Teaching and Learning Materials Manual

Handbook for ECD and Primary School Teachers

Ministry of Education Science and Technology
Kenya Institute of Education

For every child
Health, Education, Equality, Protection
ADVANCE HUMANITY

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FOREWORD

The overall quality of teaching and learning processes in the classroom remain low as the teachers continue to practice teacher-centred methods which do not promote active learning. Most classrooms in Kenya, especially at the lower primary grades, lack basic teaching aids and other learning materials and hence are usually unattractive and non – stimulating. This is a major reason for drop-outs, especially in the lower grades of primary education.

In 2002, the Ministry of Education and UNICEF Kenya launched the "School Cluster Approach" through improving the teaching learning processes in the classroom using child-centred interactive methods. The overall aim was to improve the quality of primary education by empowering the teachers, communities and children.

With the implementation of Free Primary Education in 2003, an overwhelming number (about 1.3 million) of children who were previously excluded enrolled in the primary schools, making it increasingly important to pay special attention to the teaching learning processes. This is because the great surge of pupils in schools led to teachers handling large classes that they were not prepared for. It, therefore, became critical to focus on the teaching methods as a priority coping measure, in an effort to improve the participation of children and help them to learn better.

Thus the "School – Cluster" approach came in handy to respond to the great surge which was implemented in 10 selected districts, mostly located in ASAL districts: Over 8,000 primary school teachers were trained on the child-centred interactive methods; over 500 classrooms were made stimulating, and introduced child-centred/interactive approach to teaching learning and developed and used large quantities of good quality teaching aids from low-cost materials. This innovative strategy was successfully implemented in several hundred schools in 10 districts.

There was a growing demand from the teachers for having a manual showing how to prepare and use a variety of low-cost and good quality teaching aids to make teaching learning stimulating and effective. This is the context of developing the manual. Under the technical guidance of a UNICEF consultant and the technical supervision of KIE, a selected number of skilled primary teachers, TAC tutors, teacher educators and education officials developed this manual through a series of workshops. We take this opportunity to convey our sincere thanks and appreciation to those whose untiring and dedicated efforts resulted in the development of the manual.

We believe that the manual will be extremely useful to all Kenyan teachers teaching in ECD/Pre-primary and lower grades of primary education where the need for such a manual is huge. This will enable teachers to make education a stimulating experience for millions of Kenyan children which will be manifested in their learning achievements.

A.K.M.. Kamaluddin
Chief, Basic Education & Youth
UNICEF Kenya

UNICEF / Ministry of Education Science & Technology

Effective learning and teaching in schools does not only depend on the child's cognitive abilities and teacher repertoire but also on teaching and learning environment in the class room. This environment includes availability and effective use of sufficient quantities of quality teaching and learning resources.

Research conducted by Kenya Institute of Education as well as periodic field mission of senior Ministry of Education Officials reveals that most classrooms in Kenya lack basic teaching aids and learning materials and hence are usually unattractive and non-stimulating. This has led to a high rate of drop out in lower primary schools. Old-fashioned teaching methodologies that encourage rote-learning, lack of creativity on the part of the teacher in preparing and using learning materials have also contributed to the high rate of drop out in primary schools. This manual attempts to equip the teacher with requisite skills, knowledge and attitude that will enhance his / her repertoire in making and using appropriate teaching materials for subjects such as Science, Mathematics, English and Creative Arts.

My most sincere gratitude goes the staff of the KIE, MOE and UNICEF, and all those who participated in the development of this manual especially the Primary School Teachers.

Prof. George Godia
Education Secretary
Ministry of Education

ACKNOWLEGEMENT

The Director, Kenya Institute of Education is grateful to the following experts, writers and teachers from ASAL districts (Madera, Wajir, Garissa, Moyale, Marsabit, Isiolo, Kwale, Nairobi, West Porkot and Turkana) for their hard work and dedication in the development of the teaching and learning materials manual for primary schools and Early Childhood Development (ECD) teachers. This manual has a huge potential in promoting good quality education as envisaged in the Kenya Education Sector Support Programme (KESSP).

Mr. A.K.M. Kamaluddin	Chief, Education & Youth Section, UNICEF
Mr. Elias J. Noor	UNICEF
Mrs. C. Arrigoni	UNCEF (Consultant)
Mr. Milton M. Nzioka	MOE
Mrs. E. Ndua Koimet	KIE
Mrs. E. Kiama	KIE
Mr. F. Njagi	KIE
Mr. A. Gatonye	KIE
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I wish to recommend that each Early Childhood Development and Primary teachers in Kenya should have a copy of the manual for use in the classroom.

Mrs. Lydia Nzomo
Director
Kenya Institute of Education.

TABLE OF CONTENT

INTRODUCTION

Most classrooms in Kenya lack basic interactive teaching aids and learning materials. If those were available to teachers, they could transform their classrooms into stimulating environments to maximise children's potential to participate actively in the learning process. This would enhance the love of learning and lead to greater levels of school retention and performance.

In 2002, the Ministry of Education, Science and Technology and UNICEF KCO launched the child-centered interactive approach to teaching and learning aimed at improving the quality ofteaching and learning in classrooms by motivating and empowering
teachers, communities and the learners. Special attention was given to enhancing community level capacities while supporting the education system in planning and management of primary education through a "School Cluster" system.

Stimulating classrooms was introduced into this system and primary teachers were given guidelines on how to produce low cost teaching materials, but it soon became evident that teachers needed more hands-on training on producing and using teaching aids. Therefore MOEST, UNICEF and KIE agreed on the need to produce a manual that could help teachers make a variety of quality, low-cost materials and how to use them effectively in lower primary school and pre-school readiness programmes.

In 2004, a workshop was conducted at KIE, 22 - 28 August, during which a draft of the manual was prepared, field tested and reviewed by KIE. In a second workshop held at KIE, 28 August-2 September 2005, the manual was finalised and made ready for printing. It is therefore not the product of a single "expert", but it is rather a result of contributions made by primary school teachers, education officials, pre-school and primary teacher educators, KIE experts, UNICEF project officers and workshop's facilitator. The content, in terms of methods and activities, comes from real teaching experience. It is very practical and learner friendly and has been used in TOTs courses. The materials described in the manual have been produced with low-cost resources and are now in use in many of the participants' classrooms.

It is important to understand that the content of the manual is not prescriptive: it has to be applied with flexibility, creativity and imagination, and it has to be adapted to the learners' level and environment. It should also be updated with additional innovative materials produced by teachers over a period of time through practice at the School Cluster level.

Here are some ideas on how the manual could be used to respond to different teachers' needs:

a. Choose an objective from the national syllabus and prepare a learner friendly lesson plan that includes one or more activities described in the manual. With your class create the materials related to those activities.
b. Think of a group of learners in your class who find it difficult to understand a concept in the syllabus. How can you help them learn using the materials described in the manual?
c. How can an activity described in the manual be adapted to the specific situation in your school? (rural/urban, large classes, mixed abilities, adult learners, etc)
d. Choose some activities to develop a thematic (cross curriculum) lesson or teaching unit.
e. How can you use the same material in teach a different subject/content?

Finally, trying to learn and implement new teaching methods in primary school might look difficult and time-consuming, so it is understandable that many teachers might feel the temptation to carry on with more familiar and traditional teaching/learning methods. But the teachers who have a tendency to change and make effort to prepare and use the materials mentioned in this manual, will experience an extremely positive impact on their personal professional development, learners' achievements and the level of learners' participation in class.

This has already been experienced by teachers involved so far in the development of this manual and their enthusiasm will be key to widespread acceptance and application of the content of this manual.

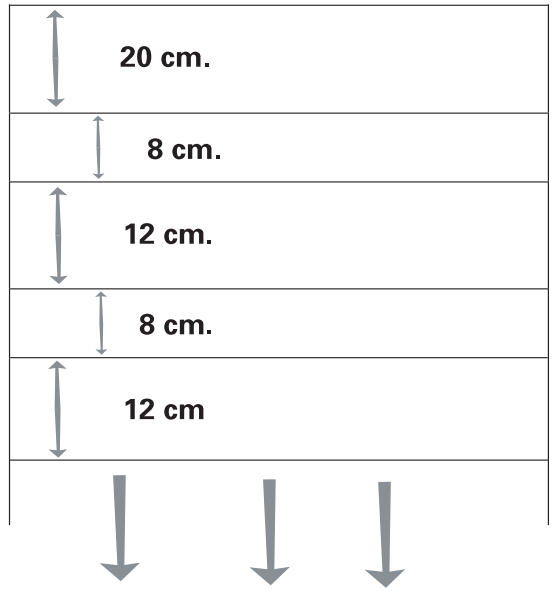
The Pocket Board:
A Magic Resource For Any Time, Any Subject And Any Place

How to Make a Pocket Board

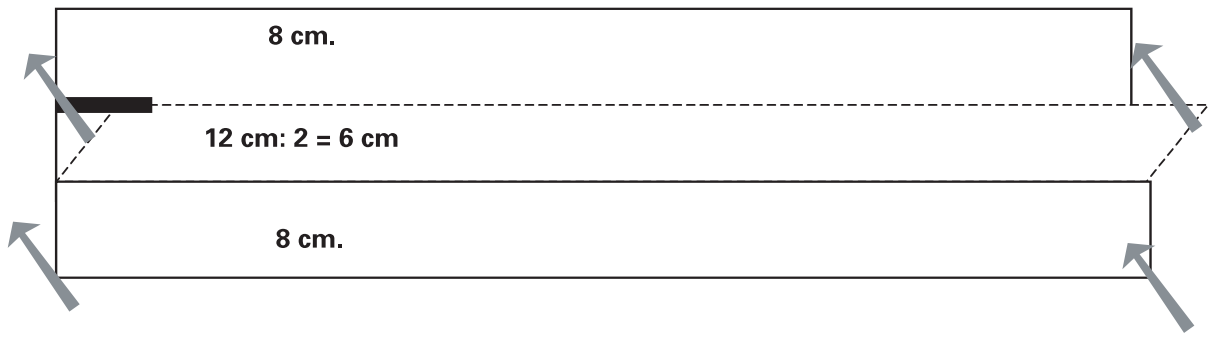
The pocket board is made of an inexpensive but durable piece of cloth measuring 3 m in length and 1_m in width. This area accommodates for around 150 pockets measuring 12 cm x14 cm.

This board is used in teaching different concepts in all subjects using flash cards with pictures or words. The pocket board is convenient in teaching as it is portable and suitable for use at in and outdoor classrooms. It is also easy to make and promotes the teacher-learner interaction in class. The pocket board can also be made from paper, cardboard, sacks, mats or any large sheet of durable material.

Instructions:
Extend the cloth plainly, measure 20 cm from the top and mark a straight line. Measure on both sides a sequence of stripes measuring 8 cm and 12 cm respectively. Mark as many parallel lines as necessary until you reach the bottom end of the fabric. See drawing below:

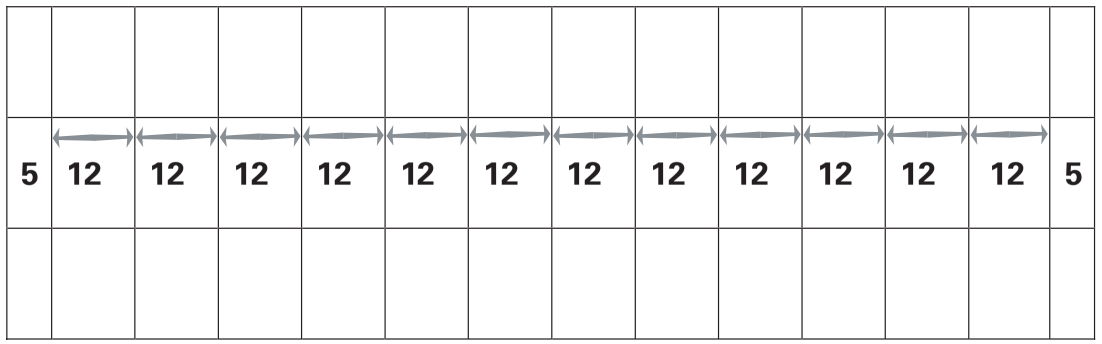


Having the marking completed, fold the 12 cm strips into half in order to create the pockets (which will eventually make up the 6 cm deep pockets). Fasten the folds in place by pins.
See below.



When all the 12 cm strips are folded, draw vertical lines. The width of these strips will determine how wide the pockets will be. You can change the size as you like, but keep in mind that, in order to perform maths activities described in this manual, you need a minimum of 12 per row and per column.

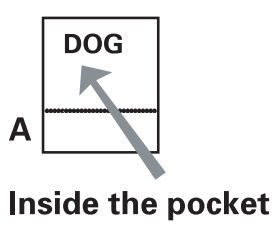
It is also advisable not to make the pockets too narrow because the size of pictures and words that you are going to insert in the pockets will be too small to be seen by the learners, particularly in big classrooms.
Measure 5 cm. from one side and then 12 cm. all along until you reach the other end. Draw all the vertical lines and tack the fabric with long stitches all along the vertical lines to fix the pockets so that the board could be sewn later with a sewing machine. If a sewing machine is not available, then the pocket board can be stitched firmly by the hand.

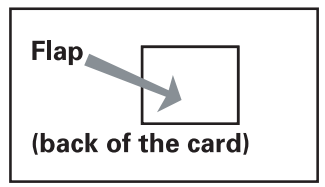


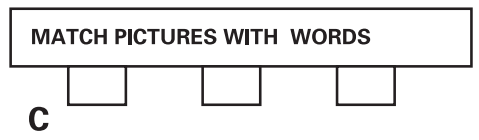
Finally fold the top and the bottom hems, leave the top hem wider in order to insert a strong wooden stick that could be used to hang the pocket board. Alternatively, few strings can be attached to the top in order to fasten the board to a bar or to another support available in class. Strong nails can also be used to hang the pocket board to the wall.

When using a pocket board it is important to hang it on the wall high enough for all learners to see, but also low enough for them to reach and work with.

The flash cards for the pocket board can be made in different sizes:
• Same as pocket size, 12 x 14 cm, noting that the bottom of the card will not be visible because it will be screened inside the pocket. See example A
• As big as you want, as far as you can hang them to the pockets, for instance with a strong flap at the back or with a few "teeth" to support long cards.
See examples B and C







How to Use a Pocket board for Teaching Maths

A. Sequencing of numerical symbols and words

Objectives

- Learn numeration
- Use and understand the numerical symbols and words in English and in the local language.

Activities (suitable for pre-school and standard 1)
Note: This should be taught after learners are able to write the numerals and their names.

1. In a row of pockets, insert numbers from 1 to 10. Prepare the corresponding symbols and words in English and in your local language. Ask learners to match words to the numbers and place them in the pockets below the corresponding number. This activity can be done with numbers 1 to 5 first and with numbers 1 to 10 in a later lesson.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

2. In a row of pockets, insert the numerical symbols of the numbers 1 to 10. In the row below, place the words randomly in the pockets beneath numbers. Give learners the time to look at the pocket board so that they can identify the words that don't match without being prompted. Ask learners to state the cards that are wrongly positioned in the pockets. Give as many learners as possible the chance to correct the order of cards. This can be done with words and numbers from 1 to 5 first and then from 1 to 10 in a later lesson.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
two	five	four	three	six	one	seven	ten	eight	nine

3. Ask the learners to read the numbers in ascending and descending order. This could be done in groups using one row for each of the groups. This can be done with words and numbers from 1 to 5 first and then from 1 to 10 in a later lesson.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
one	two	three	four	five	six	seven	eight	nine	ten

4. Remove a few numbers from the rows. Ask the learners what is missing. They should find the missing number from a pile and put it in the right pocket. Early in the year begin with numbers from 1 to 5. In later lessons increase the difficulty of the activity based on what is being taught.

1		**3**	**4**						
	2	**3**		**5**		**7**			**10**
11		**13**	**14**	**15**			**18**		**20**

B. Concept for Less than and More than

Objective

- Use the words less than and more than

Activities (suitable for pre-school and std.1)

Place some numbers (numerals or words) in a row leaving adequate space for the words less than or more than between each two numbers. Start first with numbers from 1 to 5. In later lessons increase the level of difficulty based on what is being taught earlier.

It is also very important that learners work with sticks, stones or any other available material to see in concrete terms how one number is greater than another. Groups of learners could work together to show what is displayed in the pocket board before anyone is asked to come to the pocket board to insert the number cards in the empty space.

More than	Less than

Example (i)

4	Less than	6

(ii)

5	More than		3	

C. Addition and Subtraction

Objective

- Finding the missing number in addition or subtraction.

Activities (suitable for pre-school and std. 1)

1. Find the missing number in an equation such as : 6 + = 10. The learners will identify the position of the first number (6) and count up to determine the difference between that and the final number (10). That would be the missing number of the equation and the corresponding card should be placed in the appropriate pocket. Begin with the addition of two numbers equalling 10. Increase the difficulty of the activities as learners progress in the course.

   In this exercise it is very important that learners work with rods, sticks, stones or any other available material to see in concrete terms how to work out the correct answer.
   Learners in groups could work out together the missing numbers before any of the learners is asked to come to the pocket board to insert the correct number in the empty space.

6	+	?	=	10					
?	+	7	=	13					
5	+	6	+	?	=	16			

7	-	4	=	?					
5	-	?	=	2					
13	-	?	=	9					
12	-	2	-	3	=	?			

2. Place the right sign in a problem such as : 3 5 = 8. Ask learners to work with rods, sticks, stones or some other locally available material to see in concrete terms how to work out the correct answer. Learners in groups or pairs could find out together the right answer before anyone is asked to come to the pocket board to insert the correct sign in the empty space. Begin with the addition of two numbers equalling 10. Increase difficulty level as learners advance in the course.

3	?	5	=	8				+	-
10	?	1	=	9				+	-
4	?	2	?	2	=	8		+	+

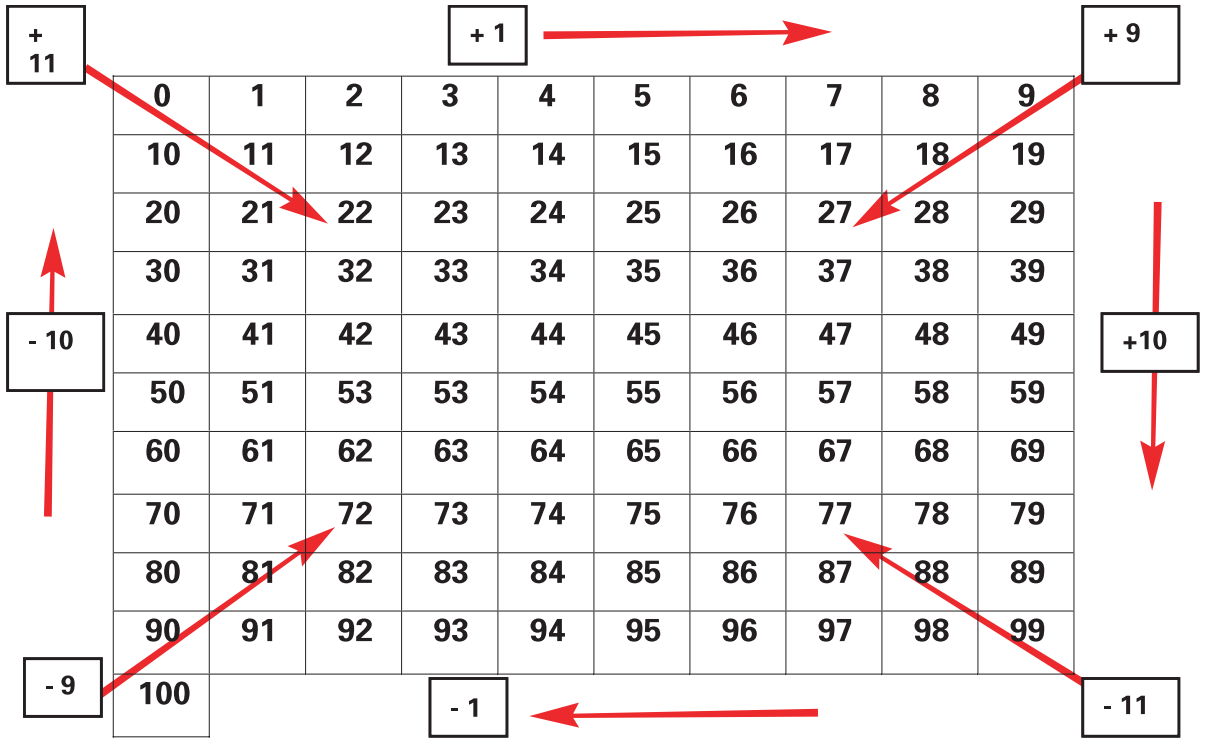
D. The table of numbers from 0 to 100

Objective

- Practice mental arithmetic and perform addition and subtraction with numbers less than 100.

Activities (suitable for std. 1- up to 99 – and std 2)

1. Establish relations between quantities more than 10. Start with a game: prepare two sets of cards from 1 to 20 and the less than, more than and equal to. Mix the cards with numbers and place them in two piles face down. Learners representing groups take two cards at a time (one from each pile), put them in the pockets and place the appropriate words between them. They should explain why they have chosen that particular sign.
2. Fill the table from 0 up to thirty. As you add each number to the pocket board ask learners to say it loudly and to read the matching word. Allow enough time to practice the sequence of numbers, to identify the numbers that are before/after/more than/less than/missing, etc.
3. Ask your learners to use the words less than and more than and build a sequence of numbers.
4. Start looking at patterns in the sequences of numbers and underline what happens when you move inside the table (with each step to the right the number increases by one, to the left, decreases by one, upward 10 less, downward 10 more, etc.) See the example below:



5. Distribute the rest of the numbers (from 31 to 100) and ask learners to help you complete the table. Explain that you will call a number and the learner with that number card will then come to the board and put it in the right pocket. Call the numbers at random, not in the correct order. Learners may need help to find the right place, particularly for the first numbers, as most of the pockets are empty. Tell them they can come to the front in pairs so they can help each other to find the place.

6. You can also give instructions that are more challenging such as:
   - Who has a number which is less than 50 and greater than 42?
   - I want a number that ends with 2.
   - Place all the numbers starting with 7 in the pocket board.
   - In std 4, if you are using this activity for revision, concepts like odd/even or multiple/factor can be used.
     Example: "Who has got a number multiple of 5 and less than 35?"
     "Show me an even number greater than 56", etc.

7. Find the missing number
   Example:
   25 + ? = 37
   ? + 35 = 57
   35 + 22 = ?

8. The addition game:
   - The teacher chooses one-digit numbers from the pockets. Place them in a separate row at the bottom of the pocket board. Then ask the learners to figure out which numbers they have to add to get a certain answer. They may use two or more of the numbers from the ones you have chosen. Encourage learners work with rods, sticks, stones, seeds, or some other locally available material to work out practically the correct answer.
   - Learners in groups could find together the right solution before anyone is asked to come to the pocket board to point it out. It could lead to group competition or it could be a simple way to assess class progress orally.

Example:
You choose 6 – 3 – 7 – 2 and place them at the bottom of the pocket board, then you ask your learners to add three of those numbers together to make 12.
The answer would be 7+3+2.

E. Addition Table

Objective

- Create a table for addition to explore its properties, make comparisons, discover patterns and develop mental mathematical skills

Activities (suitable for lower primary)

In order for your learners to understand the concept of addition, they need to use rods, sticks, stones, seeds or any other locally available material to see what is actually happening when we add things together. Create interesting word problems your learners can relate to and this will help them understand. Example: "If I have two pens and you have three, how many would we have altogether."

Work with your class to build the addition table by having learners place the cards in the correct pockets. Ask your learners to look for number patterns and explore them together.
Reflect on the properties, particularly the commutative one. Give your learners as many opportunities as possible to solve equations with different variables. For example: filling in blanks, finding and correcting mistakes, completing rows, ordering numbers, performing additions up to 20.

+	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
0	**0**	1	2	3	4	5	6	7	8	9
1	1	**2**	3	4	5	6	7	8	9	10
2	2	3	**4**	5	6	7	8	9	10	11
3	3	4	5	**6**	7	8	9	10	11	12
4	4	5	6	7	**8**	9	10	11	12	13
5	5	6	7	8	9	**10**	11	12	13	14
6	6	7	8	8	10	11	**12**	13	14	15
7	7	8	9	10	11	12	13	**14**	15	16
8	8	9	10	11	12	13	14	15	**16**	17
9	9	10	11	12	13	14	15	16	17	**18**
10	10	11	12	13	14	15	16	17	18	19

Properties of addition:
- When adding numbers they can be in any order and the answer will be the same. Example: 5+4 = 4+5
- When adding more than two numbers you can add the first two together and then add the third. Example: 3+7+5 = 10+5

Observations:
- When zero is added to a number the result is that number
- Find all the numbers adding up to ten: 0+10, 1+9, 2+8, 3+7, 4+ 6, 5+5, 6+4, 7+3, 8+2, 9+1, 10+0
- Observe the diagonal from top left to bottom right: 0-2-4-6-8-10-12-14-16-18-20. This could be the initial step to introducing multiplication by the factor 2.

After practicing with addition, you can introduce subtraction by means of variables.
Example: 3 + = 9 9 – = 3
8 + 9 =

These two arithmetical operations should be practiced at the same time. Subtraction can also be used to check if the addition is correct.
Example: 9 + 7 = 16 16 – 7 = 9 16 – 9 = 7

F. Subtraction Table

Learners who work with this table will find it initially surprising that not all the pockets can be filled with numbers. Why can they complete the addition table but not the subtraction table? They will have to reflect on the special property of the subtraction: the first number must be greater or equal to the second number. So for the time being they will be able to fill only half of the table, they can be told that at higher school level they will be able to fill also the other half with negative numbers.
Start talking about negative numbers when you feel your class is ready for this.
For example: when the temperature falls below zero or when a bank account goes below zero and somebody needs to borrow money.

Objective:
- to explore the properties of subtraction and compare them with the addition ones
- to perform subtractions and develop mental arithmetic skills.

Activities:
Work with your class to build the subtraction table by having learners place the cards in the appropriate pockets. Can they change the position of the numbers like in the addition (commutative property)? Is it the same if they say 7 - 3 or 3 – 7?
It can be very useful, in order to reinforce this concept, to move from the addition table to the subtraction one as often as possible (just change the sign + with the sign -), and let the learners work with them for a while before moving to multiplication and division.

+	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
0	**0**	1	2	3	4	5	6	7	8	9
1	1	**2**	3	4	5	6	7	8	9	10
2	2	3	**4**	5	6	7	8	9	10	11
3	3	4	5	**6**	7	8	9	10	11	12
4	4	5	6	7	**8**	9	10	11	12	13
5	5	6	7	8	9	**10**	11	12	13	14
6	6	7	8	8	10	11	**12**	13	14	15
7	7	8	9	10	11	12	13	**14**	15	16
8	8	9	10	11	12	13	14	15	**16**	17
9	9	10	11	12	13	14	15	16	17	**18**
10	10	11	12	13	14	15	16	17	18	19

Properties of subtraction:
to find out if your answer is correct, add the answer to the second number and it will equal the first.
For example:
15 – 9 = 6, 6 + 9 = 15.
This property is very useful to develop mental arithmetic skills.

Observations:
- Value of zero (neutral)
- Number patterns
- When the two terms are the same, the result is zero
- At this stage, the first number must be greater than the second
- The numbers that could fill the empty pockets are negative numbers

G. Multiplication Table

Objective

- Create a table for multiplication to explore its properties, make comparisons, discover patterns, discover the relationship between multiplication and division and develop mental mathematical skills

Activities (suitable for lower primary)

Begin to introduce multiplication as repeated addition. In order for your learners to understand the concept, they need to use rods, sticks, stones, seeds or any other locally available material to see what is actually happening when we multiply.
Example: 2 x 4 really means two groups of four; when done practically the learners will find out that it is equal to four groups of two. Let the learners work in pairs or groups and work out practically the results of different multiplications. Use examples your learners can relate to create interesting multiplication problems.
With your learners, complete the multiplication table. See the table below.

You can identify the square numbers and elicit from your learners the concept of the root of a number as one side of the square, even if the formal learning of the square root will be done much later in std 7.
Reflect on the effect of zero when it is multiplied with any other number. For example: every number multiplied by zero = zero.

This table can also be used to introduce division as the opposite arithmetical operation to multiplication.
For Example: 5 x 6 = 30 30÷5 = 6 30 ÷ 6 = 5
Practice both operations by using variables:
4 x 3 = y y ÷ 4 = 3 y ÷ 3 = 4

X	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
0	**0**	0	0	0	0	0	0	0	0	0
1	0	**1**	2	3	4	5	6	7	8	9
2	0	2	**4**	6	8	10	12	14	16	18
3	0	3	6	**9**	12	15	18	21	24	27
4	0	4	8	12	**16**	20	24	28	32	36
5	0	5	10	15	20	**25**	30	35	40	45
6	0	6	12	18	24	30	**36**	42	48	54
7	0	7	14	21	28	35	42	**49**	56	63
8	0	8	16	24	32	40	48	56	**64**	72
9	0	9	18	27	36	45	54	63	72	**81**

Properties of multiplication:
- When multiplying numbers they can be in any order and the answer will be the same. Example: 3x4 = 4x3

Observations:
- Multiplication is always possible.
- 1 has neutral value: a number multiplied by 1 doesn't change.
- A number multiplied by zero is zero.

H. Division Table

Objective:

- to explore the properties of division and compare them with the multiplication ones,
- to perform division and develop mental arithmetic skills

Activities

Fill only the pockets were the quotient is a whole number
Clarify the relation between dividend, divisor, and quotient, at this stage you work only with whole numbers.
Reflect on the properties of zero. For example, you cannot divide a number by zero because there is not a quotient that multiplied by zero gives a product different than zero. To explain this difficult concept clearly you have to refer to multiplication as the opposite operation of division. For example: 8 : 0 = y y x 0 = 8 y = doesn't exists. You can't find a number that multiplied by 0 gives 8 as result.
Show your class how you can use multiplication to check the result of a division. If they multiply their result by the divisor (the second term) and they get the same number as the dividend (the first number) then their result is correct.
For example: 8 : 2 = 4 2 x 4 = 8; 10 : 5 = 2 5 x 2 = 10

:	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
0	0	0	0	0	0	0	0	0	0	0	0
1		1									
2		2	1								
3		3		1							
4		4	2		1						
5		5				1					
6		6	3	2			1				
7		7						1			
8		8	4		2				1		
9		9		3						1	
10		10	5			2					1

At the initial level only few cells can be filled: the ones where the quotient is a whole number. Later on the remaining cells will be filled with fractions or with decimal numbers.
Some patterns are already evident:
- When a number meets an equalnumber the result is always 1.
- When a number meets its half, theresult is always 2, etc.

The first column is empty because you cannot divide a number by zero

I. Fractions

Objective

- Create a table for division with fractions in order to explore the properties, make comparisons, explore patterns, and develop mental mathematical skills

Activities (suitable from std 3 to std 5)
Use the table below to:

- Identify and define fraction.
- Identify fractions with equivalent value.
- Work on equivalent fractions, compare and simplify them (reduce to lower terms): J. Decimals

EQUIVALENT FRACTION CHART/TABLE

–						–					
1/3			1/3			1/3					
–			–			–			–		
1/6		1/6		1/6		1/6		1/6		1/6	
1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12	1/12

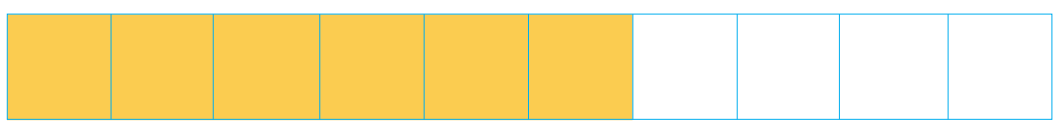
*** A fraction has two parts**
i. The top part is called numerator
ii. The bottom part is called denominator

J: Decimals

Objectives

1. To represent fractions with denominator 10 and to show relationship between fractions and decimals.
2. To represent fractions with denominator 100 and to show relationship between fractions and decimals.

Tenths

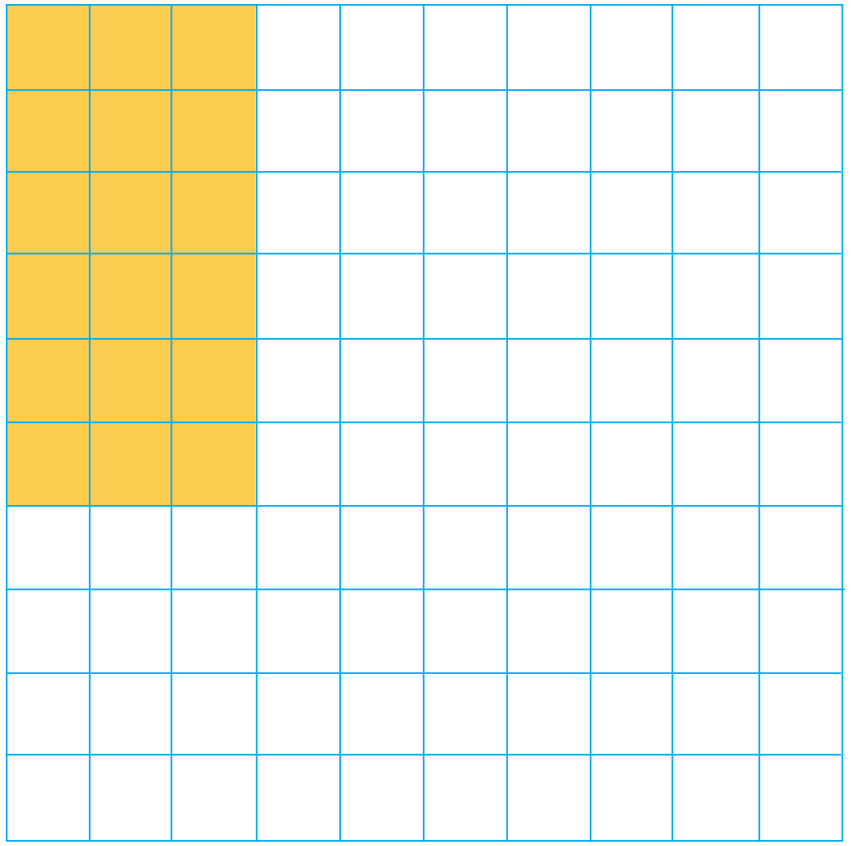


- 6 parts out of 10 are shaded
- The fraction 6/10 represents the shaded parts
- 6/10 as a decimal is 0.6.

Hundredths

Activities

- Teacher asks learners to put 6 cards of the same colour in the pocket board (in a row of ten pockets).
- Discuss the fraction represented and its equivalent decimals: if the row is = 1, 6/10 is = 0.6. Teacher guides the learners to represent other fractions and give corresponding decimals.
- Teacher discusses further with learners and demonstrates by putting cards of the same colour in the pocket board.
- Discuss fractions represented and their equivalent decimals.
- Learners do more practice on other fractions and give corresponding decimals.



- 18 parts out of 100 are shaded
- The fraction 18/100 represents the shaded parts
- If the whole board is = 1, then 18/100 represents a decimal and it is 0.18.
- 18 = 0.18
  100

K. Place Value

Objective

- Identify place value and its importance in additions and subtractions.

Activities (suitable from std 1 upwards depending on the size of numbers)

1. Prepare pocket board cards with the words for ones, tens, hundreds, and thousands. Place them in a row as shown in the table below. Ask a pair of learners to come to the front and put numbers in the correct column to show 27, 218, 1095. The value of each digit has to be clearly stated.

thousands	hundreds	tens	ones
		2	7
	2	1	8
1	0	9	5

27 = 2 tens, 7 ones
218 = 2 hundreds, 1ten, 8 ones
1095 = 1 thousand, 0 hundreds, 9 tens, 5 ones

2. Use the place value cards to demonstrate additions with carrying. Begin with a number in the ones column and show how that number represents 8 things, such as stones or sticks.
Then explain that you are going to add 9 more stones or sticks. Point out to your learners that when you have a whole group of ten that will be represented by 1 in the tens column.
Ask a leaner to count the stones. Example: 8 + 9 =17, he/she will make a group of ten and place it in the tens pocket, the remaining 7 will stay in the ones pocket. Allow a lot of time for similar activities.

thousands	hundreds	tens	ones
			8
			9
		1	7

3. It is important to give your learners the opportunity to practice using the place value table.
This can be done by giving each group a piece of paper or card that looks like this.

thousands	hundreds	tens	ones

Each group would have some sticks, stones, seeds, or some other locally available material to work with. Ask learners to show a number such as 54 on the table using their sticks. Explain that they need to put five sticks in the tens column and four sticks in the ones column. Walk around the class to see if they are doing the activity correctly. As learners progress in the course, they can use the place value chart to do additions and learn to carry over.

5. You can use the same strategy to practice subtractions with borrowing (from std 3)
- Place both numbers for the subtraction in the place value table
- Fill the pockets underneath with a quantity of sticks equivalent to the initial number (bundles of sticks and loose ones).
- Discuss with your class whether you have enough sticks to take away the second number
- If necessary, do the following change: 1 tens stick will be changed with 10 ones sticks and then the subtraction will be possible.
  Example: 32 – 18 = ?

Can you take away 8 ones from 2? No, so you have to borrow from the tens.
Take one bundle of ten and untie to get loose sticks and put them into the right pocket.

tens	ones
3	2
1	8
1	4

Now you have 12 ones and can take away 8 leaving 4 sticks.
Now you can subtract 1 ten from the remaining 2 tens.
The result of subtraction is 14.

6. When learners start working with decimals and fractions, (std 4 upwards) extend the place value table to include tenths and hundredths as seen in the table below

tens	ones	tenths	hundredths
		6	
			2
	8	4	5

As reinforcement, link what the learners already know about decimals and fractions to the place value table.
Example:
- 6 tenths = 6/10 = 0.6
- 2 hundredths = 2/100 = 0.02
- 8 ones, 4 tenths, 5 hundredths = 8 and 45/100 = 8.45

L. Multiples

Objective

- Identify multiples and establish rules to determine when a number is a multiple of another number, identify common multiples and the lowest common multiple

Activities (suitable from std 4 upwards)

The following tables show how you can explore multiples with your learners. As they discover the patterns and begin to understand the relationship between multiples, work together with your learners to establish rules to define a number as a multiple of another number.

As you explore multiples of 2, 5 and 10 (std 4 syllabus), think about how you could get your learners more involved in the lesson by getting them to count their eyes, fingers, or hands to find the different multiples. Then relate what they find to the table in the pocket board to make the learning more meaningful and practical.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
32	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 2

They end with 2, 4, 6, 8, or 0.

They are called even numbers.

When you divide them by 2 you still have a whole number.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
32	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 5

They end only with 5 or 0

They include even and odd numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 10

They always end with the digit 0.

They are all even numbers.

They are multiples of 2 and 5, because 2 x 5 = 10

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 3

They can be even or odd numbers.
Here is an easy way to determine if a two-digit number is a multiple of 3. First add its digits together.

If the answer is 3 or 6 or 9 then the number is a multiple of 3.
Example:
45, 4+5=9
78, 7+8=15 = 6

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 9

They are very easy to identify because the sums of the digits are always equal to 9.

In fact the first digit increases while the second decreases.

All multiples of 9 are also multiples of 3.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
32	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 7

They are the most difficult to classify because they don't follow a simple pattern.

Std 7 includes the multiples of 11

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 11

They are very easy to identify because they are made of a pair of identical numbers.

They include even and odd numbers.

Once you have worked with your learners to identify the multiples of a particular number, try to define the rule that applies (look at the box near the table)

Using the pocket board for the identification of multiples is very effective because:

- If you experience shortage of text books, paper and exercise books, a lot of the counting can be done using the cards and inserting them or taking them out of the pockets.
- The basic material is the same as for the table of 100 numbers: 100 cards with numbers from 1 to 100 (or one more for 0 if you want) that can be shared and used for different classes and different class levels.
- The learners will be practically involved in the preparation of the pocket board following your instructions: filling in the right cards in the right place, removing them while counting, filling gaps or matching, ordering, completing sequences, etc.

M. Prime Numbers

Objective

- Identify prime numbers from 1 to 100 (or from 0 to 100 as in the previous page)

Activities (suitable for std 5)

1. Work with your learners to remove or turn over the pocket cards that are multiples of 2. You could ask a pair of learners to come to the pocket board to do the task.
2. Ask another pair to remove or turn over all the multiples of 3.
3. Continue to have pairs of learners working together to do the same for all the multiples of 5,7, and 11.
4. Any numbers left in the pocket board will be prime numbers.

Using what your learners have just learned help them establish the rule for defining a prime number. For example: a prime number can be divided only by one and by itself.

1*	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

* Number 1 is not a prime number because it has only one factor, itself.

In the above table the numbers in red are all the numbers that should be removed from the pocket board because they are multiples of a number. The numbers left are prime numbers.
This activity needs to be done step by step with learners' participation.
Examine the numbers left in the pocket board and ask learners to see if any of the remaining numbers could be divided by any other number except 1 and themselves. Give your learners time to check to make sure they have understood this principle and that all the remaining numbers are prime numbers.

On the following page you will find an example of the table you can use to identify the factors of each number. Start colouring the multiples of the numbers while working at the same time on the pocket board. When finished you can see by the quantities of colours in each cell how many factors and which factors a certain number has.
Example: n. 24 will have the colours referring to factors 2, 3, 4, 6, 8
n. 60 will have the colours referring to factors 2, 3, 4, 5, 6, and 10
n 49 will have only factor 7 and all prime numbers won't have any colour.

Table to identify factors and prime numbers (suitable for std 5 and 6)

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	53	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
100									

Colour code:
multiples of 2 = colour red
multiples of 3 = colour green
multiples of 4 = colour purple
multiples of 5 = colour yellow
multiples of 6 = colour dark green
multiples of 7 = colour black
multiples of 8 = colour blue
multiples of 9 = colour brown
multiple of 10 = colour orange
multiple of 11 = colour pink

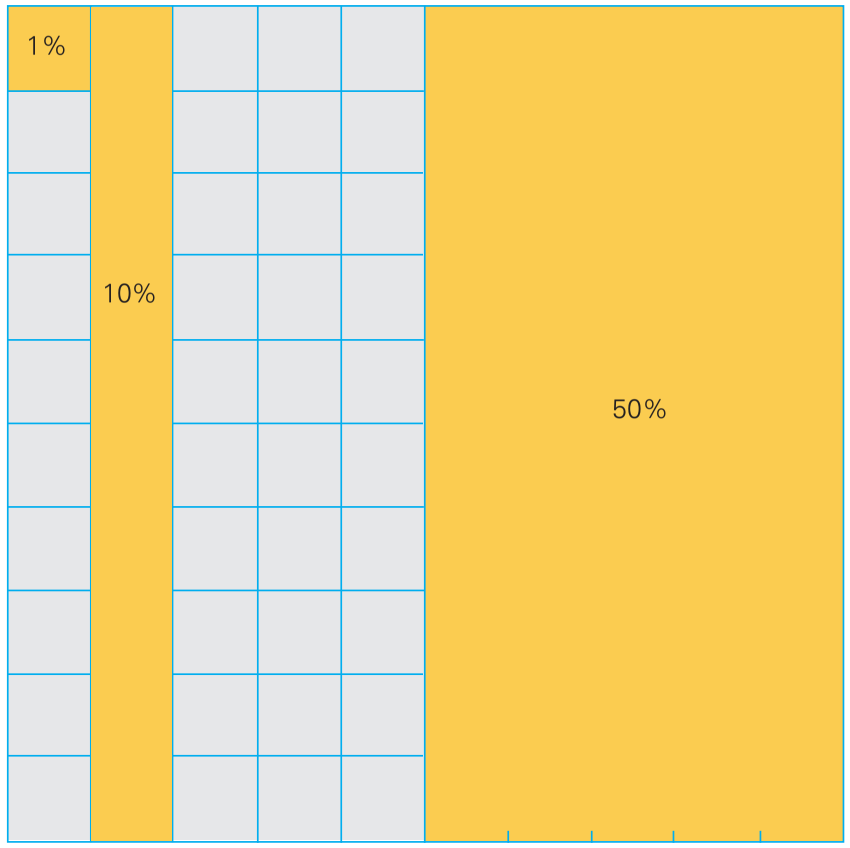
If you can't use colours use other keys you think are appropriate, as far as it makes the table clear to understand. When the table is completed you can use it to identify the GCD (greatest common divisor) or the HCF (highest common factor) and the LCM (lowest common multiple) for operations with fractions.

N. Percentage

Objective

- Introduce or reinforce the concept of percentage

Activities (suitable for std 6 and 7)
1. Turn over all pocket cards so the 100-table look like the table below.



Ask learners to count the total number of cards on the pocket board to get 100 cards.
Explain to the learners that one card represents 1/100 of the total number of cards that 1/100 = 1% read as one percent.

Explain to your learners that the whole pocket board represents 100%.
Remove 5 cards in a row or column. Ask learners what percentage of the cards has been removed. Then ask them to figure out the percentage of the cards left in the pocket board.
For example: if 5 cards (5%) were removed then 95 cards (95%) remain. Allow learners to come up, remove some cards, and then ask other learners what percentage of cards were removed and what percentage remains.

The pocket board can also be used to show the relationship between percentages and fractions. For example: 20 cards represent 20% of the cards or 1/5 of all the cards. If the cards from 1 to 50 are removed, it is easy to see that half (1/2) the cards are missing and half remain.

HOW TO USE THE POCKET BOARD IN GAMES

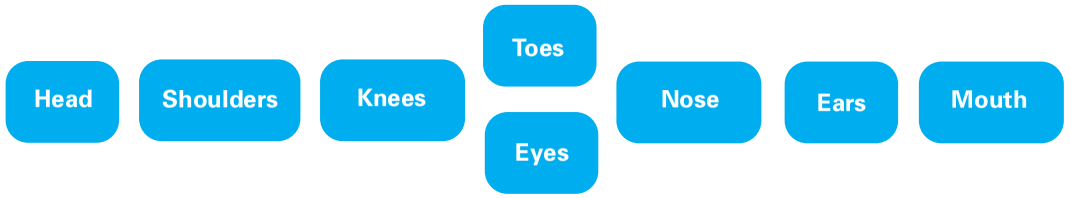
P1 – A COMPETITION GAME

Objective

- Revise words relating to parts of the body and match them with the pictures within a given time

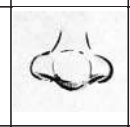
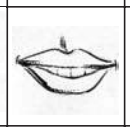
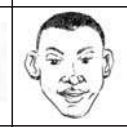
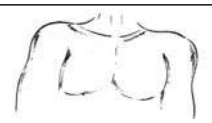
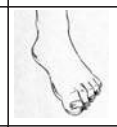
Materials

- a set of cards referring to the parts of the body mentioned in the song "Head and Shoulders" and the pocket board.
- The parts of the body cards can be replaced by names of shapes, numbers for shape identification and number recognition.



Activities

- Divide your learners in groups and ask one group to match the words and the pictures using the pocket board. The group will have a limited time to perform the matching, so therefore group members have to share the cards and organize them by their own.
- The rest of the class will define the length of time assigned to the activity by either singing the song (see the session relating to songs in this manual) or counting like a clock from one to twenty or from twenty to one.
- When the time is over, the game is stopped and points are counted. Then another group will be involved and the class will sing or count again.
- As game proceeds, the learners will acquire speed and their matching skills will improve through learning from their classmates.

	Nose	Mouth	Ear	Eye	Head	Shoulders	Knees	Toes	
									

Note. During the game learners will practice vocabulary a lot without feeling bored or tired of repetition; the whole class participate in counting or singing and that keeps everybody's attention focused on the task.

ABACUS

Definition: An abacus is a mathematical instrument that is very helpful for understanding the place value of numbers and teaching additions and subtractions at all levels.

Objectives

- Make an abacus using locally available material
- Use the abacus to teach additions, subtractions, decimals and measurements
- Stress the importance of the abacus in the teaching/learning process

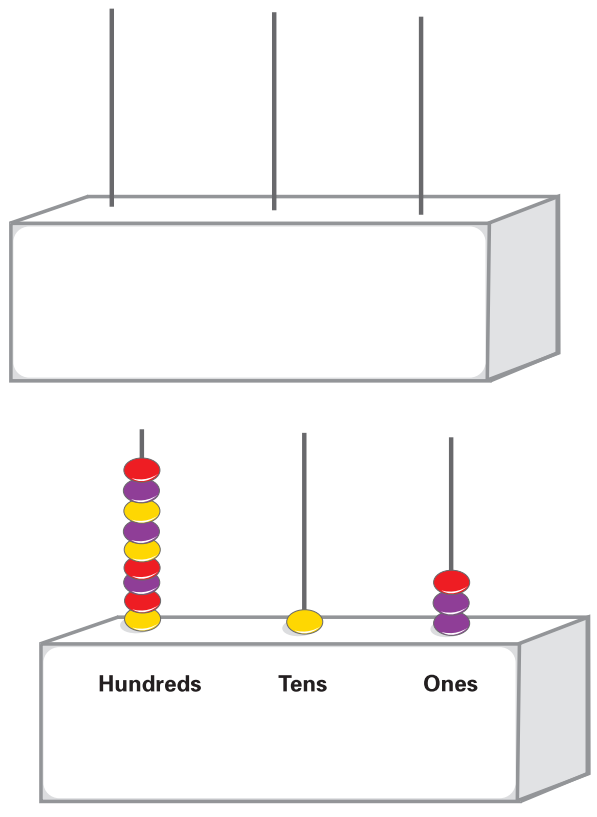
Material

The following locally available material can be used to make an abacus:

- Wood
- Iron rods
- Nails/wire
- Strong strait sticks
- Old slippers
- Bottle tops
- Moulded clay
- Shock absorbers
- Plywood
- Bamboo stems
- Maize cobs
- Bones
- Plastic bags
- Plastic bottles full of sand/soil

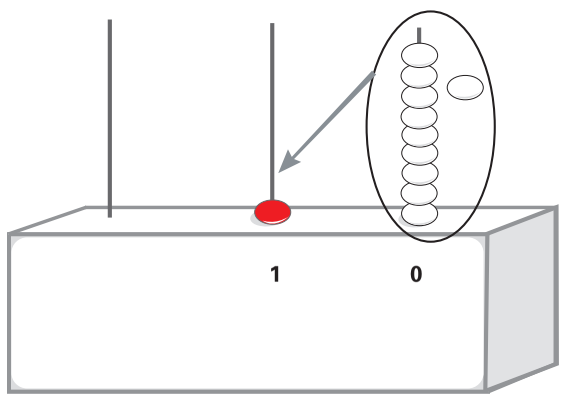
How to make the abacus

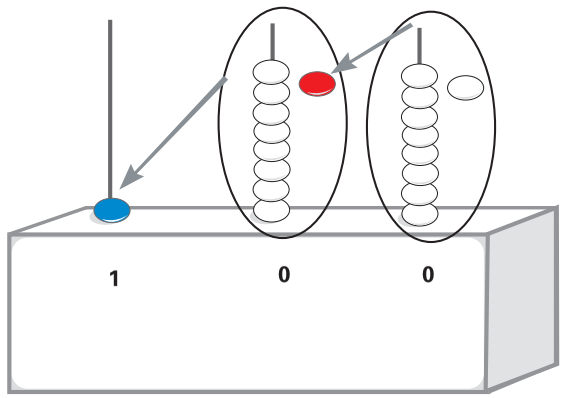
1. Prepare a base made of wood or clay or a plastic bottle filled with soil.
2. Make three holes in the base.
3. In the holes insert strong rods made of metal, wood, plastic or any other appropriate material.
4. Make the counters of the same shape and size with a hole drilled through them to allow for their insertion in the rods: in each rod you should be able to insert a maximum of nine counters, if the abacus is meant to operate on base 10.
5. Colour the counters and the base in order to make the abacus more interesting to use.
6. Add a label to the base indicating the value of each place (optional).



Activities with the abacus

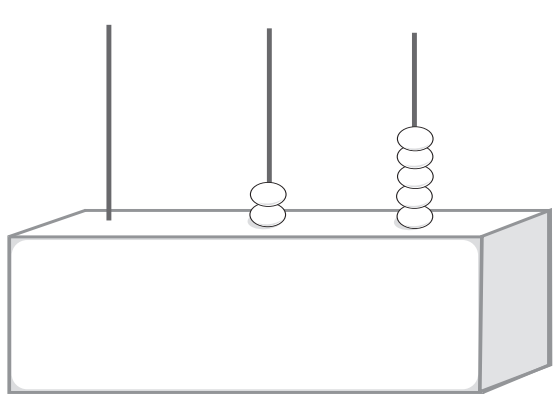
An abacus is used to work out mathematical sums based on additions and subtractions with whole and decimal numbers - adding, comparing and changing measurements.
Here are a few step-by-step examples:

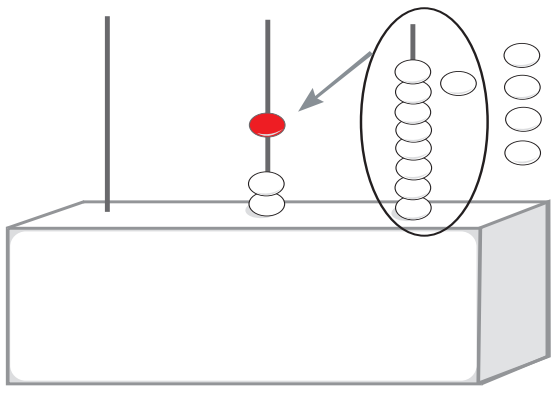




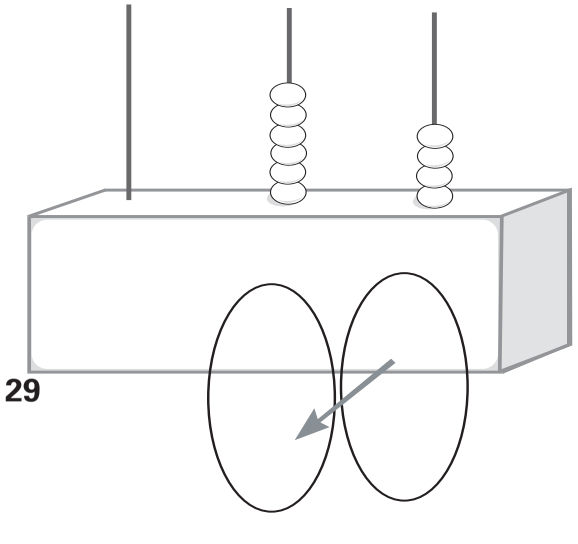
Addition 9 + 1 = 10 (std 1) Addition 99 + 1 = 100 (std 2)
The red counter represents the group of ten The blue counter represents the group of ones that has been moved from the place of ten tens that has been moved from the
the ones to the place of tens. The place of place of tens to the place of hundreds.
ones is now empty, this is why we put the The places of ones and tens are now
zero. empty = 0

Addition carrying the ones: 26 + 38 (std 2)

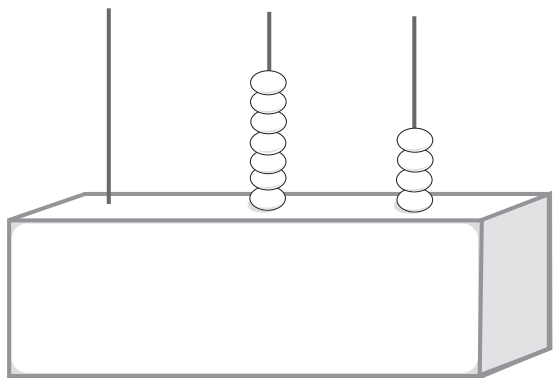


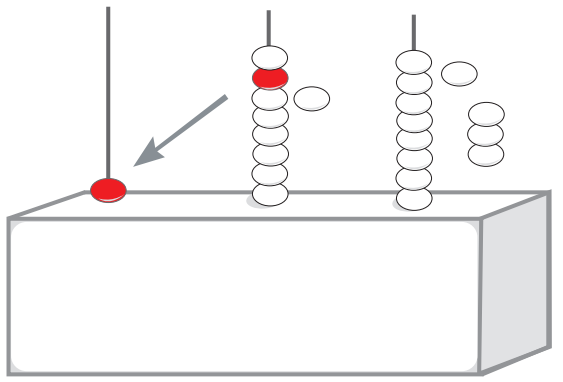


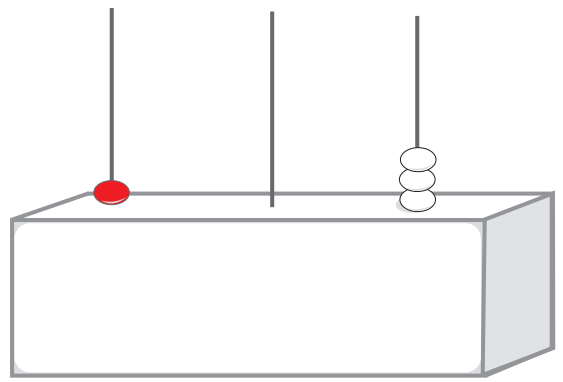
1) Put the counters in the abacus to represent the first number.
2) Add the ones: 6 + 8 = 14 so one group of ten will be moved to the ten place and 4 ones will remain.
3) Add the tens: 3 + 3 = 6 and you have the result of 64 = 6 tens and 4 ones.



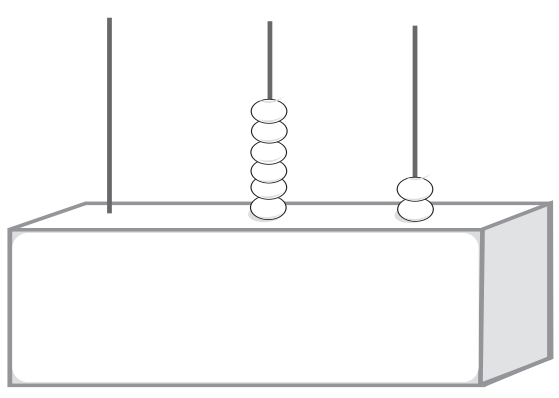
AAddition carrying ones and tens: 74 + 29 (std 2)ddition carrying ones and tens: 74 + 29 (std 2)

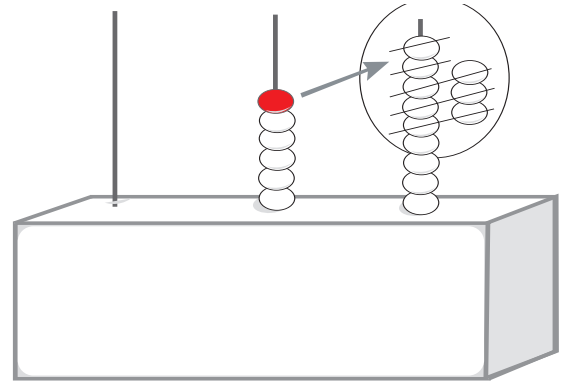


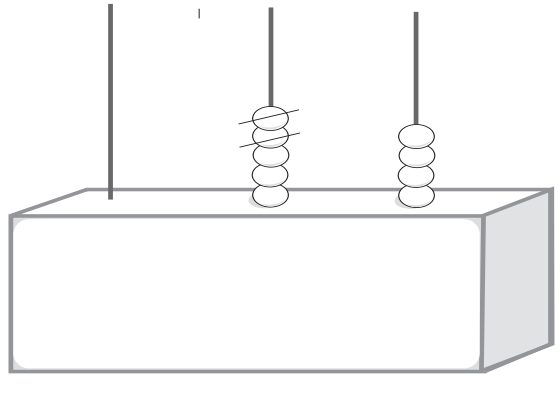




Subtractions with borrowing: 62 – 28 (std 3)

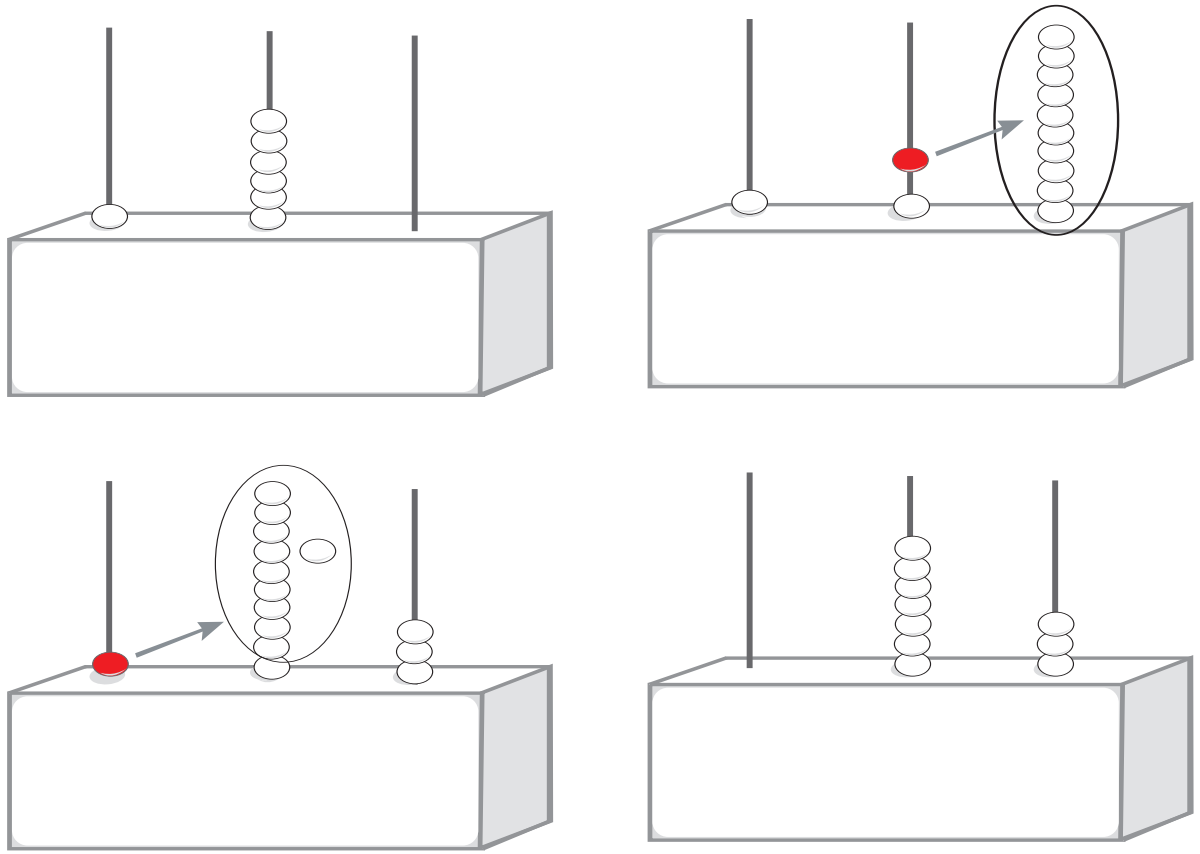






1) Put the counters in the abacus to represent the first number = 62.
2) You need to subtract 8 ones from 2 ones: it is impossible, so you need to change one ten into 10 ones.
3) Now you can subtract the 8 ones and 4 will remain = 54.
4) Last you subtract the two tens and the result of the operation will be 34.

Subtraction with borrowing: 120 – 47 (std 3)



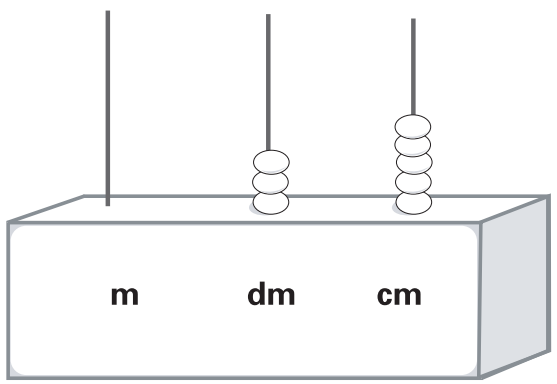
Understand the relationship between different units of measure and perform conversions. (from std 4 to std 7)

How many centimetres are in 0.35m?
By placing the quantities in the right positions of the abacus, converting units of length becomes visually very clear and learners will understand it easier.

1) Place the counters in the abacus in a way that 0.35 metres is correctly represented = 0 metre, 3 decimetres, 5 centimetres.

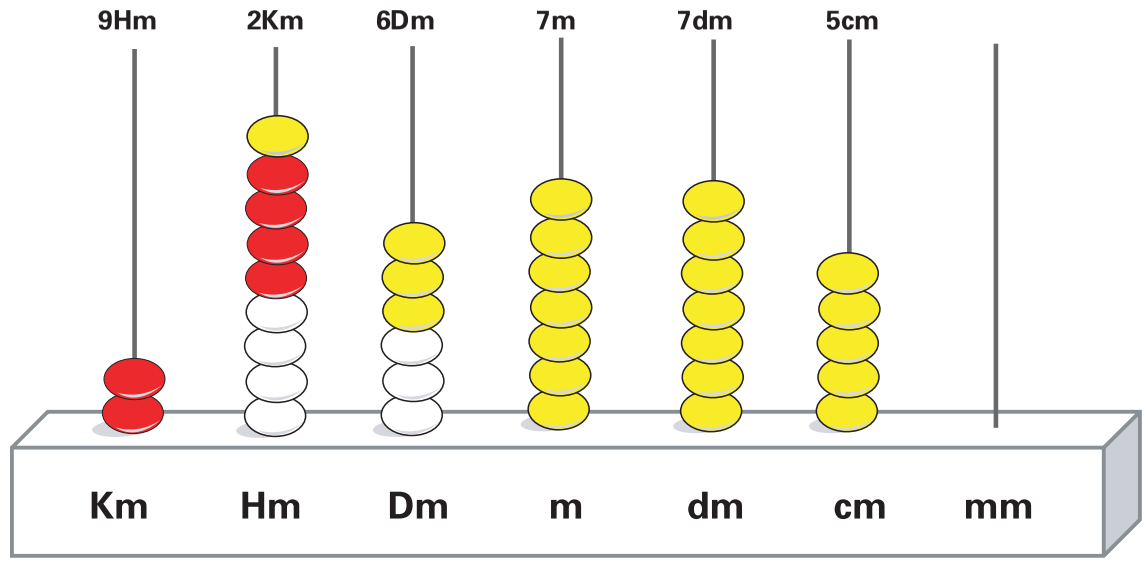
2) Define the value of each position clearly so the learners understand that every time the counter is moved one step to the right it is multiplied by 10, every time it is moved to the left it is divided by 10.

3) It is visually clear that 0.35 metres = 3.5 decimetres (dm) = 35 centimetres (cm).



Let's look at another example with measurements (std 6 and 7)
Learners need to add the following measurements to solve a problem:
0.43km + 24Hm + 132 m = ?

By using the abacus the learners will have to place the counters in the positions representing the different units of measure therefore reflecting on the relationship among them and the real value of the digits they are adding.



1) Represent the first measurement (white ball): 0.43 Km = 0 Km and 4 Hm and 3 Dm
2) Add the second one (red balls) looking carefully at the value of each digit: 24 Hm = 2 Km and 4 Hm
3) Add the third one (green balls): 132 meters = 1 Hm and 3 Dm and 2 m.
4) Add the last one (yellow balls): 5.75m. = 5 m and 7 dm and 5 cm
5) Calculate how many counters in each place: Km 2 ; Hm 9; Dm 6; g 7; cm5 and mm0

Now the learners can work on the conversion of units by placing the point indicating the decimals after the unit of measure they are considering (adding 0 if necessary).
So it will be Km2.96775 = Hm 29.6775 = Dm 296.775 = m2967.5 = dm 29677.5 = mm2967750

RODS

Definition: Rods are pieces of wood representing numbers in a way that learners can associate each number with a specific quantity and compare numbers with each other

Objectives

- Make rods
- Demonstrate how rods can be used in learning concepts in mathematics, language and art.
- Help learners discover that each number corresponds to a specific quantity represented by the rod, make comparison and solve simple equations.
- Help learners identify and compare size, colours and positions.
- Make learning mathematics concrete, interesting, relaxed and enjoyable

Key

White - 1 unit
Red - 2 units
Green - 3 units
Purple - 4 units
Yellow- 5 units
Dark green - 6 units
Black - 7 units
Blue - 8 units
Brown - 9 units
Orange - 10 units

Possible alternative material to make rods:

- Lay slabs
- Carton cut-outs
- Reeds
- Metal bars
- Dry maize stems
- Bamboo sticks
- Old rubber sandals
- Wood
- Biro tubes

How to make rods

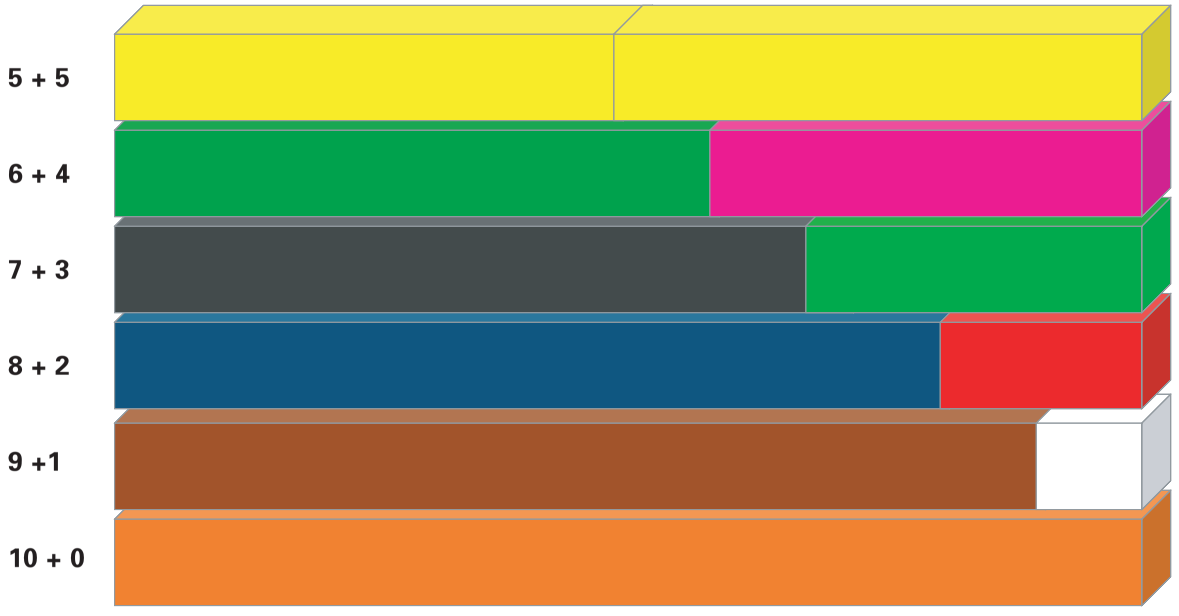
a) The rods are made of 10 pieces of 2 cm by 2 cm wooden sticks, the longest (number 10) measuring 20 cm in length and the shortest (number 1) 2 cm.
b) Each rod is coloured differently for easy identification as shown in the previous page.
c) You need at least a set of 10 identical rods so that many learners can work with them and many activities can be done at the same time.

Activities (suitable for pre-school and std 1)

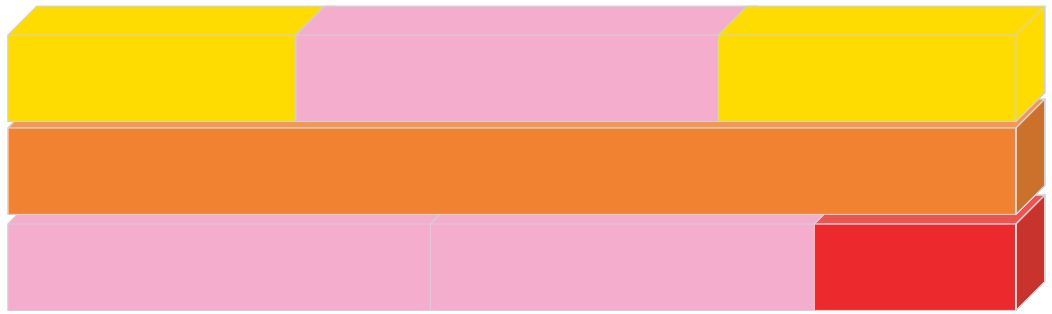
1. Identification of rods and matching with numbers
   Examples:
   Teacher "Show me the yellow rod" – Pupil holds the yellow rod
   T. "Show me the number 7" – Pupil shows the black rod which is number seven

2. Sorting colours and size
   Examples
   T. "Put all rods having the same colour together"
   T. "Put all rods having the same size together"
   T. "Put the rods in order from the shortest to the longest" etc.

3. Combining 2 rods to make 10 – see the following example



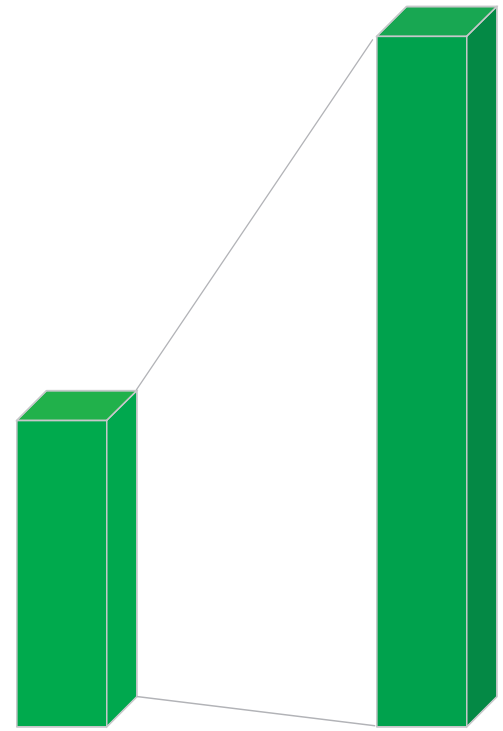
4. A - Comparing by adding:
The learner compares rods of different sizes and adds them up to make up the length of number 10
Examples: 2 + 4 + 4 = 10; 3 + 4 + 3 = 10



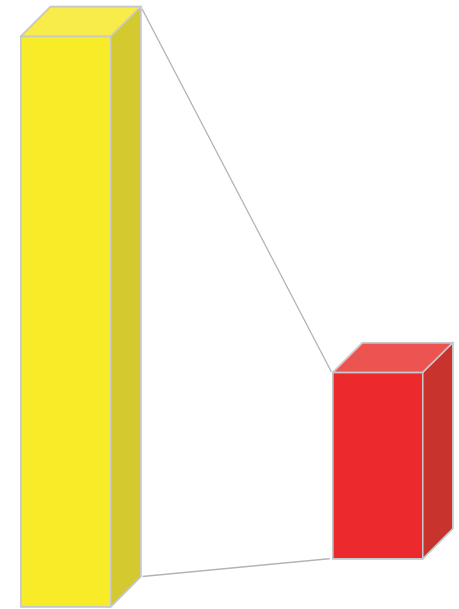
B – Comparing by subtracting
The learner has to find, by trial and error, the rod which fits into the space
Examples: 9 – 6 = 3; 9 – 3 = 6

C - Comparing lengths/heights/ and using comparative and superlative language structures:
The teacher chooses a set of different rods and asks learners to compare and describe them.
Examples:
T. "Which one is the longest rod?"
T. "Which one is the shortest rod?"
T. "Is the blue rod longer than the yellow one?"
T. "The orange rod is the longest: true or false?"

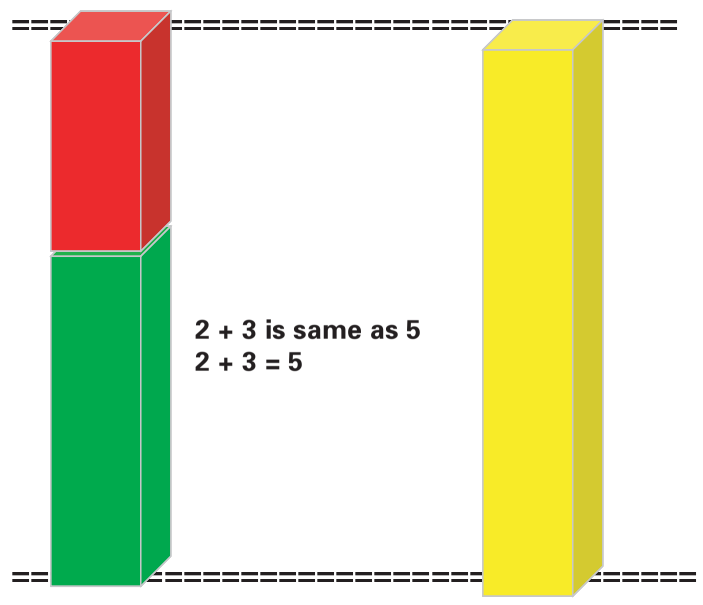
5. Use the comparison between two rods in order to understand the meaning of greater, lesser and equal.



3 is lesser than 6



5 is greater than 2



2 + 3 is same as 5
2 + 3 = 5

Similar the logiblocks in the next chapter, rods can be used for a variety of activities, such as:

- Learning and revising the names of colours either in local language or in English.
- Practising position in space with use of prepositions like: in – on – under – near – below – between – to the left – to the right - near to, etc.
- Being strong and durable they can behandled by learners without problems and can be used easily in group work and games.
- They are invaluable means for remedial teaching; they can help slow learners to understand many abstract concepts.

LOGIBLOCKS

Definition: the logiblocks are simple structured materials to represent basic shapes of different size, colour and thickness

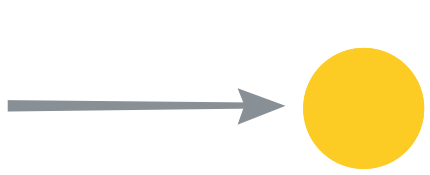
Objective
- Make logiblocks
- Identify different shapes for description, comparison and classification

Materials
Cartons, plastic material, plywood, clay and other modelling material like play dough,layers of cardboard or paper, old newspapers and papier mâché, cow dung, etc.
To provide different thickness some shapes will require three layers of cardboard or plywood or any other material used.

How to make logiblocks
The whole set contains 48 pieces:
- four geometrical shapes: square, rectangle, triangle and circle
- two sizes: big and small
- three colours: red, yellow and blue
- two thicknesse: thin and thick

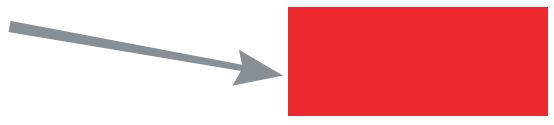
Activities (suitable from std 1 upwards)
A – Describing different blocks, identifying shape, size, colour and thickness
Example:

This is a circle. It is big, yellow and thin.



This is a square. It is small, blue and thin.

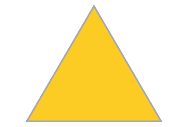
This is a rectangle. It is big, red and thick.



B – Changing the characteristics of the block, one at a time
Examples:
A learner chooses one block randomly and describes it:
"This is a square. It is big, yellow and thin".

LET'S CHANGE THE SHAPE:
Another learner chooses a block that has the same colour,size and thickness but a different in shape, and describes it.
"This is a triangle. It is big, yellow and thin".

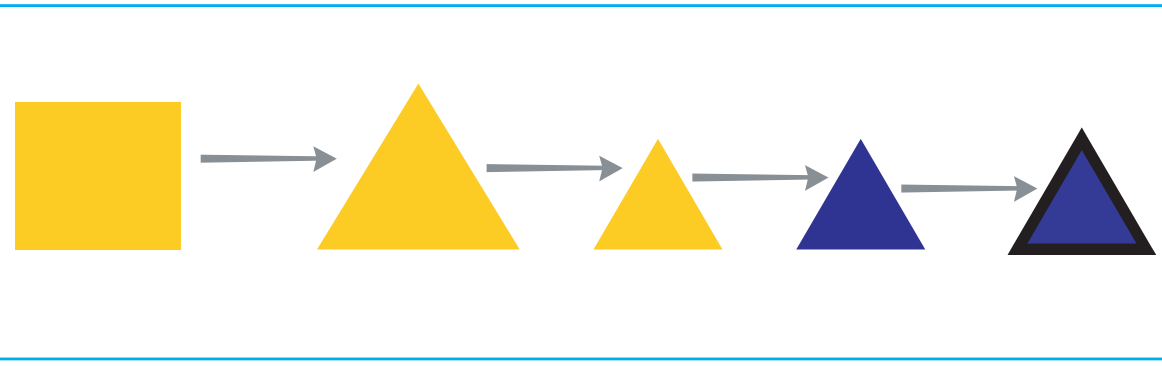
LET'S CHANGE THE SIZE
A third learner chooses a block that has the same shape, colour and thickness as the previous one, but has a different size and describes it:
"This is a triangle. It is small, yellow and thin."



LET'S CHANGE THE COLOUR
The fourth pupil chooses a block that has the same shape, size and thickness as the previous one, but has a different colour and describes it:
"This is a triangle. It is small, blue and thin."

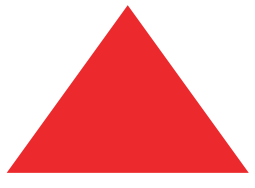
LET'S CHANGE THE THICKNESS
The fifth pupil chooses a block that has the same shape, size and colour of the previous one, but has different thickness and describes it:
"This is a triangle. It is small, blue and thick."

The five shapes are lined up in order to look at the sequence, to compare and describe in which way they are equal or different. Comparing the first and the last block, there will be no similarities, only differences.

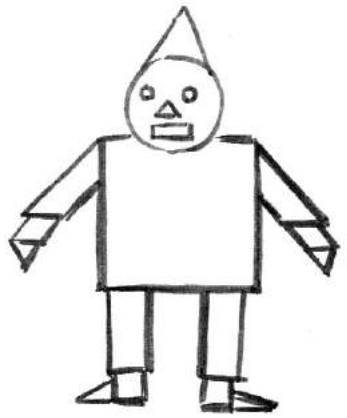


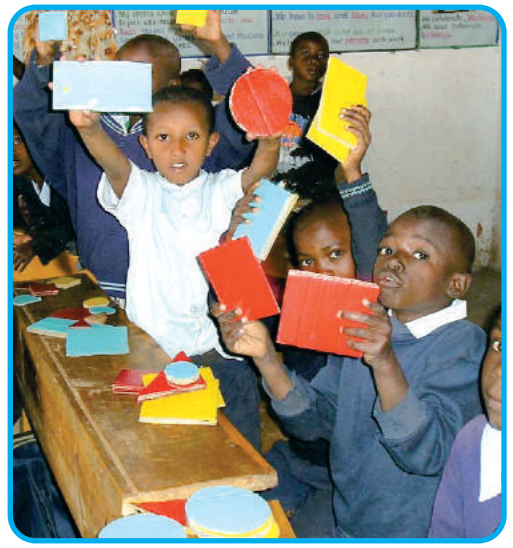
C – Comparing two blocks randomly and identifying similarities and differences.
Examples: compare the two following blocks

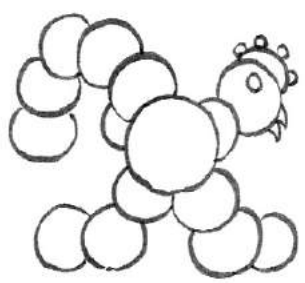
They are similar in size (big) and colour (red).
They are different in shape and thickness.

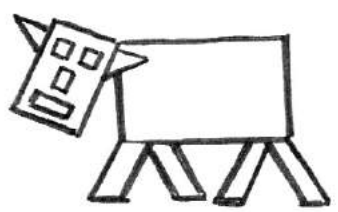


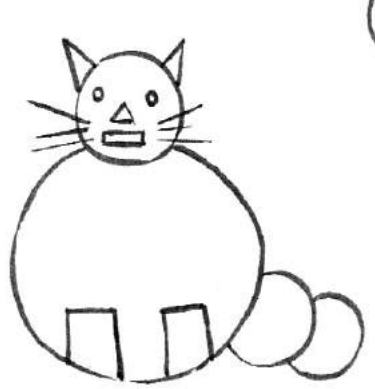
This tree graph has been used to classify logiblocks in term of
shape, size and colour in a standard class in Nairobi. Seven and eight year old learners were involved in many useful classification activities as such as comparing, identifying differences and similarities, describing characteristics, using
sentences with and/or. They have improved their logical thinking skills and performed very enjoyable activities at the same time.

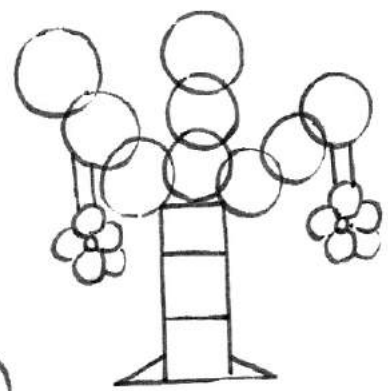












The logiblocks can also be used as templates for simple drawings.
Young learners can gain confidence in their artwork if they can draw around simple shapes.

The activity can be either strictly directed by the teacher, (i.e.: “Draw animals using only circles.” or “Draw a person using squares only”.) or left to the imagination and creativity of the learners. It can be completed by colouring.

MATHS GAMES

INTRODUCTION

Through physical games and exercises children develop healthy minds and bodies. It also cultivates in them the skills of co-operation and friendship. Children learn and remember better when they are involved in a playful activity that may include elements of competition and team work.

OBJECTIVE

- To provide opportunities to acquire problem solving skills and to put into practice what the learners have learnt in different subjects

Our visitors challenged by the maths games

1. SNAKES AND LADDERS

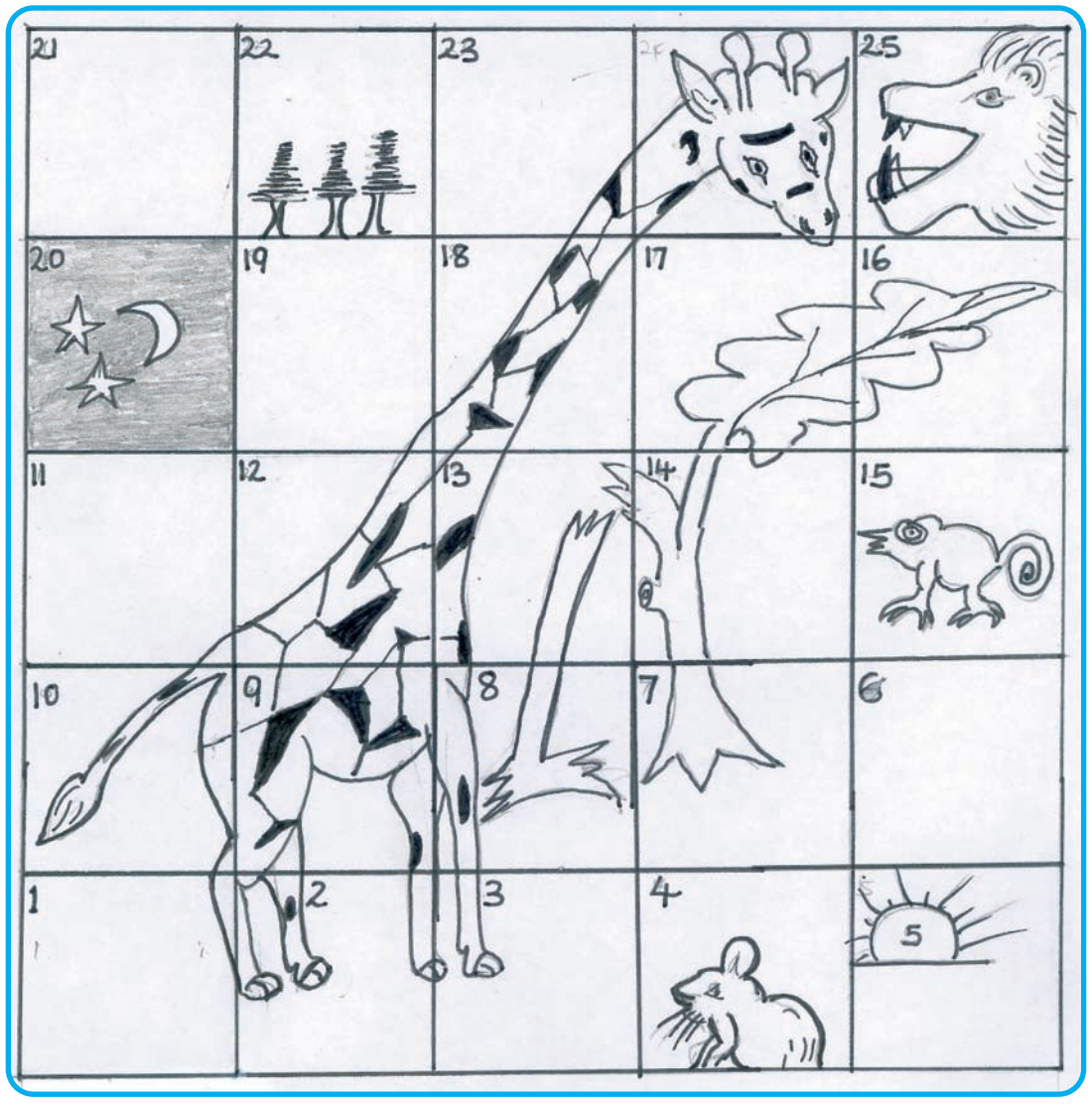
Material: dice, board or carton or a piece of cloth, crayons or coloured pencils, rulers, pencils and rubbers. The dice could be prepared by std. 6 or 7 learners when they learn about cubes and cuboids and need to practice how to make them.

Method

- Prepare the game with numbers and drawings of snakes and ladders.
- Divide the class into groups and give each group a set of dice
- Each group will throw the dice and will say loudly the number (if you give two dice the learners will have to perform the addition)
- The teacher will write the points on the board and check whether the points correspond to a lucky or unlucky number.
- The lucky numbers are the ones at the bottom of the ladders because the players will climb the ladder and get more points. The unlucky numbers are the ones with the head of a snake because the players will have to go back where the tail of the snake is.
- Continue the rounds adding the points until one group reaches number 100 and is thewinner. If there is no time to go to 100, agree with the class about the number which is going to be the end of the game.

Here is a small example of the "snakes and ladders" game: this should be reproduced on a bigger piece of paper or, even better, on a piece of cloth which has been treated with glue and then finished with varnish. That would make an everlasting resource which can be used over long time in class or in the playground.

2. IN THE JUNGLE

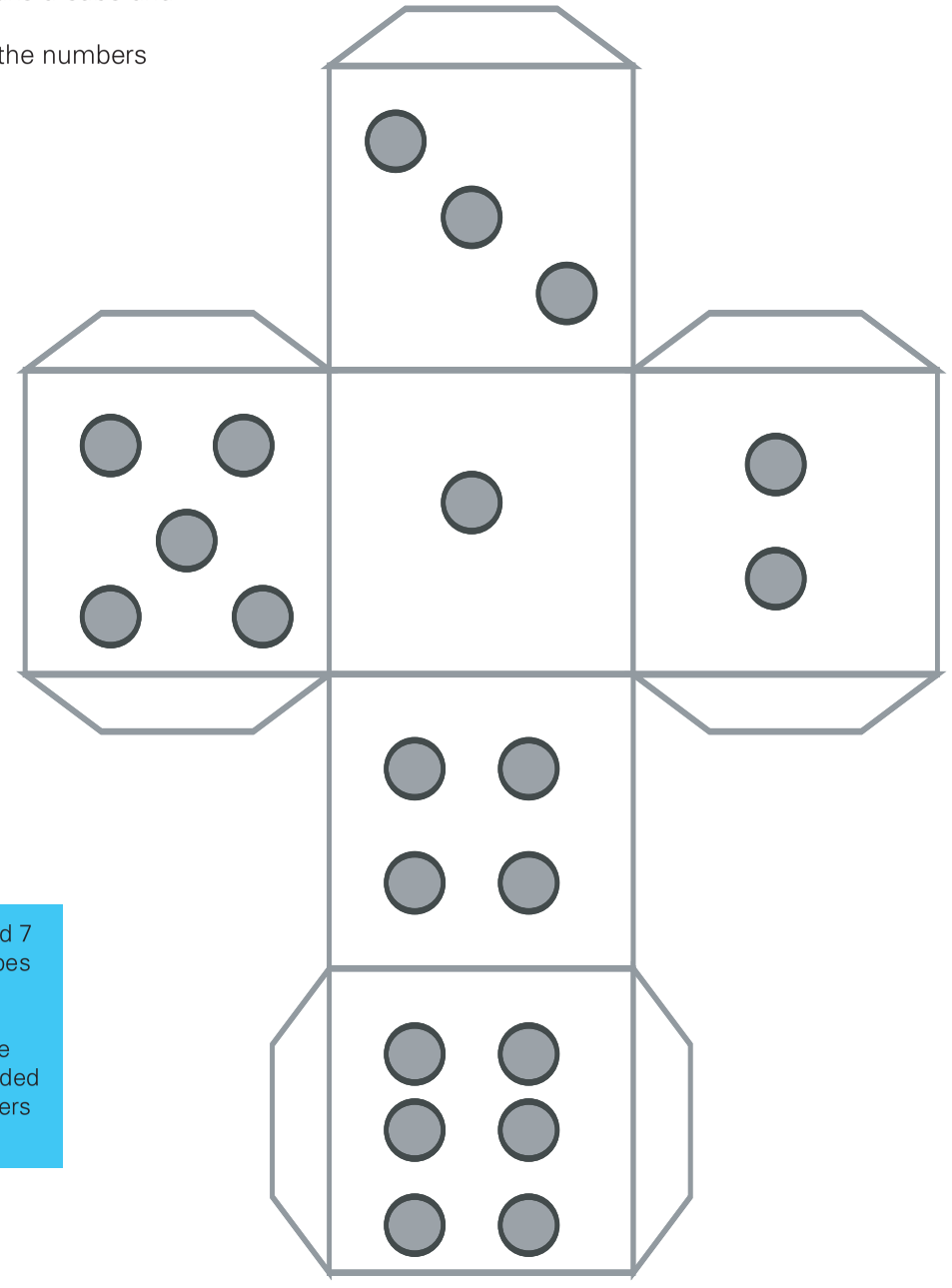


KEY

4 – Don't disturb. Go back one step.
5 – Go for breakfast to 6.
7 – Climb the tree up to 17.
10 – Have a ride to 24.
15 – Bad omen. Start again.
16 – Climb down to 8.
18 – Throw the dice again.
20 – It is night. You must sleep.
22 – Lost for three days in the forest.
25 – Go back 3 steps

In order to play the games you need a group of dice, at least one for each group. So here is how you can make dice:

- Draw this picture on strong paper, cardboard or cartons.
- Cut along the external lines and fold along the internal ones
- Fold it so as to make a cube and glue the flaps
- Draw the dots or the numbers on the dice faces.



Learners in std 6 and 7 have to work on cubes and cuboids.

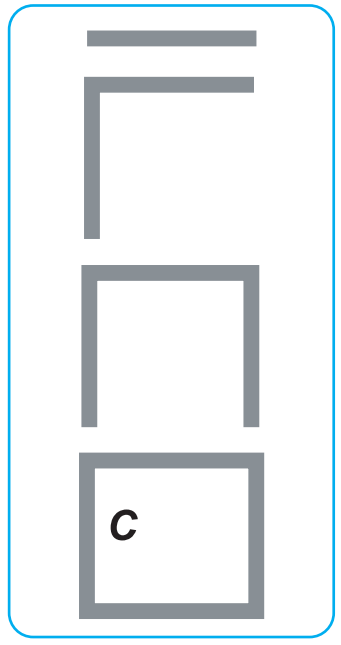
They could make the number of dice Needed by their fellow learners in lower levels.

3. DRAWING SQUARES

Material: a board and chalk

Method:

- divide the class into groups and divide the board into three parts to allow for competition among three groups
- The first person in the group will draw a straight line
- The second person in the same group adds a line as Indicated.
- The third one also adds another one and the fourth completes the square and writes the first letter of his or hers name in it.
- each team works at the same time trying to write as many letters as possible.
- The winner is the team that manages to complete more squares.

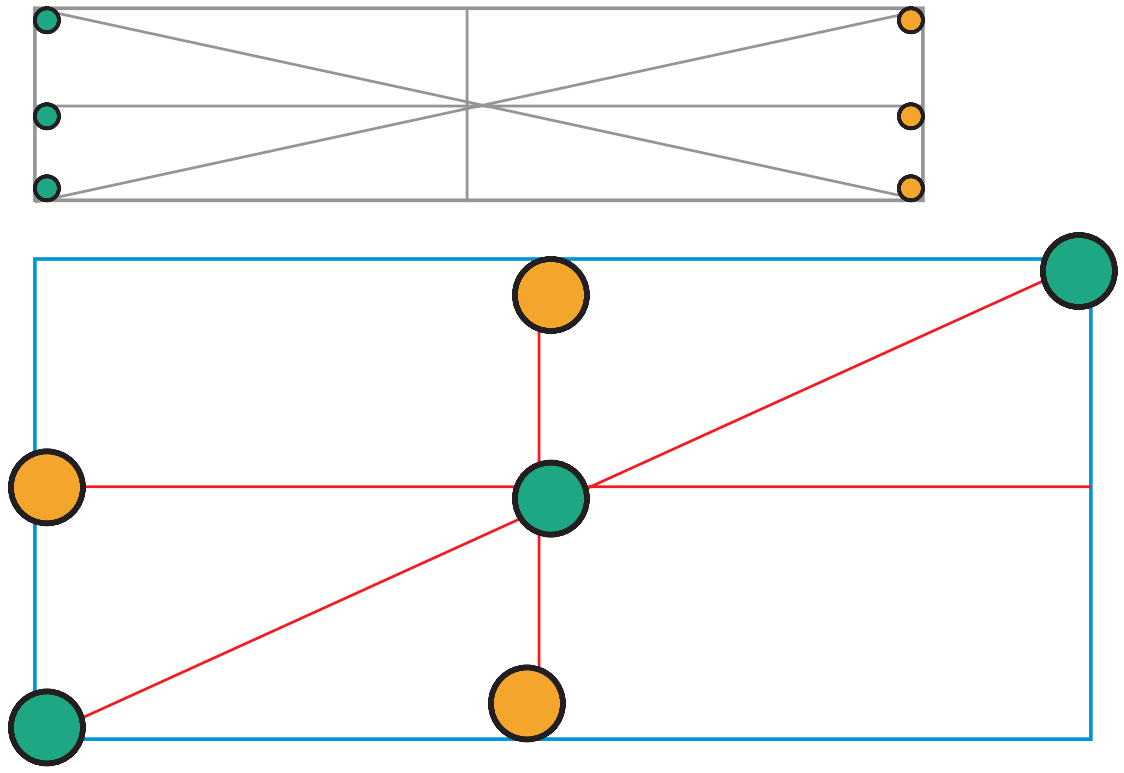


4. THE THREE TOPS GAME

Material: a drawing on cardboard or carton box

Six bottle tops with two different colours.

Method: Each player places 3 counters at the three points on the shorter side of the cardboard. The players move one bottle top at a time trying to put them along the internal straight lines. At the same time they try to prevent the other player from completing a straight line. The first to complete a line is the winner.



LIFE SKILLS

Young learners today face many challenges and problems in their growth and development that may lead to HIV infections, drug addiction and substance abuse. Therefore, there is a need to equip them with proper knowledge and skills to cope with the situation.

Life skills are abilities, which enable an individual, develop adaptive and positive behaviour so as to deal effectively with the challenges and demands of everyday life.

Specific objectives

- To be aware of himself or herself
- To be able to make informed and appropriate choices on issues affecting him or her and others
- To be able to relate with others meaningfully
- To be able to make decisions about personal and social behaviour.

THE TEN CORE LIFE SKILLS ARE:

- Decision-making
- Problem-solving
- Creative thinking
- Critical thinking
- Effective communication
- Interpersonal relationship skills
- Self-awareness
- Empathy
- Coping with emotions
- Coping with stress

WHY DO WE NEED TO TEACH LIFE SKILLS?

In order to help our learners:

- develop self help skills that will allow them to cope with specific problems now and in the future
- acquire knowledge and skills they need to operate effectively in many areas of life (to know what to do and at what time)
- make appropriate choices and enable them to confront new situations effectively

Life skills are acquired or learnt and therefore can be unlearnt, modified and even radically changed. Teachers play an important role in building positive behaviour patterns among their learners, and they are role models too!

HOW DO WE ACQUIRE LIFE SKILLS?

- Through information given at home and school
- By observing others
- Through the feedback received from other people, particularly parents and teachers
- By trial and error through personal experience
- By reading books and looking for information in the media
- By peer education and experiences in groups or gangs

Reflect on and discuss the following attitudes which can be barriers for behavioural change:

- Blaming our poor environment
- Sticking to negative past experiences
- Rigidity and refusal of new ideas
- Ignoring or rewarding negative behaviour
- Stigmatising people without really understanding them
- Discrimination or sex bias
- Poor or absent teaching of life skills
- Refusal to be taught
- Unrealistic rules and expectations
- Lack of confidence in themselves
- Refusal to accept feedback
- Distorted information
- Making excuses
- Refusal to accept and own information
- Negative self talk (e.g. I don't think I can make it in life)

In order to be able to implement life skills education we require:

- Supportive relationship
- Sensitivity
- Security
- Listening
- Appreciation
- Communication that allows opening up
- Courage to confront the negative and develop the positive
- Role models
- Adequate and correct information
- Opportunities to develop life skills

What are the most important life skills we want our learners to acquire?

Assertiveness: knowing what you want and being able to take the necessary steps to achieve it; being firm and focused.

Creative thinking: coming up with new ways of doing things when faced with unfamiliar situations or problems.

Problem solving: the ability to appreciate the nature of the problem and come up with workable solutions to different situations.

Critical thinking: developing an inquisitive mind instead of accepting everything at face value; analyse issues and evaluate them.

Negotiation: ability to discuss issues in a calm and open manner, to resolve conflicts and establish fair play.

Decision making: ability to make a reasonable decision based on adequate information, to look at alternatives and appreciate the results.

WHAT CAN YOU DO TO DEVELOP THESE SKILLS IN YOUR LEARNERS?

Form a club in your school following these steps:

1. Discuss the issue with the school head and ask for his/her support.
2. Identify the learners who are interested and will benefit most from the club.
3. Invite their parents for a clear and open discussion: they need to agree and give consent.
4. Establish a timetable convenient for you and for the learners.
5. Find a suitable room (any classroom after school hours will do).
6. Set rules with the learners and follow them.
7. Share responsibilities.
8. Plan the activities by considering the learners' priorities.
9. Collect any materials that can help to make the club interesting and colourful: posters, leaflets, books, etc.
10. Be open to the learners and be their role model: don't be shy and afraid of discussing sensitive issues such as sex, drugs, domestic violence, etc., but at the same time be cautious with intimate details and respect learner's privacy (confidentiality).
11. Fight the stigma not only with words but with actions by inviting to the club and looking after AIDS orphans or HIV positive learners.
12. Use these learners as ambassadors to spread the information to other learners in school.
13. Learners can organise workshops and network with other schools in the neighbourhood.
14. The teacher in charge should monitor and evaluate the activity on regular basis.
15. Promote discussion among school staff on issues of life skills. Invite a resource person from a counselling NGO or from the Education Department to talk about life skills promotion activities conducted by the school. In the next step, invite the parents to share their worries, difficulties and successes with the school staff: that will empower and motivate them to improve their relationship with their children.
16. Contact community based organisations that deal with life skills in your area and see if they are interested in coming to the school where they can present drama, music, songs, hold debates.. etc.

Local churches can also be involved and can offer different activities to your learners.

If you are not infected, you are affected.
Your problem is mine, my problem is yours.
Let's work together and the load will be lighter.

ENGLISH LANGUAGE: COMMUNICATION

Children first learn to communicate through their mother tongue at home. They improve those initial communication skills by using various means to deliver the message they want and to understand the information they receive. Through "real communication" activities in school they are encouraged to use the vocabulary, language patterns, structures or dialogue lines they have learnt or become familiar with during the language drills and practice. In this sense games are essential in communication skills development. It helps improve learners' pronunciation and sentence pattern development and makes learning more interesting and easy and will allow for the practice of specific language structures away from the boredom of meaningless repetition drills.

In order to organise effective communication activities and games, it is necessary to reflect on how "real communication" takes place:

Communication in daily life implies a reason to speak and to listen. It also involves understanding the message, exchanging new information and using language freely. It doesn't follow grammar rules strictly and allows language creativity, use of face expressions and gestures.

Therefore:

- We need to give our learners a reason to speak and listen.
- We must make sure they tell each other new information.
- They should be encouraged to use their own words to explain the message.
- Communication should take place in a interesting and relaxed situation so that learners can develop confidence and express themselves freely.

According to the Primary English syllabus, the learner should acquire:

- Listening skills to be able to listen, understand and respond to information and instructions appropriately.
- Speaking skills, to be able to use correct pronunciation, stress and intonation to express needs, feelings, convey information and relate experiences.
- Reading skills, to be able to read and understand instructions, to read for information and for pleasure, and to develop vocabulary and sentence structures.
- Writing skills, to be able to express own feelings and ideas meaningfully and legibly in correct English structures.

WHY INVOLVE LEARNERS IN COMMUNICATION GAMES?

- Learners gain courage and confidence in using the language they are learning.
- The slower learners get motivated and have a chance to express themselves.
- Learners are free to communicate with each other.
- Learners are able to improve their academic performance.
- Learners learn better when they do something or are involved in a performance.

Points to remember when playing language games:

- Give clear and fair rules in order to avoid confusion and arguments
- Explain the objective of the game and which language structure will be practiced so that the learners understand clearly what they have to do
- Play the game for a short time: it can be a very good warm up session or the conclusion of a lesson or a brief intersession to make a heavy lesson more pleasant
- Do not interrupt a game to correct learners, let them complete their task and correct the common mistakes at the end
- Play games regularly so learners become familiar with them and can play them also during break time.

The following games involve mainly speaking and listening skills.

They can however be developed to include some writing. Effort should be made to use the themes in the syllabus to develop activities or language games as demonstrated below.

Listening Skills

Communication games can be used in Theme I (greetings and requests). In the process of greeting each other in the classroom, the learners will have the opportunity to know each other's name, and practice the sentence patterns.

Example: Questions like: What is your name? How old are you? Where is your home?

SPEAKER
Adan Hussein
7 years Old
YABICHO, RHAMU

PARTNER
You are
Adan Hussein
7 years Old
YABICHO, RHAMU

Note: this covers speaking skill also.

- Reading – The learners will be reading the name cards as they distribute the letters.
- Writing – The learners will write their names during writing lesson by filling in blank spaces.

Draw patterns/write legibly and neatly.
e.g.1. My name is Adan.
2. I am six years old.
3. I am a boy.

THE POSTMAN (suitable for std 2-3)

Objectives

- Developing communication skills
- Practicing simple language structures

Materials: Envelopes, cards

Activities

- Divide the class into groups with leaders who will be the postman
- The group leader distributes to the group the cards containing the following details: name – age – post address – telephone number.

- The postman carries envelops containing the same information in the cards.
- He/she asks questions (what's your name, how old are you, what's your address, what's your phone number, etc) and identifies the right person to whom the letter has to be delivered.
- If the information on the card corresponds with the one on the envelope then postman delivers the letter.
- If there is a competition among the groups, the first postman who delivers the letters to the right people is the winner.
- During the game the participants should not show their cards: it is a game for listening and speaking, not for reading skills! The whole class has to be involved in asking and answering questions.

ENVELOPE:
It has to be delivered to:

You are: RAHA ABDI 14 YEARS OLD PO BOX 489 WAJIR TEL N. 78346	RAHA ABDI 14 YEARS OLD PO BOX 48 WAJIR TEL N. 78346

FAMOUS PAIRS (suitable for std 3-4)

Objectives:

- Enhance effective communication among learners
- Develop listening and speaking skills

Materials

- Cards containing names of famous people

Activities

- Teacher distributes the cards to a group of learners
- Individual learners move around asking each other the following questions

- Who are you?
- Are you …… ?
- What's your job?
- Once a participant has identified the person indicated in the card, he/she introduces herself and later will introduce his/her friend to the rest of the class.

Examples of cards

YOU ARE **CHIEF KIVOI** YOU ARE LOOKING FOR **LAIBON LENANA** (Masai leader)	YOU ARE **PROF. MAZURI** YOU ARE LOOKING FOR **PROF NGUGI WA THIONG'O** (Writer)	YOU ARE **PAUL TERGAT** YOU ARE LOOKING FOR **KIPCHOGE KEINO** (Runner)

Each card has to be prepared twice in order to match the participants two by two. Of course the name at the top in card A will be at the bottom in card B and vice versa.
Look at the following example:

CARD A	CARD B
YOU ARE **CHIEF KIVOI** YOU ARE LOOKING FOR **LAIBON LENANA** (Masai leader)	YOU ARE **LAIBON LENANA** YOU ARE LOOKING FOR **CHIEF KIVOI** (Masai leader)

AT THE AIRPORT (suitable for std 3 or 4)

Objective

- To practice the skills of asking questions in order to identify someone,
- To develop polite communication skills and
- To practice pronunciation of various English sounds/words.

Materials

- Cards with all the information about the two people meeting at the airport.
- The cards include a lot of details about the two people who are going to meet at the airport: at the top WHO ARE YOU, at the bottom WHOM YOU ARE LOOKING FOR.

Activities

- The participants go round looking for their guests or hosts as they are being guided by the description on their card.
- Each participant must have a partner, so the cards must be prepared in pairs with identical information (see the above example for the famous pairs).
- After identifying their partners, the participants start communicating freely, expressing themselves and sharing the information on their cards.
- When most of the participants have found their partners the game is stopped and as many learners as possible will introduce their partners to the class. Ideally some short role-plays could be developed from the information on the cards and presented by volunteers.
- The number of cards would depend on the number of participants.

Examples of cards:

YOU ARE:
- A young male learner
- You come from Germany and you are a tourist
- You want to travel all over Kenya
- You have only one brother
- You like listening to rock music and drinking beer
- You smoke a lot

YOU ARE LOOKING FOR:
- A middle age lady
- She has 5 daughters and 3 sons
- They are all grown ups
- She sill offers you accommodation for one week in her house
- She doesn't like listening to rock musing
- She doesn't allow smoking and drinking in her house

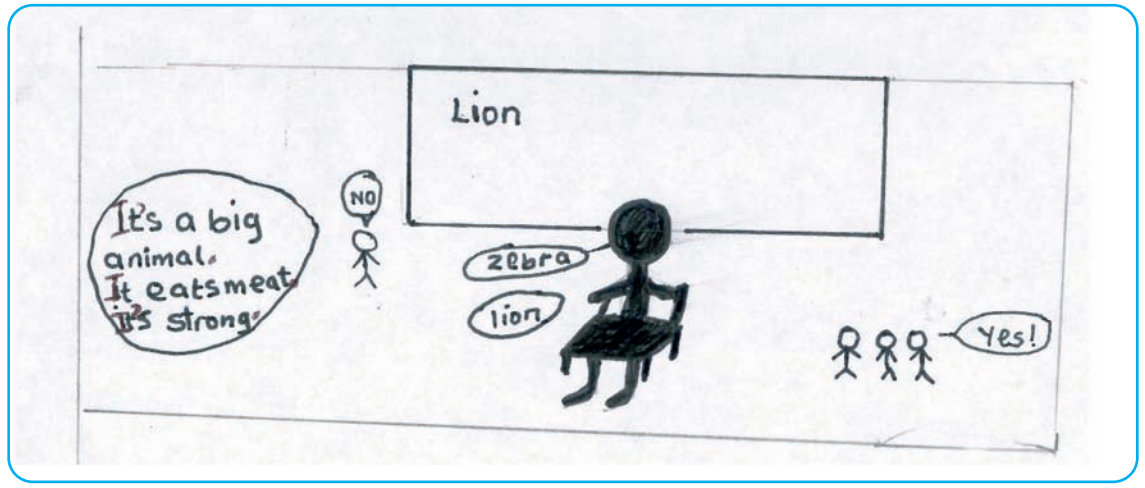
YOU ARE:
- A middle age lady
- She has 5 daughters and 3 sons
- All of them are grown ups
- She still offers you an accommodation for one week in her house
- She doesn't like listening to rock musing
- She doesn't allow smoking and drinking in her house

YOU ARE LOOKING FOR:
- A young male learner
- You come from Germany and you are a tourist
- You want to travel all over Kenya
- You have only one brother
- You like listening to rock music and drinking beer
- You smoke a lot

BACK TO THE BOARD (Very flexible: it can be played at every level)

In this game a learner is seated with his/her back to the board. A word is written on the blackboard, where he/she cannot see it. The class will help him/her guess the word through simple sentences describing a characteristic of what is on the board.

When the learner has enough information, he/she will try to guess the word.
Eventually he/she is asked to turn and see the word written on the board.



STOP THE BUS (can be played when learners know a considerable number of words)

This game helps learners to practice spelling rules when using English or Kiswahili. It also enables learners to classify words according to the category they belong to.

To start the game the teacher draws a table on the board with different headings, i.e. animals, clothes, adjectives, actions, food:

	Animals	**Clothes**	**Adjectives**	**Actions**	**Food**
C	cat	coat	crazy	cry	carrot
D					
F					
H					

The teacher asks learners, in groups, to find words that begin with the letter shown on the vertical left column. When a group has found all the words, it will shout "stop the bus" to stop everybody else from writing. Then that group will say, or write, the words under the headings and the class will check whether they are right or not.

When one set of words is completed the teacher will give another letter to start again and will award the marks to each group.

WORD FORMATION (very simple, suitable for pre-school and std1)

Objective

- To develop coordination and communication skills
- To be able to make words from letters.

Materials: Cards and boxes, the pocket board.

Method

The game is played in pairs

First round: Box A contains pairs of letters of the alphabets while box B contains numbers from 1 to 6. A member of the two teams picks a letter and places it on a pocket for the others to complete the word by picking other letters from the box. Whoever completes the word first is awarded six marks.

Second round: following the same rules whoever completes the word first is awarded 5 marks
At the end of the game the learners will add their points.

Note: Only the letters forming the words are used. The rest or the cards are kept aside until all cards are used
Here is an example on how the cards are placed in the pocket board in order to make words

									C	A	T				
B	A	S	K	E	T										
			A	B									A	B	

STORY TELLING

Listening to stories, and participating to storytelling, is a naturally appealing learning activity that all learners will enjoy. Stories bring the language alive in a context that is meaningful and interesting so that learners can often work out the meaning of new words for themselves.
This is the best way for them to learn at every level from pre-school to standard 8.

Here are some points to keep in mind before planning your story telling:

- Stories must be chosen to match learners' interests and age.
- Stories can include language that is slightly more difficult than learners have learnt, but they should be able to understand the main points.
- Various story telling techniques should be used to make a story come alive for the listener, especially participatory styles involving riddles, songs, dances, and even questions and answers related to the stories' action and meaning.
- Telling a story helps learners understand the language because the storyteller shows the meaning using his/her body and voice. Learners can also read a story after they have heard it, to check their understanding and develop their reading skills.
  There are lots of activities you can do before, during and after you have told a story to your class, depending on the age and learning level of your learners.

Before listening to the story:

- **Put pictures into an order:** Learners are given or shown a set of pictures from the story in the wrong order. They work in pairs to talk about the pictures and decide what the correct order is. They then check their answer when they listen to the story.

- **Predict the story from important words:** Put 6 key words from the story on the blackboard and tell learners who the characters are. They speak together and decide on a story using these words and characters.

- **Predict the story from the title or key topic:** Tell learners the title of the story or the basic topic. They work in pairs to decide on 8 words that they think they will hear.
  They listen to see if they are correct
  Reading or Listening Comprehension

- **Ordering sentences or paragraphs:** Learners are given a mixed up version of the story. They must put it in the correct order.

- **Spot the mistakes:** Learners read sentences about the story that all have a mistake in them. They must find the mistakes and correct them. The sentences can be given to learners before you tell the story, so it is a listening comprehension, or after the story as a reading exercise.

- **Fill in the gaps:** Learners are given a number of sentences from the story with words taken out. They must choose the correct word finish the sentence. Again, this can be given as a listening or reading exercise.

Writing

- **Re-tell the story:** Learners tell the story by drawing 4-6 pictures. Then, they write a simple sentence under each picture to re-tell the story. This exercise can be done as a creative writing exercise or as a copying exercise where learners copy the sentences from the board and have to draw pictures to match them. These pictures can be compiled into books.

- **Letter writing:** Learners imagine that they are a character from the story and write a letter to another character. If possible they can send the letter to another learner who replies as the other character.

- **Describing characters:** Ask learners to draw characters from the story and to write simple sentences describing their appearance, character or daily routine.

- **Write a new story:** Learners use the characters from your story in another story - possibly following on from the one they have just heard. They can tell this story using puppets or pictures.

Speaking

- **What happens next?** With a long story, stop so often and ask learners to speak in pairs and decide what they think will happen next. They then listen to see if they are correct.

- **Acting:** Learners work in small groups to act out the story. They can use words from the original story or come up their own words to say.
- **'Hot Seat":** One learner assumes the role of a character in the story and starts answering questions from the rest of the class on the character. This can also be done in small groups.

- **Role-play:** Learners work in pairs and imagine that they are two characters from the story. Tell them a situation and then ask them to have a conversation assuming the role of these two characters.

- **Re-telling the story:** Learners try to re-tell the story to a partner in their own words.
  You can give them pictures or prompts others to help them.

• **Translating:** Tell learners the story in Kiswahili and ask them to re-tell it in English.

CREATIVE STORY TELLING

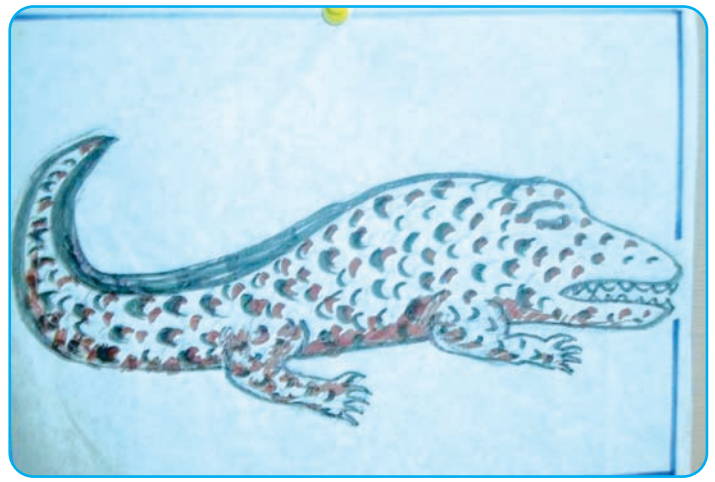
- Give learners a set of pictures. Ask them to put the pictures into a series to make a story, and then ask them to tell the story, pointing to the pictures as they move along.
- Help learners make stick puppets and use them to tell a story.
- Tell learners the first or last line of a story, then challenge them to tell the rest of the story.
- Give learners a set of words. They must tell a story including all the words.
- Ask learners to draw a picture story of a certain type, for example: horror, mystery, and adventures. They then use their pictures to tell a story – using the pocket board to hang them.

Here is a step-by-step example of story telling with the story "The clever monkey"

Pictures done by Mesfin - Debre Birhan – Ethiopia - 2003

CAPTION 1

A young crocodile lived happily in the big river. One day he felt very sick.



CAPTION 2

He went to see the doctor. The doctor said: "You are very sick.
To get better you have to eat a monkeys' heart."

CAPTION 3

The crocodile waited near the riverbank until a little monkey arrived.
"Do you want to go for a ride?" asked kindly the crocodile. "Oh, yes. Thank you very much!" answered the monkey.

CAPTION 4

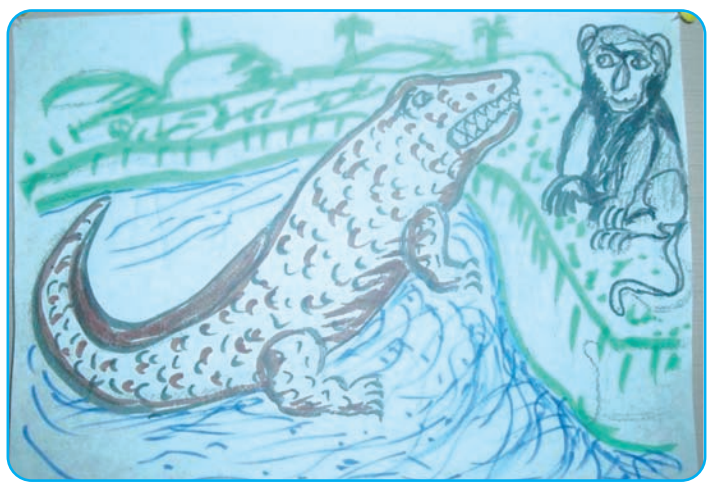
When they were in the middle of the river the crocodile said: "I am very sorry, monkey, but I have to take your heart. I'm sick and I need it to get better."

CAPTION 5

After a while the monkey said: "I am very happy to give you my heart, but today I have left it at home.
So, if you take me back to the river bank I will get it for you"

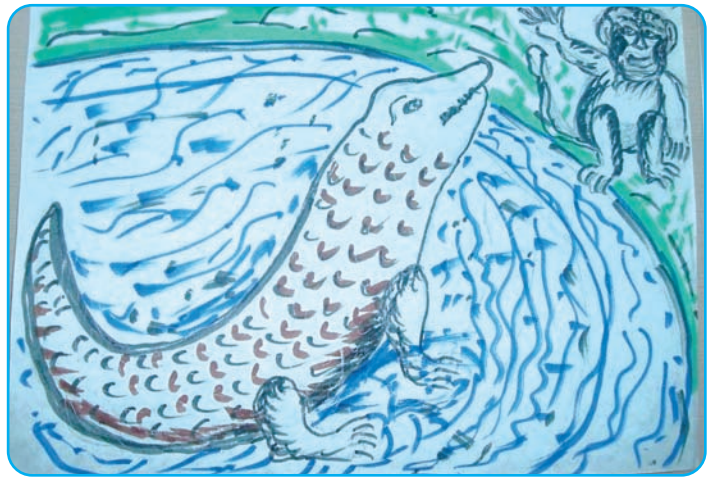
CAPTION 6

Happily the crocodile took the monkey back to the river bank



CAPTION 7

The clever monkey jumped quickly from the crocodile's back and said: "Good bye my friend. I'm sorry, but I can't help you. I need my heart!



You can use this story with learners at various learning levels.

1st level: FOCUSING ON SPEAKING AND LISTENING SKILLS

1. Tell the story: speak slowly, clearly and in a way that everybody in the class can hear you. Use the right stress, intonation and punctuation.
2. Ask the learners if they have identified some of the key words in the story: they will tell you and you check if everybody in class knows their meaning.
3. You tell the story again leaving a few gaps to be filled by the learners.
4. Give out the pictures: while you tell the story the learners will match the sequence you are telling with the right picture.
5. Ask learners holding the pictures to put themselves in order, showing the sequence of the story to the whole class.
6. Ask the learners holding the pictures to say something about their picture: key words, actions, places, etc.
7. Distribute the cards with the captions to some other learners and ask them to find the picture matching what is written in their card: they should stand next to the learner holding the picture so completing the sequence of the story.
8. A few learners in class can read aloud the story so you have a chance to check learners' reading ability and correct pronunciation mistakes.
9. Collect the cards and pictures and introduce the puppets: the crocodile, the monkey and the doctor. With the whole class, practice the conversation lines of the story.

Example: "What is the crocodile saying to the doctor?" "How does he invite the monkey?"
Encourage learners to use their own words to express the feelings of the characters.

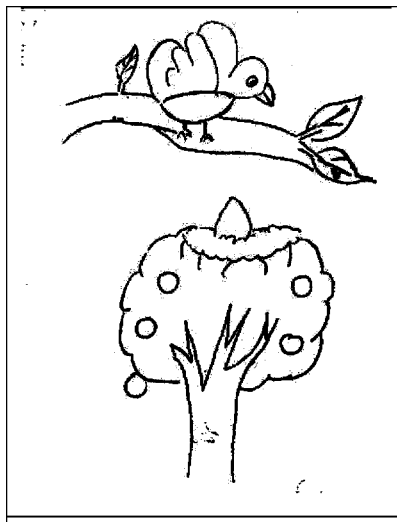
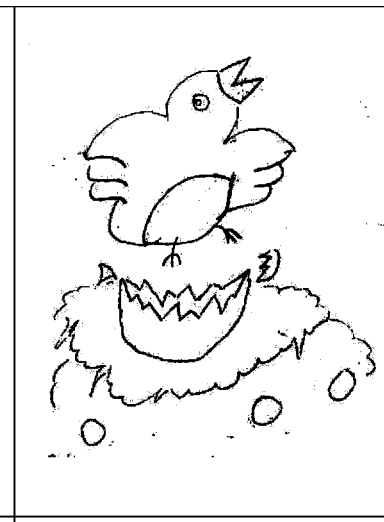
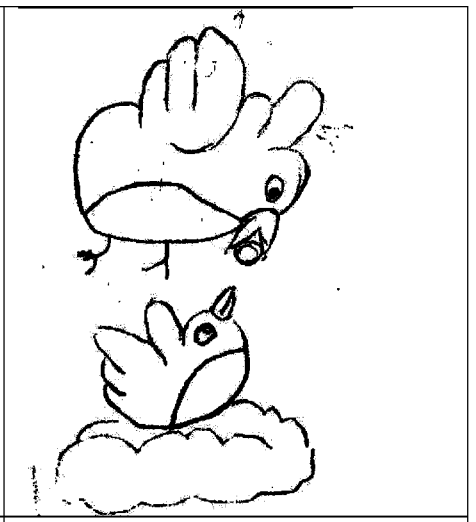
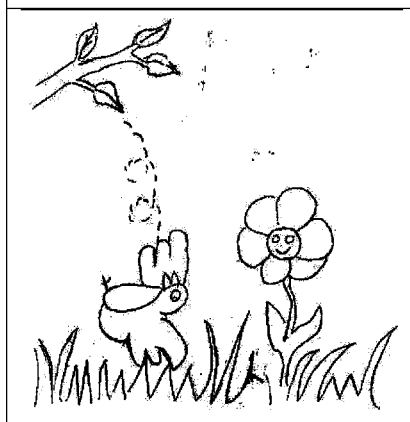
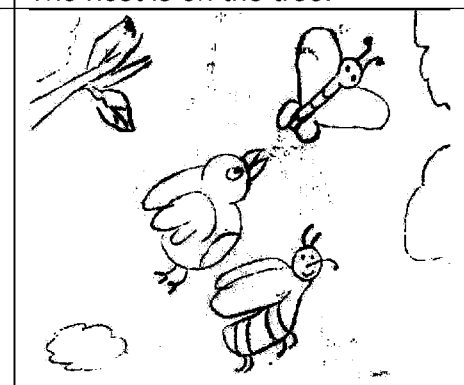
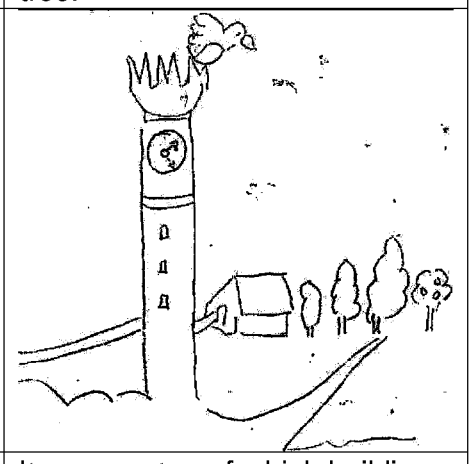
10. Ask learners to take part in a role-play when three of them will act the story holding the puppets: they might need some time to prepare themselves and agree on the sequences of the story.
    More groups could be involved, making it a competitive drama presentation.
11. As a follow-up activity done after a few days you could ask some learners to try to tell the story again to the rest of the class.
12. Oral comprehension assessment: ask one learner to start a sentence from the story and another one to finish it. If it makes sense they have got the gist of the story.

2nd level: FOCUSING ON READING AND WRITING SKILLS

- Give a card with a caption of the story to each group and ask learners to read as many key words as possible from their card.
- You read the captions and the learners match them with the cards they have in their hands.
- The learners stand in front of the class ordering the captions in the right sequence.
- One learner will read the whole story and the class will check if the cards are in the right order.
- Write on the board some true/false statements about the story: ask learners in pairs to read the statements to each other and decide which is true and false. Then you can ask the learners to raise their hand and vote for True or False.
- Dictate few sentences with blanks to fill in and ask the learners to complete them in groups.
- Ask learners in groups to write few sentences about the story: you will have to correct only the group work.
- Rewriting the story: suggest different characters and allow learners to choose the ones they prefer. They will follow a similar storyline writing a new story. They can also change other elements of the story: different places, time and season, age of characters, good characters becoming bad and vice versa, etc.
- Ask learners to change only the ending of the story.
- Use all these suggestions to promote book making in your class: each one of the short stories produced by your learners can become a book for the class library (see the chapter about book making in this manual)

THE STORY MAP **Written by Nairobi Group. Artwork by Joyce, Leah, Calvin and Josephine.**

To understand how a story map works let's look at a simple example. The story of Bibo the bird was produced during the workshop by a group of teachers to be used for silkscreen printing. The pictures here reproduced are the ones printed during the workshop.

		
BIBO THE BIRD	Bibo comes out of the egg. The egg is in the nest. The nest is on the tree.	The mother bird brings food to Bibo. Bibo is left alone on the tree.
		
Bibo falls down on the flowers. Bibo gets new friends, the Butterfly and the Bee	Bibo and his friends fly high up.	It goes on top of a high building and tries to find its home.

Follow up activities:

1. Help Bibo to find its home
2. Name Bibo's friends
3. Fill in the missing vowels:

- B – tt - rfly
- B – b -
- B- -
- F – r - st

The story map will help learners to identify the important points of the story, to break it down in meaningful parts in order to understand the facts, the implications and the moral of the story. The student will be motivated to learn the vocabulary in order to participate in the exercise and eventually to be able to retell the story. If this kind of "story analysis" was included in the class routine and performed often, the learners themselves could make their own story maps in groups or pairs and then present them to the class. That would give them a very useful tool they could use later on at higher levels to understand more difficult narrative texts.

POEMS, RHYMES, RIDDLES, TONGUE TWISTERS

Poems / rhymes (suitable for all levels)

Objectives

- To involve the whole class in a very enjoyable atmosphere of learning
- To give learners intensive practice in selected pattern without boredom
- To exploit rhythms and similar sounds to remember vocabulary
- To improve pronunciation in stress, intonation and rhythm as well as individual sounds
- To improve learners' communication skills
- To enable the learners to complete sentences/paragraphs.

Using poems/rhymes in teaching language

- **Reciting** poems and listening to poems/rhymes being recited always captures the attention of the learners thus improving their listening and speaking skills.
- **Reading** poems/rhymes helps the learners to improve their pronunciation, to understand and to develop their reading skills.
- **Writing** poems/rhymes helps learners to express their feelings and ideas. It helps in writing legibly and improving their spelling ability.

Reciting poem step by step

- Recite the poem as the learners listen
- Use the right stress, intonation and punctuation
- Display the poem on the chalkboard or on a chart
- If necessary use pictures or actions to convey the meaning of the words
- Read through the lines one after another as the learners listen.
- Read through the whole poem and lead the learners to do the same following the teacher's model
- Let the learners recite for enjoyment
- Involve the learners in reciting the poem in choral.

Example 1 Theme: Our Environment Std. 2

ONE BUSY LEARNER

One busy learner planting the trees
Two busy learners weeding the flower
Three busy learners sweeping the floors
Four busy learners dusting the windows
Five busy learners picking the rubbish
Six busy learners cleaning the towns
All busy learners taking care of our Environment.

Example 2 Theme: Children's Rights

LISTEN TO ME by Joyce Otieno

I am a child
Listen to me
I am here
Listen to me
I have a right
A right to live
A right to grow
A right to education
Listen to me.

Reflection on the structure and meaning of the poem (compiled by Calvin Adoar)

Repetition. It lays emphasis and arrests attention to help with mastery.

- Listen to me
- I am
- A right

Length

- Short. Suitable for mastery by even the tender age.
- Also short lines

Word choice

- Simple and clear

Sounds

- S in listen
- R in right
- L in listen

Tone

- Plea

Rhythm

- Rocking

Vocabulary

- Child – boy or girl
- Listen – verb
- Here – preposition
- Right –
- Live – life, home, house
- Grow – verb
- Education – learn

Senses

- Hearing – listen
- Seeing – I am here

SPELLING WORDS

You see the word
And sound the word,
Then close your eyes and think.
You say the word,
Then, quicker than a wink,
You can spell the word,
You can write the word
With pencil or with ink.
Do this often, do it well;
This is how you learn to spell.

Anonymous

Activities that can be done after reading the poem:

1. Write down the action word in line

1 ———————— 2 ———————— 3 ———————— 4 ————————

2. Find a word that rhymes with well ————————————
3. Find the opposite of the word open ————————————————

DOODLE – ART

Did you ever try some doodle-art?
It's so much fun to do.
You make a squiggle or a curve
And add a line or two.
You turn it this-a-way and that
And very soon you'll see
A bird, a man, or anything
As plain as lain can be.

Anonymous

If

If girls played marbles
And boys jumped rope
Now wouldn't that be funny?
If girls were Butch and Pete and slim
And boys were "dear" and "honey"?
That thought gives me quite a jar.
We like things the way they are!

Anonymous

+ - x :
When I put money in a bank
I add.
When I spend it,
I subtract from what I had.
If I share it with another
I divide.
My problem is to get it
Multiplied!

Anonymous (compiled by Calvin Adoar)

Riddles and tongue twisters

Objectives

A: Riddles

- To develop language skills
- To provoke learners' thoughts
- To encourage free speech

B: Tongue twisters

- To develop learners' pronunciation skills
- To build their confidence in speaking
- To curb mother tongue interference in the speech
- For enjoyment and relaxation

Using Riddles/Tongue twisters in language teaching

Riddles

- Using riddles in language helps learners to learn more about their environment and everyday activities carried out at school or at home.
- It helps the community to participate in child's language skills development.

Example: Std. 2 Theme - Food
4. My house has no door (an egg)

Example: Std. 2: Theme – Animals
2. I walk with my house on my back (Tortoise)

Note: The learners should be encouraged to find out and learn riddles from their own community and tradition.

Tongue twisters

- Using tongue twisters in language helps the learners practice different sounds of words and letters.
- It encourages fluency in speaking

- It motivates learners and stimulates competition.

Examples: Applicable in std. 2-3

- Mr. Peter Piper picked a pack of pickled papers. A pack of pickled papers Peter Piper picked. If Peter Piper picked a pack of pickled papers, where's the pack of pickled papers that Peter Piper picked?
- Pat a cake: Mr. Billy Button, bought some buttered biscuits. If Billy Button bought some buttered biscuits where's the buttered biscuits that Billy Button bought.

Note: There are so many examples from the teachers' own collection which can be used together with these few examples. The learners as well have a variety of these and should be given time to learn from one another.

The English songs and Rhymes at the end of this manual can also be used in teaching the relevant topics.

DRAMA / ROLE PLAY

Objective

- To enable learners express themselves freely
- To enable learners to engage in miming and dramatizing activities.
- To enable learners draw and write the names of characters and important events.
- To promote a group/class activity, an spirit of cooperation which helps to bring learners together and develop their social skills.

Using Drama in teaching language

- Engaging learners in dramatization and role-play helps them to practice vocabulary and sentence pattern (listening/speaking).
- It helps the learners to participate freely in simple conversations.
- This creates a base for oral composition leading to improve skills in composition writing.

Dramatization step by step

- Allow learners to read a story or listen to one.
- Discuss the characters in the story.
- Talk about important events in the story.
- Choose characters or learners volunteer for various roles.
- Let learners imitate the characters in their own words.
- If there are words provided, they could use the words.
- Allow them adequate time to practice their roles and to make presentations.

SCIENCE

Some low and no-cost material can be used to achieve objectives in the syllabus, as will be illustrated below. Indeed, some children will have not learnt to read and write in lower classes. To remember what they have learned they can be taught a song that carries the science messages (knowledge) by singing. Two important aspects of learning science through songs in lower primary are to inculcate scientific attitudes and skills through rhythms and movement of the body.

Using songs in science

Objective

- To stress the importance of cleaning the teeth
- To learn how to use a toothbrush

Materials

Manilla paper or flannel board, felt pens, salt, water, tooth stick and toothbrush.

Activities

- Draw on the board or on manilla paper the following: tooth sticks, toothbrush and toothpaste.
- Alternatively collect and display tooth stick, toothbrush, salt, clean water and toothpaste on a table.
- Teach through rhymes and movement the following song:

The Song

We brush our teeth every day
We brush our teeth every morning
We brush our teeth after meals
We brush our teeth using a toothbrush
We brush our teeth using toothpaste
We brush our teeth using clean water
We brush our teeth using salty water
We brush our teeth from side to side,
Side to side x 2
We brush our teeth from side to side
Each and every day
We brush out teeth from side to side
Side to side x 2
We brush our teeth from side to side
Each and every morning.
We brush our teeth from side to side
Side to side x 2
We brush our teeth from side to side
After every meal

Using games in science

Using games in teaching science can be a very interesting way of teaching and learning through learners' participation. Scientific knowledge, skills and attitudes in lower primary can be imparted positively through simple games.

Let's look at a few examples:

GAME 1: FIND WHERE YOU BELONG.

Objective

- Classifying the elements present in the environment
- Establish what belongs or doesn't belong to a specific category
- Define criteria for belonging to or being excluded from

Materials

- Masks or puppets representing animals or people
- Real objects
- Pictures or words, depending on the level of the class

Activities

- The learners will hold pictures, masks or puppets representing different objects, animals, and people, depending on the materials available or the specific objective of the lesson.
- The teacher asks the learners to group themselves, as they like and to explain why they have chosen that particular position. Why do they feel they belong to that group or why do they feel they don't belong to a group.
- Very often the groups can be divided again in sub-categories.

Example:

A group made of animals can be divided into mammals and insects, vertebrate and invertebrate, vegetarian and carnivorous, etc. Objects can be divided again depending on their materials, their texture, their size or shape, their use, etc.

- The teacher can suggest as many rearrangements of groups as appropriate and every time the learners will have to explain why they think they belong to that particular category.

Note: By using masks, puppets or pictures the learners (particularly the very young ones) will feel that the fact of belonging or being excluded from a group it doesn't refer to themselves, but only to the object or animal or person they represent, therefore avoiding any emotional involvement. At the same time being involved in a physical action will make the concept of scientific classification clearer and more memorable.

A group of animals

A group of people

GAME TWO: THE ANIMALS CHART

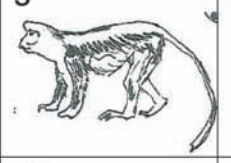
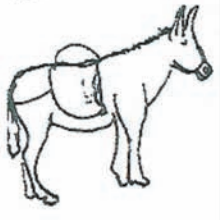
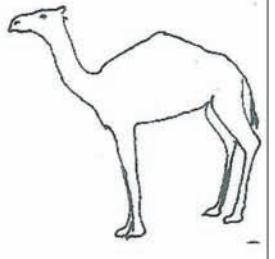
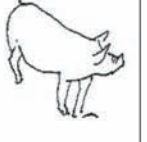
Objective

1. Identify and describe animals
   - Name some animals in the locality
   - Identify animals kept at home
   - Identify wild animals
   - Identify useful animals
   - Identify harmful/dangerous animals
2. Observe the behaviour of small animals
3. Care for animals at home
4. State characteristic of animals
5. Classify farm animals according to their product

Materials

- Flash cards with pictures and words about animals
- A board game made with a big poster divided into squares, in each square there is a number and in some of them there is a picture of an animal, as shown below
- Dice and counters
- Blackboard or paper to keep record of individual or group points

Here is an example of how the poster to play the game could look:

1 	2	3 	4	5	6 	7
8	9 	10	11	12 	13	14 
15	16	17	18 	19	20 	21 
22	23	24	25	26	27	28

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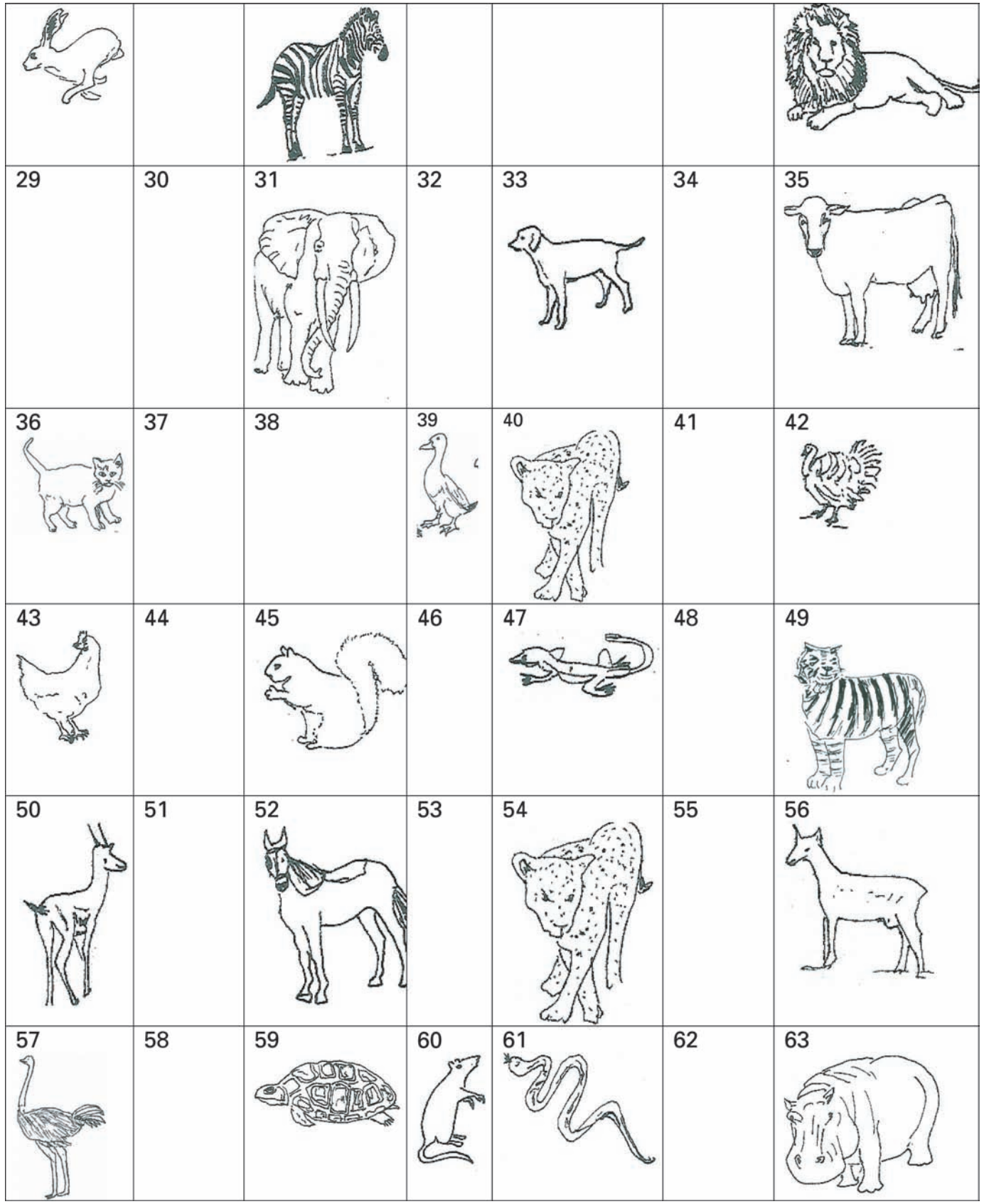


Activities:

1. Oral revision:

In order to revise and practice the vocabulary, many activities can be done by using flash cards with pictures of the same animals as in the board game.

Here are a few examples:

- Give a picture card to a learner and ask him/her to mime the movements of the animal in the card. The class should try to guess which animal it is.
- A learner is sitting or standing in front of the class. The teacher shows a picture card behind his/her back so the class can see it but the learner can't. The classmates try to describe the characteristics of the animal until he/she is able to guess it.
- The teacher gives out a few picture cards to a group of learners and asks them to group themselves depending on which kind of animal they have on their card (see the previous game).

2. Reading and writing:

- The teacher distributes the picture cards to the class and then writes on the blackboard the name of an animal. The learner who has the corresponding picture runs to the board to match it and then reads the word.
- The teacher puts some words into the pocket board and asks the learners who have the corresponding pictures to come and match them. They should also read the words.
- Teacher gives out all cards with pictures and words and asks the learners to find their partners. They should go around asking questions like: "Are you a lion?" or "Who are you?" until they can match words and pictures. Then they can go to the teacher and show their pair of cards.
- As an alternative, instead of "Find your partner" it could be "Find your family". In that case when the learners have made a group they should go to the teacher and show their cards and explain why they are a family (animals that share a similar characteristic).
- Teacher divides the class into groups and gives an equal amount of picture cards to each one. The group leader will have to write the names of the animals on a piece of paper and give it to the teacher as fast as possible. Each word that is spelled right will earn points to the group.

3. Whole class playing a board game:

Considering the average number of learners in class it is suggested to play the game in groups not individually.

A. Each group is given two dice and practices how to throw them and how to calculate the total number.
B. On the blackboard or on a piece of paper the teacher writes the name or the number of the groups in order to keep a record of the points they will earn.
C. The first group throws the dice, adds the numbers and tells the total. Then look at the corresponding square in the game board and the group has to name that animal, or perform any other task agreed before starting the game.

Examples of tasks:

- say the name of the animal and what it usually eats
- say the name of the animal and where it normally lives
- name an animal which belongs to the same family
- make a full sentence about this animal

D. If the group is correct the teacher assigns the points they have earned, if it is wrong the group loses the points.
E. The next group will do the same.

F. If the number refers to an empty cell, the group can throw the dice again.
G. The winner is the group that first reaches the number 100 or gets to the highest number when the activity is terminated. Depending on time available, the game does not need to be completed up to number 100, it can be concluded after two or three turns per each group or resumed and finished later on.

Using pocket board in science

Objectives

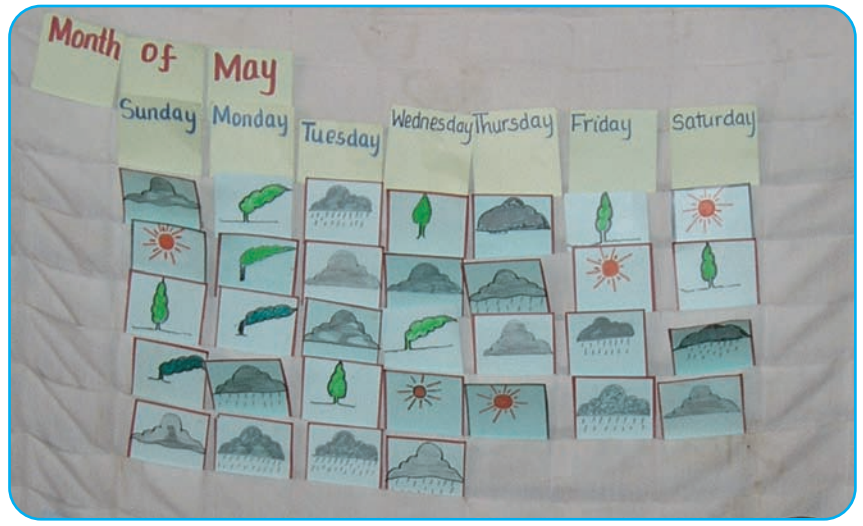
- Observe weather
- Identify weather changes
- Draw simple weather symbols
- State effects of weather changes on dressing
- Record weather changes using symbols
- Describe farming activities during dry and rainy seasons.

Materials

- Cards, manila papers, carton boxes
- Scissors, razor blades, pictures, colours, pencils, rubbers.

Activities

1. Observing the weather for the day (morning –afternoon)
   - Drawing the weather symbols
   - Matching them with the names on the pocketboard
   - Matching weather symbols with dressing cards on the pocketboard
   - Recording weather changes using symbols or objects in the pockets. This can be done weekly or monthly, morning session and afternoon session.



2. Describe farming activities during dry and rainy season, put it in form of simple sentences and pin it on the pocket board with a hook.

Example:

- Juma is a farmer
- When it is dry he prepares the land
- When it rains he plants the crops
- When it is dry he harvests the crops

The pocket board can also be used to teach and learn topics like parts of the body, wild and domestic animals, food we eat etc.

Example 1:: Part of the body (from standard 1 to 4)

Objectives

- To match pictures and words featuring body parts
- To read words related to part of the body
- To learn about the actions that each specific part can perform

Materials

- Flash cards with pictures of parts of the body
- Flash cards with the corresponding words
- Flash cards with actions that can be performed by that part of the body
- Flash cards with the relevant headings

Activities

1. Class discussion about a variety of experiences that can be done with the use of the five senses.
2. Class brainstorm to elicit from the learners the relevant words while the teacher writes them on blackboard.
3. Teacher inserts the headings in the first row of the pocket board.
4. Teacher gives to one group the cards with the pictures of parts of the body, and asks the group to put them under the right heading in the pocket board.
5. Teacher gives to another group the cards with the words to match the pictures and asks the group to put them into the right pockets next to the pictures.
6. A third group is given the cards related to the actions that each specific part of the body can perform.
7. Next group will have to place the cards related to the actions.
8. Finally the words with the names of the five senses can be put in place

Look at the example in the following table.

Sense	**Part of the body** (picture)	**Part of the body** (words)	**What can you do?** (Actions)	**What will you see, hear, smell, touch, taste?**
Eyesight		Eyes	See, watch, observe, look	Colours, light, people, nature
Hearing		Ears	Hear, listen,	Sounds, music, noise, voices
Taste		Tongue	Taste	Sweet, bitter, salty, acid
Touch		Hands	Touch, feel	Rough, soft, hard, smooth, hot, cold
Smell		Nose	Smell	Perfumes, scent, smells,odours, stench.

Example 2:: Words classification

Objectives

- To develop logical thinking, in particular the ability to classify
- To identify common characteristics, similarities and differences

Materials

- Flash cards with words belonging to different categories (animal, plants, objects, nouns, adjectives, professions, numbers, actions, etc.)
- Flash cards with the headings related to the chosen categories.

Activities

1. Fill the pocket board with words relating to different categories,
2. In the first row insert a few headings and ask the learners to find a way to organise the cards under them.
3. The learners are free to move the words where they like by coming to the board and moving the flash cards under a specific heading. The two following tables show how the pocket board could look at the beginning and at the end of the activity.

	Animals		**Body parts**		**Adjectives**		**Actions**	
red	read	dog	watch	blue	the	yellow	elephant	sing
eyes	white	legs	round	jump	arms	whale	big	snake
small	cow	square	wait	man	circle	hands	one	boy

Animals	**Body parts**	**Colours**	**Actions**
dog	hands	red	read
elephant	eyes	blue	watch
snake	legs	yellow	sing
whale	arms	white	jump

By moving the cards under the appropriate heading the learners show that they can read the words and understand their meaning, that they know to which category they belong and that they can perform a classification, which is one of the basic necessary strategy essential to develop logical thinking.
Another way of using the same flash cards, it is to repeat the same activity without any headings, so that the learners can try different ways to classify the words. Here is an example,but the learners can find endless ways of classifying words or pictures.

Headings chosen by the learners

Actions I can't do Actions I can do Colours I have Colours Idon't have Words that begin with w 3 letters

can't do	**can do**	**I have**	**don't have**	**begin with w**	**words**
sing	read	red	blue	watch	dog
jump	watch	yellow	white	white	ant
				whale	red

Using experiments in science

The scientific method of learning about the environment is based, at every school level, on the process of observation, manipulation, comparison, classification, reflection, and formulation of hypotheses that have to be verified by means of practical experiments. Science learnt only through listening to the teacher or with just a few sentences or pictures in books does not help the learners to develop fundamental scientific skills and to build a strong reference system inside their mind so that they will be able to perform more difficult tasks when they reach secondary level. In fact, very often, they end up relying just on their memory and learning by heart their answers in order to pass the final exams, with no understanding of the scientific processes involved in what they have learnt. Here is an example on how a topic like WATER, which is common to all grades, can be presented through practical experiments starting from standard 1.

1 step: Explore what the learners already know, allow them to talk about previous experiences and about what they have observed in the environment around them. During this phase it is important to allow them to talk freely about what they believe so they can share, discuss, try to find some explanations of the phenomena they have observed. The teacher should keep a neutral position and keep a record of what they say without giving answers and solutions that could stop the learners in their process of making hypotheses in their mind and work our by themselves why and how those thighs happen.

The discussion about water could be guided by these questions:

(depending on the level of the learners)

1. Has it got shape? If yes when?
2. Has it got colour? When?
3. Has it got smell? When?
4. Has it got taste?
5. Can you describe pure water?
6. Does it move?
7. Do things go into the water?
8. Do water go into the things? All of them?
9. Can we use the water like a mirror? Why?
10. Is it heavy? How heavy?
11. Where does it come from?
12. What do you use it for?
13. Can you use it every day?
14. Is it always available?
15. Where is not there, what do you do?
16. Who has got the responsibility to fetch the water in your family?

17. Is water good or bad for you?
18. Are there rules in your family about the use of water?
19. And what about the rules in school?
20. In how many ways do you find water in the environment?

When thorough discussion has taken place the class can perform simple experiments in order to find answers to their questions.

Experiment no. 1 -The water cycle

Objective

- To demonstrate how the water can be found in a solid form , liquid and gas status
- To demonstrate how the water cycle goes through the evaporation and condensation processes

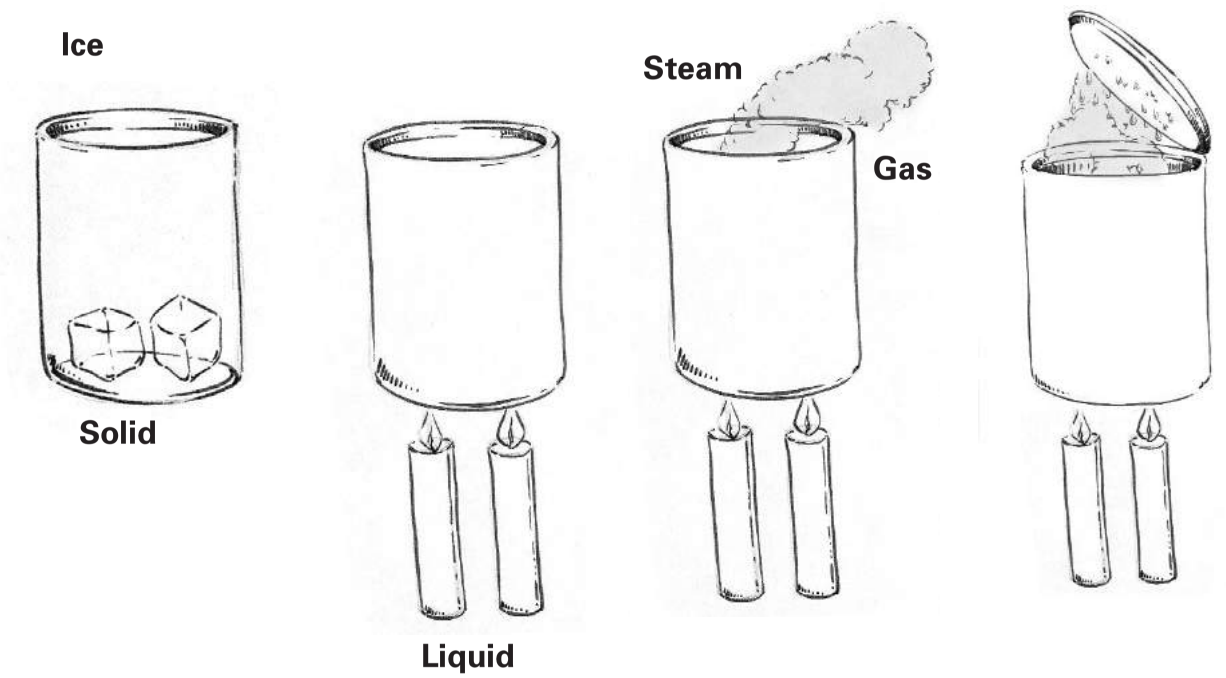
Materials

- A few ice cubes (they can be kept in a thermos or in another insulated container
- A small pot where water can be boiled or a glass heat-resistant flask from the labs
- A three footed support for the pan or the test-tube
- candles
- A piece of paper
- A lid for the pot or the flask
- A thermometer

Activities

1. Give learners some ice cubes and ask them to touch, to feel them, to observe what happens, to describe their sensations and what they have in their hands: shape, colour, etc. Is it something liquid or solid? What is the difference?
2. Learners will pass the cubes to each other and share their feelings and ideas.
3. The cubes are brought back to the teacher and put into the pot or the flask which is then put over a support in order to light the candles beneath.
4. The candles are lit and the learners observe what happens. If possible a thermometer should be used to check the changes in temperature during the whole experiment.
5. After a little while the cubes have disappeared and in the pot there is only water. Is it solid or liquid? Is it cold or hot? What happens as the temperature increases?
6. When the water starts reaching the boiling point the presence of steam becomes evident. Ask some of the learners to put there hands above the pot or flask to feel the steam with their hands (make sure they are far away from the heat). Ask them to describe what they feel: they are capturing the steam and their hands get wet. Where does the steam go?
7. At full boiling point put the lid over the pot/flask and leave it there for few minutes.
   Lifting the lid and turning it into a vertical position the learners will see that some drops of water, like rain, are falling back into the pot. What has happened?
   Let's discuss their opinions and repeat again the experiment several times.
8. The experiment will make the learners understand the water cycle, with the two major phenomena of evaporation and condensation, rules the whole environment causing clouds formation, raining and dry season, water on Earth like rivers and oceans, availability or scarcity of water, etc.

9. Look for other examples of evaporation: what happens when you wash your clothes and then hang them outside? Where does the water go? The same when you wash your hair or clean the floor: it is wet, after a while it is dry. Why?



Experiment no. 2 – Float or Sink

Objective

- To observe the behaviour of different materials in water
- To formulate hypotheses and prove if they are right or wrong
- To understand simple physical laws that regulate the environment

Materials

- A container full of water
- A variety of different objects and materials
- A table where the learners' hypotheses and the results of the experiment can be recorded, as shown below

Objects or material	**Hypotheses (before the experiment based on learners' opinions)**		**Result from the experiment (were the hypotheses confirmed?)**	
	Float	**Sink**	**Float**	**sink**
Stone				
Scissors				
Pencil				
Piece of wood				
Empty box				
A full box				
Empty tin				
A full tin				
Plastic bottle				
Glass				
Cardboard				
Paper				
Rubber				
Sharpener				
A piece of cloth				
Chalk				
Cork				
Nail				
A leaf				
A stick				
Etc.				

Activities

1. The teacher asks the learners to collect a variety of material from the school grounds and to bring more samples from their closer environment.
2. Looking at the materials, their weight and consistency, the learners will formulate their hypotheses about whether they will sink in the water or not.
3. Their opinion will be record in the chart and then the learners will be asked to take turns in carrying out the experiment.

4. As different materials are put in the water the column in the chart referring to the experiment results must be filled and compared with the hypotheses.
5. At this stage the learners will express their satisfaction on having been able to foresee the exact result, or will wonder about why the material didn't behave as they expected. Hopefully a lot of verbal interaction will be happening in class at this time.
6. Some materials will change their behaviour after a while, like cloth or cardboard, which initially float but tater, when they are completely soggy, sink. The same if the plastic bottle is filled with water.

Conclusions

At this stage it is not important how much content has been covered or how many concepts the learners have memorised. The focus is on the method: science is learnt through observations and experiments and any statement or assertion must be proved true before everybody can accept it. With this method learners will feel motivated to observe their environment, to collect specimen, to bring interesting things to class, to ask questions, to wonder about how nature works. By actively participating in this process of discovery, they will find learning pleasant and stimulating and will feel the desire to know more.

Note. In other parts of this manual there are more examples of activities that are science oriented. Those activities are left where they are because they are strongly linked with the use of that specific material and can be clearly explained in that particular context.

CREATIVE ART

Use of colour

Main objective

By the end of these activities, the learners should be able to learn how to use colours appropriately in the teaching/learning process.

Specific objectives

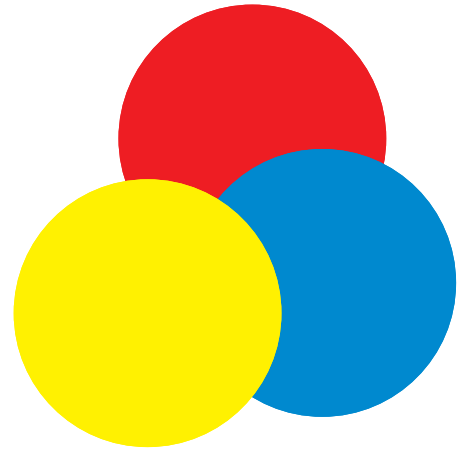
- Recognize both primary and secondary colours
- Identify primary and secondary colours
- Mix different colours to get new effects
- Use colour to paint defined areas
- Produce colour with the locally available material
- Decorate their faces in preparation for a dance and a singing game.

Materials

- Commercial colours
- Leaves
- Flowers
- Tree roots
- Waste cartons
- Cutting tools
- Small containers/ bottle tops
- Water
- Brushes
- Very thin paper in the 3 primary colours
- Plastic sheets in the 3 primary colours
- Any kind and size of paper

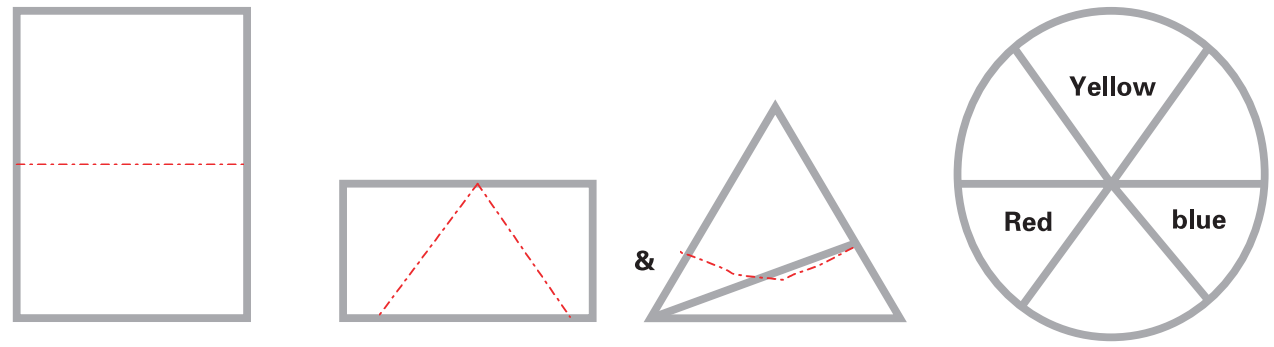
Activities

1. Learners should work in small groups (max 6/8 learners). These groups are easily arranged where the learners are sitting or in the field in the case of large classes.
2. Ask the children to name some of the colours they can see in the classroom by touching or describing their position.
3. Explore with them various uses of colours and why they are used (Example: colours of the traffic light are a safety measure for people on the road).
4. Introduce the primary colours by identifying yellow, red and blue in nature: sky, sun, moon, sea, fruits and flowers.
5. Mix the primary colours in a way that the secondary colours (green, orange and purple) are made and paint them on paper as below
6. If light coloured paper (Indian paper) or plastic is available you can have a very effective demonstration on how the colours work by overlapping them and sticking them on a window pane so the light can go through.
7. Give clear instructions to the children on how to carry out a practical experience on mixing colours. There are three primary colours plus three secondary ones, so the learners need to divide their paper into six sections.



We suggest this procedure:

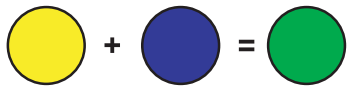
a. Take an A4 paper and fold it in the middle
b. Fold it again in three parts
c. Cut the paper in a way that you end up with a circle
d. Open it and trace over the six folding lines: now you have six parts



8. Group leaders will collect from the teacher the brushes and colours and start the experience by colouring the three sections as indicated above (yellow, blue and red), leaving the sections in between blank.
9. Learners will take a very small quantity of two primary colours and mix them in order to make a secondary colour, as below:

Yellow + Red = Orange

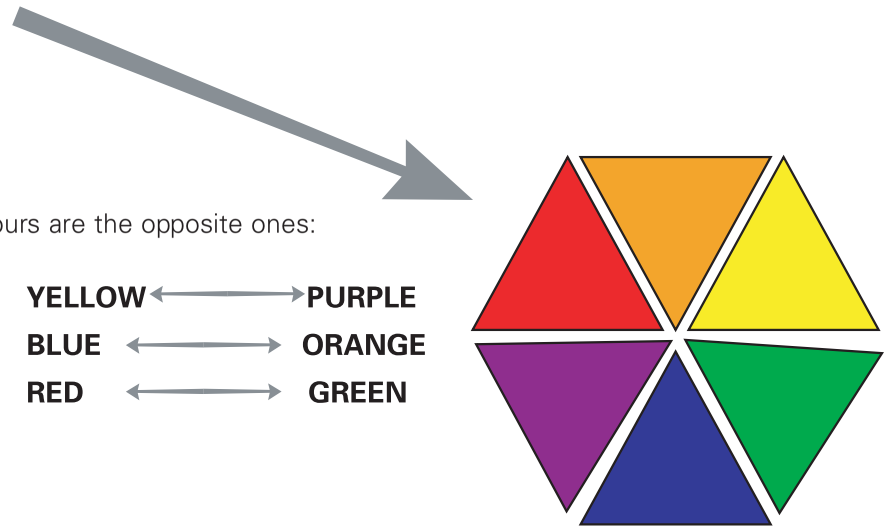
Yellow+ Blue = Green



Red + Blue = Purple

Note: Learners should be given a minimum quantity of paint in order to avoid waste of paint and mess on the papers and tables. A plastic bottle top, a very small tin or the bottom of a small plastic bottle would be enough. Group leaders can always ask for more paint if what they had been given is not enough

When the work is completed the colours should look like this.

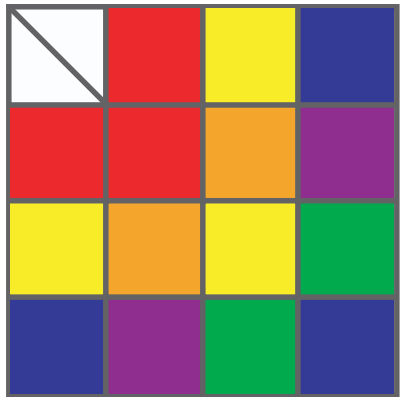


The complementary colours are the opposite ones:

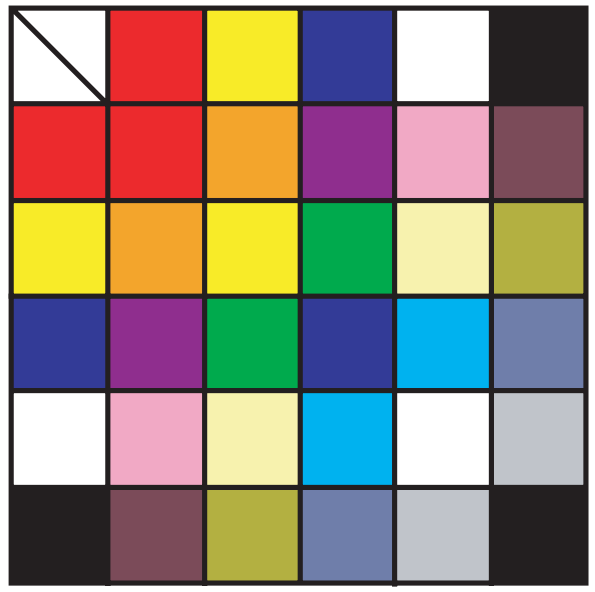
YELLOW ⟷ PURPLE
BLUE ⟷ ORANGE
RED ⟷ GREEN

Colours Table

As an alternative to the representations used in the previous page, you can work with your learners on a double entry table with the primary colours on the first row and the first column. The cells will be filled with the primary or secondary colours depending on the combinations of colour.

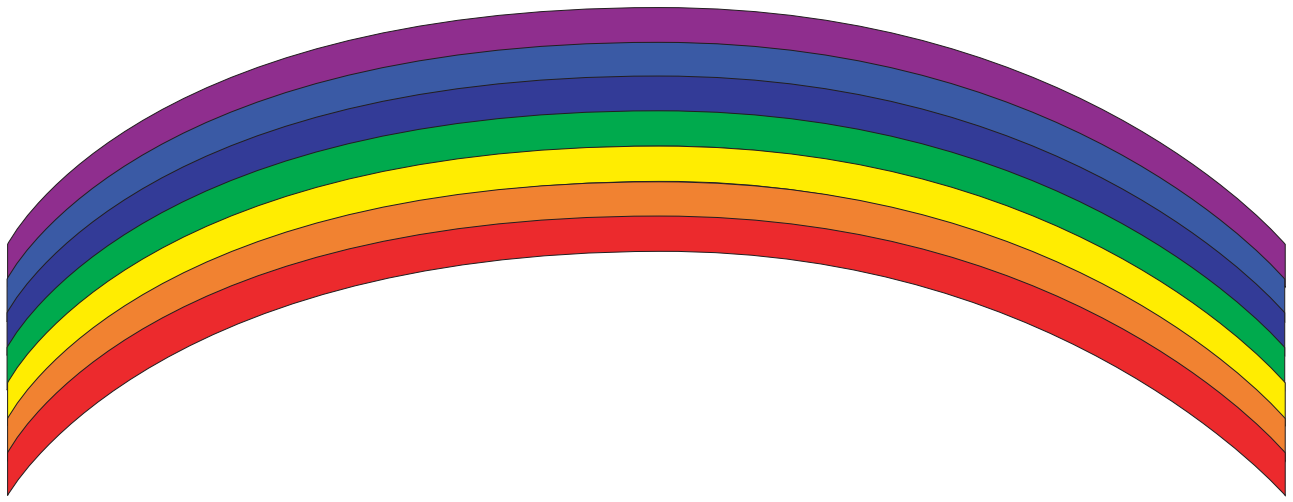


You can add black and white in order to have darker and lighter shades.



Learners should be given very small quantity of paint to experiment freely and create as many shades of colours as possible. In this way they will develop their skills and will be able to display their creativity while painting.

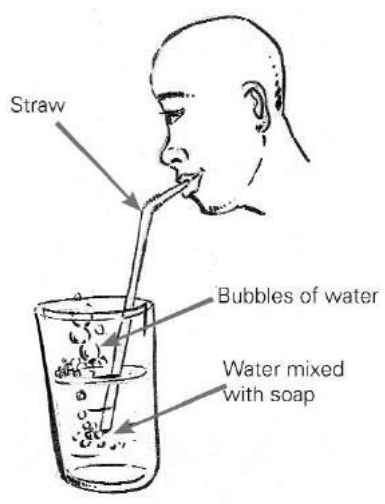
The Rainbow



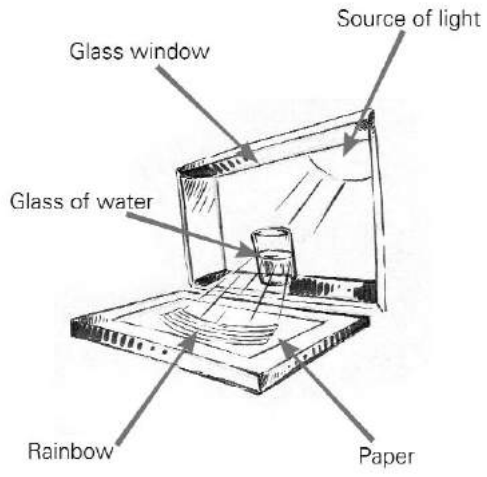
How Can We Make a Rainbow In Class?

Here are some suggestions:

1. Blow bubbles: put some water in a container and add some washing powder. Stir well, dip a straw and blow bubbles; when the light goes through the bubbles you will see

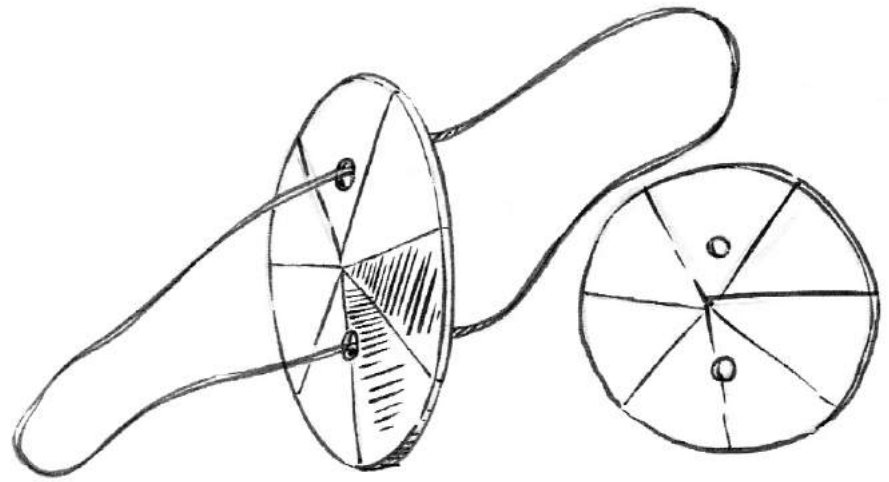


2. Fill a transparent container with water and place it on a white sheet of paper at a sunny window: you will see coloured light on the paper and you can paint your own rainbow.



Spin Your Rainbow

- Divide a circle of card in seven equal parts and then colour them on both sides with the rainbow colours.
- Make two holes in the centre of the circle. Thread a piece of string through each hole in the card to make a ring with the card in the middle, and knot.
- Put your hands in the loops so made and twist up the string by spinning your hands in a circle.
- Bring your hands alternatively in and out: the card will spin very fast and the colours will become white, like the light.
- Alternatively you can put a stick through the centre and spin it on the ground.



How to make paints from locally available material

1.Soil

- Collect different colours of soil.
- Sieve the soils separately and put the fine powder into containers for storage.
- Mix the powder with water, a little at a time ,when required

2. Ash

- Sieve the ash and store the fine powder in a container.
- Mix a little with water as required for grey paint.

3. Charcoal

- Crush the charcoal into a powder form.
- Sieve it and store in a container.
- When required, mix with a little water to make black paint.

4. Chalk Paint

- Cook one cup of corn flour with four cups of water until thick.
- Add crushed chalk, keeping colours separate.
- This mixture will make store–bought colours go farther if they are mixed together.

5. Food Colouring Paint

- Boil a teaspoon of flour with one cup water until it thickens.
- Add few drops of bought food colouring.

6. Paint From Leaves, Petals, Vegetables And Fruits

- These can be used as they are – rubbed directly onto the cardboard or paper or leaf.
- Crush and extract the juice
- Store in containers and use for painting

Notes:

- Care should be taken not to use POISONOUS plants. Even so, teachers should make up the paint, not the children
- Always use ripe fruits. Some of the plants listed below are POISONOUS when the fruit is unripe or in the cases of ALOE VERA SPP- poisonous until exposed to the sun
- Children should be warned no to put paints in their mouth.

List Of Plants That Can Be Used To Make Colours

Local name	Scientific name	Part of plant	Colour
Ogaka	Aloe	Leaves	Yellow
Guava		Leaves	Green
Beetroots		Boil plant	Red/purple
	Lantana camara	Fruit Blue	Black
	Lemon/orange	Fruit peel	Yellow
Onions		Bulbs	Yellow
Tomato		Leaves	Green
Tea		Leaves	Brown

POISONOUS PLANTS:

Aloe
Euphobia
Datura
Red lily
Black jack

Finger Paint

- 3 parts of water, 1 part corn flour and colouring or
- 2 cups of warm water, 1 cup of thin flakes of soap and colouring
  Putting some detergent into any paints will help to keep them from going off and it will also be easier to remove the paints from clothes.
- Boil a teaspoon of flour with one cup water until it thickens.
- Add few drops of bought food colouring.

How to make glue and play dough for modelling

Flour Paste

This is very good to spread over normal sugar paper to make it stronger and hard before you use it for posters, book making or flash cards. Mix one teaspoon full of flour with a little cold water into a smooth paste.

1. Add one cup of cold water and stir.
2. Bring to boil stirring all the time.
3. Simmer for a few minutes, cool and use.
4. If you add some disinfectant it will make the glue last longer.

Liquid Starch Glue

This sticks paper, glass, metal and plastics.

1. Dissolve 1 teaspoon of starch powder in a small amount of cold water.
2. Add 1 cup of hot water, stir and boil for one minute.
3. Add few drops of disinfectant to make it long lasting, keep in cool place or use it straightaway.

Modelling Dough

A – Uncooked play dough

- Mix 1 kg. of plain four with _ kg. of salt
- Add water and knead well. You can add colours if you want.
- If you are not going to use all of it immediately, wrap the dough in a plastic bag so it will not dry out, and keep it in a cool place, possibly a refrigerator.

B – Cooked play dough: keeps very well for a long time

- 1 cup of self raising flour and _ cup of salt.
- Mix it with 1 cup of water, 2 teaspoons of cream of tartar (from baobab fruits), 1 tablespoon of oil and colouring.
- Stir all ingredients together over heat until combined in smooth dough.
- Store in a plastic container or plastic bag (air tight) in a cool place.
- You can sometimes use whole-wheat flour for a different texture.

Human and animal forms and shapes

Main objective

By the end of the activity, the learner should be able to develop skills in puppetry

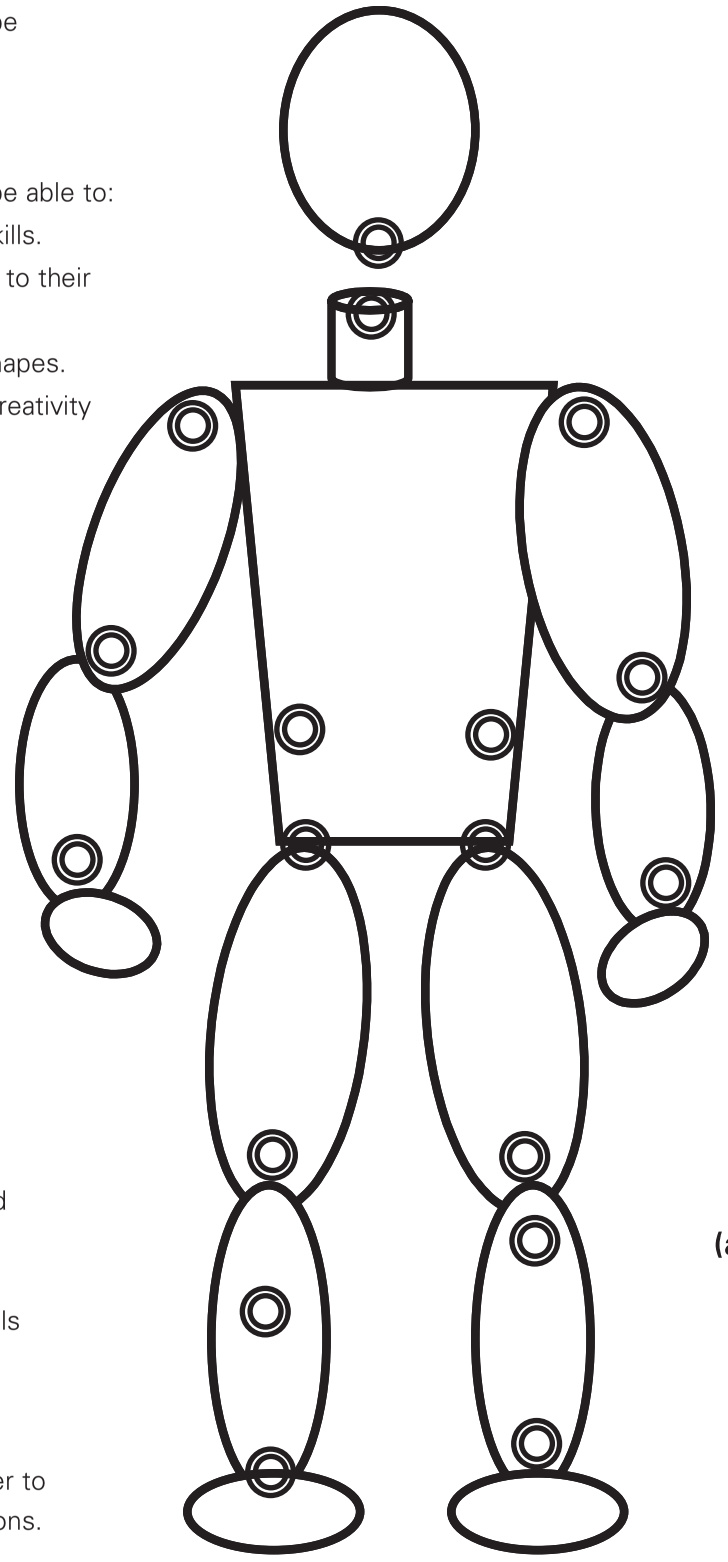
Specific objectives

By the end of the activity, the learner should be able to:

- Play with materials and develop puppetry skills.
- Make different forms and shapes according to their choice and creativity
- Observe and compare finished forms and shapes.
- Develop an appreciation for other people's creativity and artwork.
- Use puppets for projects in other subjects

Materials

- paper, cardboard or cartons
- light wood
- food wrapping foil
- paper fastener / pins
- pencils / colours / crayons
- scissors/ cutters
- tissue paper



(a)

Method to make puppet (a):

1) Prepare all the necessary materials.

2) Draw on the board the parts necessary to make the puppet.

3) Specify the way the parts will be assembled so the learners know how to cut them.

4) Ask the group leaders to collect the materials to make one puppet per group.

5) Each group will produce its own drawing: check them before they start cutting in order to see whether they comply with the instructions.

6) Cut the parts and pierce where indicated in the drawing so that they can be assembled.

7) Overlap the parts of the puppet and insert a paper fastener in the hole to put the puppet together

8) Finish the puppet by drawing the eyes, nose, mouth and the fingers in the hands.

9) When finished, let learners move the puppet into different positions to experiment with the body and become aware of how the body parts move and connect to each other.

Method to make the foil puppet:

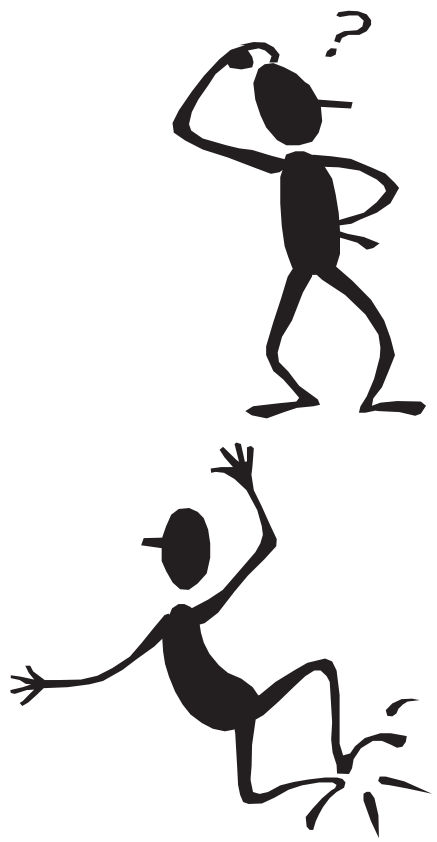
1) Prepare 4 squares of food wrapping foil around 25 cm side.

2) Roll three of the squares into a stick shape.

3) Use the fourth square to make the head: put some tissue paper in the middle of the square and wrap the foil around it.

4) Place two long shapes at each side of the head and wrap the last strip around them to hold the pieces together.

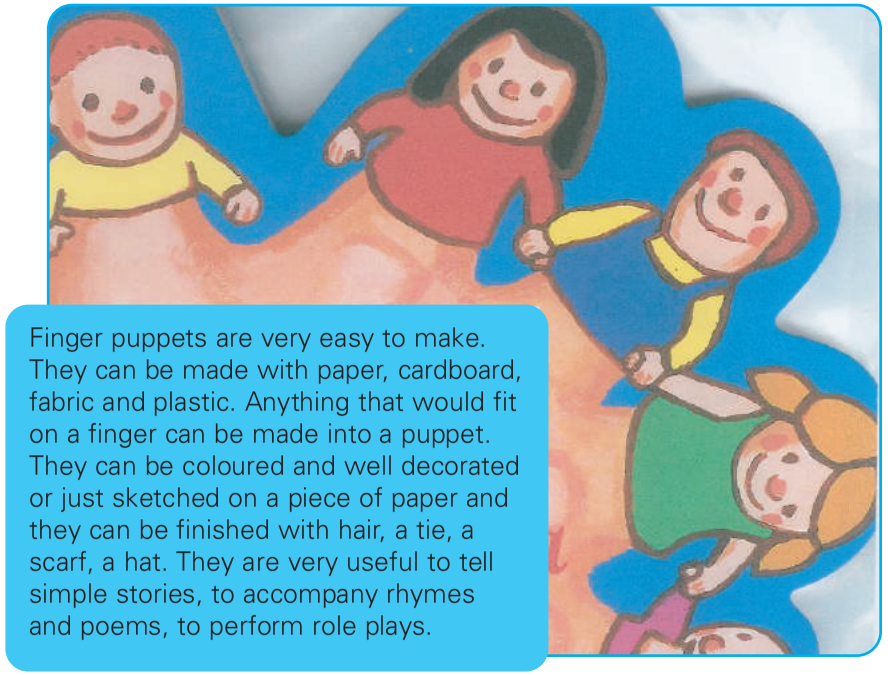
5) Fold the end of the long strips in such a way that they look like shoulders, arms, hands, legs, and feet. The puppet is very easy to model and you can make it sit, run, jump and move in many different ways like a stick figure.



Suggestions:

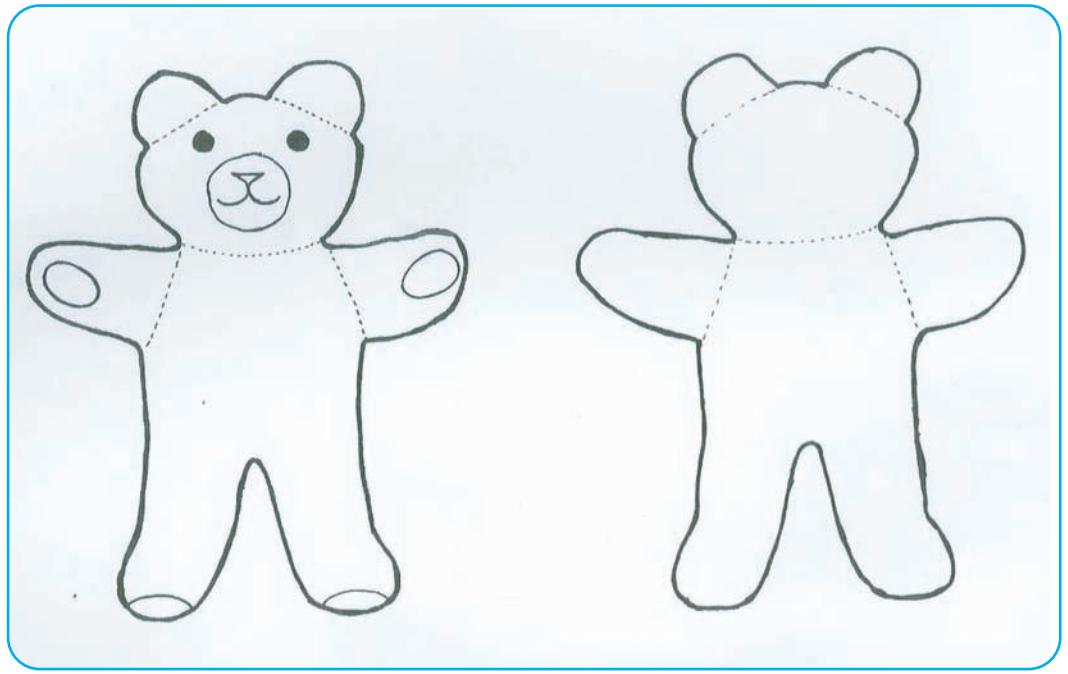
- The working area should be left clean after work.
- Clean your hands properly after these activities.
- Learners should be careful when using scissors and other cutting tools.
- After using these materials in one class, put them aside and keep for future use: they can be used again and again at different levels and for different activities.

Finger puppets



Finger puppets are very easy to make. They can be made with paper, cardboard, fabric and plastic. Anything that would fit on a finger can be made into a puppet. They can be coloured and well decorated or just sketched on a piece of paper and they can be finished with hair, a tie, a scarf, a hat. They are very useful to tell simple stories, to accompany rhymes and poems, to perform role plays.

Puppets made with fabric



Puppets made with gloves

In other words, puppets can be made with absolutely everything.

Let the learners try to make their own puppets with what they find in their environment. Allow them to display their creativity and to use their imagination by making them in any form or shape.

Puppets can be very good friends of young learners. Through them they can find the courage to express feelings and emotions that would be very difficult to show in any other way.

Puppets can introduce some magic in your class, let them in!

UNICEF / Ministry of Education Science & Technology

How To Use Puppets In:

Language

- To learn the vocabulary related to the parts of the body and their use.
- To look at different positions of the body and practice the vocabulary relating to actions: sitting, running, sleeping, jumping, etc.
- To represent a sequence of actions and practice different language structures: present tense, past tense, present continuous.
- To build a story or a time sequence: at 8 o'clock the puppet is walking, at 10 it is sitting in class, at 11 it is playing football, etc.
- Use the puppets for storytelling and drama.

Science

- Look at different parts of the body and learn about them.
- Relate this to learners' understanding of their own bodies.
- Become conscious of the existence of joints and how body parts move.
- Use the puppets to identify the "front", the "back", the "left" and the "right".
- Use the puppets to practice the left and right on somebody facing the same or the opposite direction from us.
- Learn the characteristics of different materials, particularly of the foil, that can be modelled into shapes.

Art

- The puppet can be used as a template for drawing the body in different positions.
- It helps learners to learn how to draw proportioned parts of the body.
- It improves confidence of the learners when they have to draw people in their art work.

Acquisition of life skills

- Puppets help children express feelings
- To act out stories linked to living values
- To overcome shyness and strengthen communication skills
- To act out psycho-social issues they are facing in their life (e.g. bullying in school, loss of parents, issues related to boy/girl relationships, special problems girls face in pursuing education)

Modelling

Main objective

By the end of the activity, the learners should be able to provide learners with the opportunity to develop modelling skills.

Specific objectives:

- Learners will enjoy playing with materials and develop modelling skills.
- Learners will learn how to make different shapes according to their choice and creativity.
- Learners will observe and compare finished work, appreciating other learners' creativity and learning from it.
- Learners will use modelling for projects on different subjects.

Materials used for modelling

- clay soil
- plasticine
- play dough (see instructions on page 74)
- colours
- water
- carton boxes
- strong paper or cardboard
- anything in the environment to make the model more realistic

Method

1) Collect the materials: depending on what you want to use make sure it is ready for use, e.g. clay has to be shredded or crushed in small parts; you need the right quantities of flour and salt for the play dough plus a container for mixing it with water, etc.
2) Discuss with the class what they would like to model: if there is a common project to complete, the learners should be clearly assigned their part of work.
3) Teach the class the basic techniques for modelling.
4) Give each group a quantity of clay or dough and help them to try different techniques.
5) Modelled work can be decorated either by adding details or carving them out from the dough, by embedding shapes or incising with a blunt pointed tool.
6) Let the modelled work dry, then colour and varnish later. The varnish will protect the work and make it last longer. In the case of clay, it can be baked to make it more durable.

Here are few suggestions about what you could model:

- Human body/faces
- Animals: wild and domestic
- Geometrical shapes/Numbers/alphabet
- Fruit/vegetable/ food in general
- Maps/buildings/traditional tools
- Any work of art: landscape/abstract art/ portraits

Making Books

Main Objective

By the end of the activity, the learner should be able to develop artistic skills in making books that will be used as a record of art works done for creative arts presentation and displays.

Specific objectives

By the end of the activity, the learner should be able to:

1. Make books from locally available material.
2. Make similar books for different subjects
3. Paste art work's done in the books

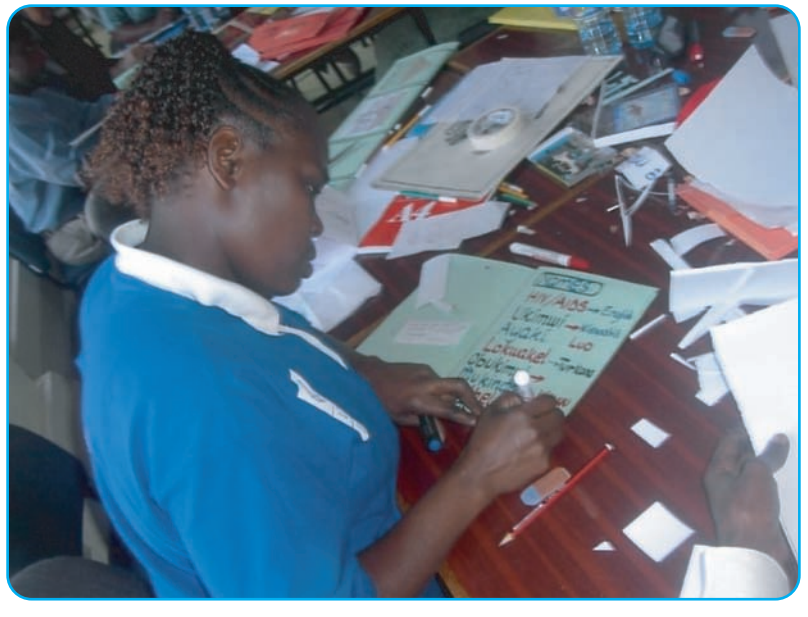
Importance of Making Books in Class

- It gives learners the opportunity to have access to simple books made from locally available material, which is relatively inexpensive.
- It actively involves learners in making pictures which can be used to develop a story.
- It gives learners an opportunity to have access to books when funds are not available.
- It is more economical to make books rather than buying them.
- It helps learners develop artistic skills in drawing pictures in different ways and different techniques.
- It gives the opportunity to develop ordering and sequencing skills when the learners have to put the pictures and captions in the correct sequence.
- It enables learners to make a follow-up in the story they have read or narrated.

Materials Used For Making Books

Here is a list of the materials that can be used for making books

- Piece of cloth
- Carton
- Manila papers
- Crayons
- Dyes/colours
- Pencils for drawing
- Glue
- Wheat flour paste
- Scissors
- Razor blades
- Rubbers
- Rulers
- Recycled paper.



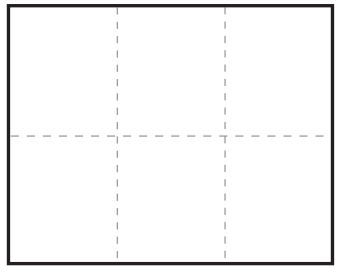
Types of Books

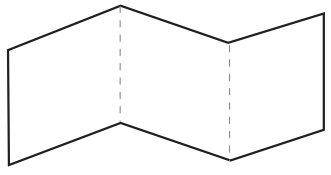
- Story books
- Picture books
- Letter book
- Colour book
- Book of shapes
- A story and a picture book

Procedures of Books

- Collect the relevant material for making the book.
- If you intend to use a piece of cloth, cover it with glue (see instructions on page 73) in order to make it strong and more durable. The same can be done with paper.
- Develop the stories and divide them into sequences.
- Decide the number of pages the book should have in order to include the whole sequence of the story.
- Fold the paper in either a horizontally or vertically in order to have enough pages for your book.
- Draw a picture on every page (or every other page if you want to write a long story) and captions that tell the story in a simple but clear way.
- Stick captions below pictures or on the blank page.
- As an alternative, the pictures can be drawn on the left and the words on the right on the same page.
- If the pages are separated, put the book together either by stitching it or making holes and binding with a ring or wire.
- Show the book to the class and discuss possible improvements.
- Protect the book with varnish or other means made with locally available material such as resins.
- Keep the book in class so that the learners can look at it during their free time and even borrow it.

How To Fold Paper





How To Use Books

The books can be used in a variety of activities relevant to language teaching such as storytelling, listening comprehension, reading comprehension, describing pictures, and as a stimulus for creative writing when learners are requested to change the ending or to make a similar story with different characters, etc.

The books can be read by individuals or pairs or groups of learners (three learners per book is the present policy). It can be the initial stage of a follow-up activity or the reward after a well-done work. It can help to keep the learners who finish early busy and engaged.

Teachers' creativity at work: many different books have been produced during the workshop; all of them were attractive and interesting.

Silk Screen Printing

The silk screen is simple equipment that can be used in place of the modern photocopier and duplicating machines. The teacher can make it from the locally available material for the purpose of teaching and learning.

Objectives

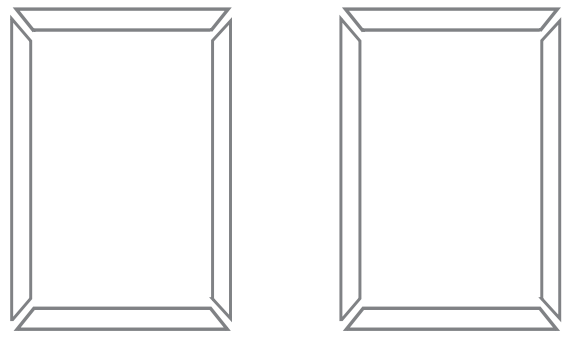
- Produce pictures in different colours
- Decorate dance costumes using silkscreen-printing techniques.
- Produce teaching/learning materials for all subjects.

Materials

- Duplicating ink
- Paper of any size
- Stencils
- Wood (timber and plywood)
- Nails
- Hinges or hard material
- Rollers or other means to press the ink through the screen
- Polythene or plastic bags
- Silk material or any other cloth that allows the ink to go through easily

Procedures For Making Silk Screen

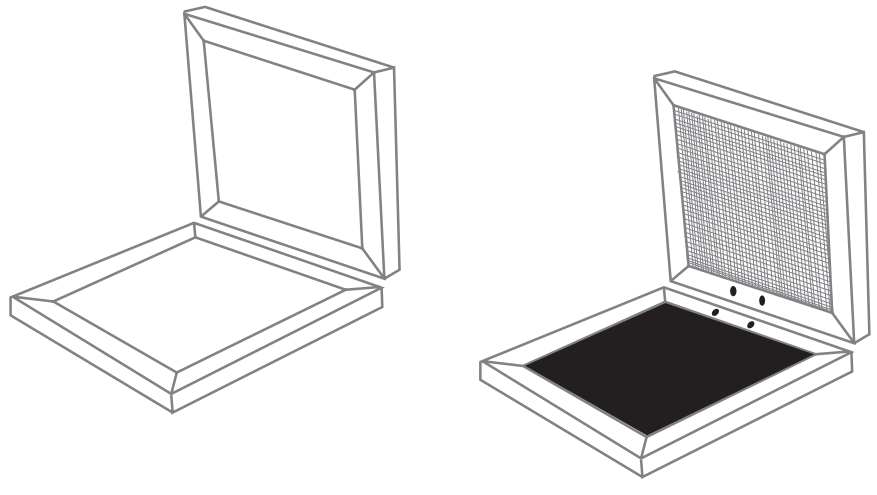
1. Measure the wood for the two frames so that the space inside the frame corresponds to the size of an A4 sheet of paper.



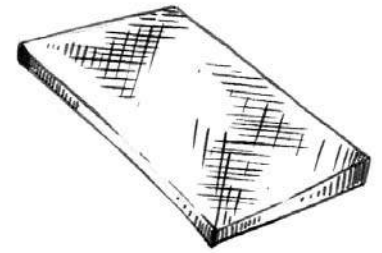
2. Assemble the frames with nails or glue.

3. Join the two frames with the hinges or a piece of rubber, strong cloth or any other material that can keep the two frames together while allowing them to open and close.

4. Fix the silk material to the top frame: keep it as tight as possible.

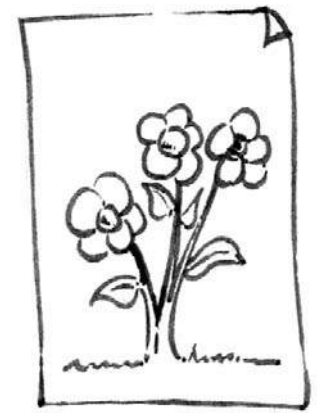


5. Cover the bottom frame with a piece of plywood to offer a solid flat surface for printing.



6. Cut another piece of wood or strong plastic to be used later to spread the ink.

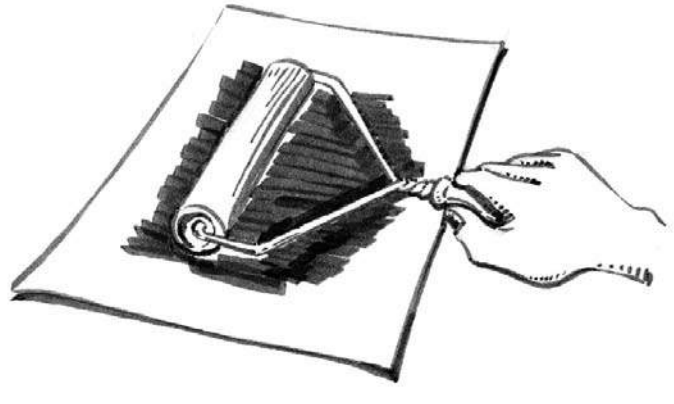
7. Prepare your drawing on A4 paper. Insert it under the top sheet of the stencil and trace over it.
If you are confident, you can draw directly on the stencil.



8. Use sharp pencils or old biros or a nail to draw on the stencil in order to cut through it. You can check at the end by lifting the top part and looking through it.

9. Fix the stencil to the inside top frame with masking tape

10. In order to distribute the ink evenly, spread it over the piece of wood or plastic you have cut beforehand and roll the roller or the printing bag over it.



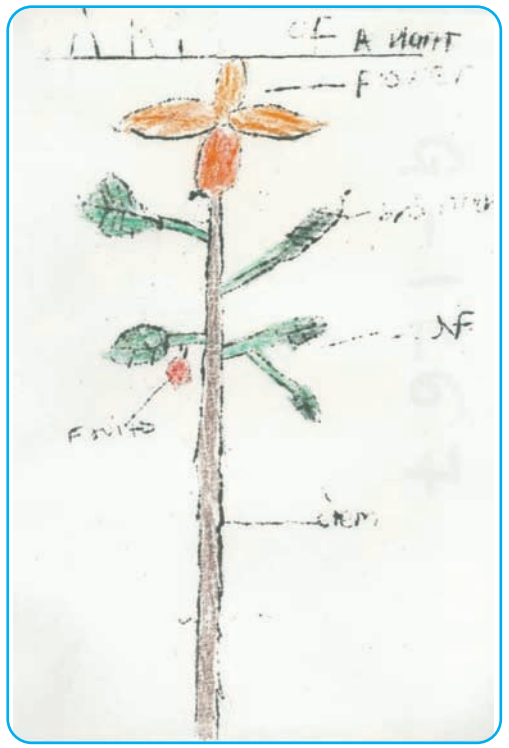
11. Lower the top frame over the bottom and roll the ink over the silk screen. Press the roller or the printing bag over the silk screen so that the ink will pass through the stencil and print the sheet of paper beneath.

12. The result will be an A4 paper printed with the same drawing or text you have cut in the stencil.

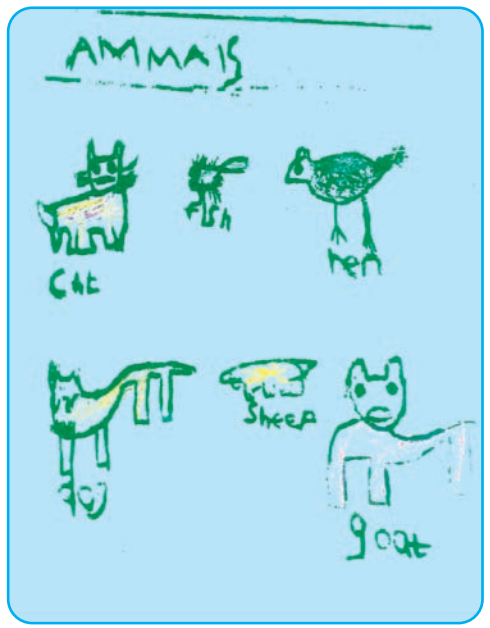
13. Remove the stencil and proceed with another one if you have more pages to print.

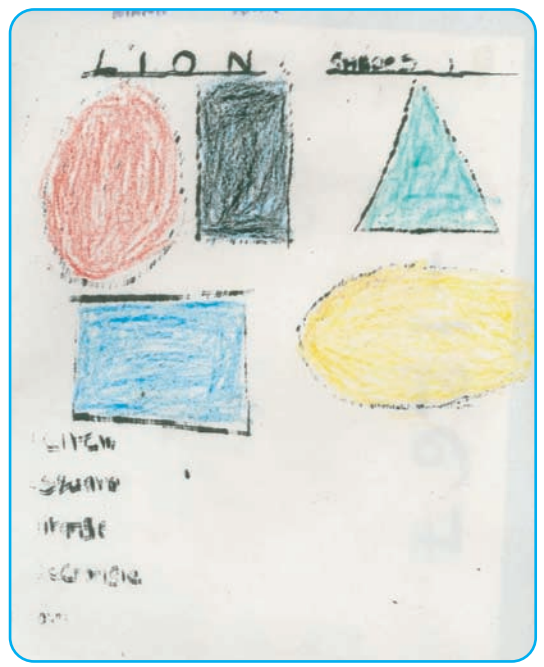
Standard 2 pupils from Ngunyumu Primary School in Nairobi printing their own materials with the silk screen.

Learners have worked in groups to prepare the drawings, they have cut the stencils with old biro and they have printed the papers using the silk screen. Considering the large size of the class, learners had to organise themselves by taking turns to print and to distribute the papers to the whole class. The final product has been used as working sheet or as a test paper.



Here are examples of working sheets prepared by the learners.





Precautions:

- Do not apply too much ink to the screen.
- After finishing printing, clean the screen carefully so that the ink doesn't dry on the screen and clog it.
- Use soft material: (e.g. tissue paper or cotton) to clean the screen.
- You can keep the stencils for future use: just stick them back to the original paper and hang them in a dry place.

The silk screen above has been made with strong cardboard using the side of a carton as hinges. The bottom part has been reinforced with a piece of plywood in order to provide a flat surface for the paper to be printed.

Here you can see some of the drawings that have been printed with the silk screen.

Some of them have been made into working sheets by adding instructions that learners have to follow to perform a task. Finally they have been varnished to protect the paper.

This material can replace text books when necessary and can be given to learners for individual or group work. Being durable and easy to clean and store, they can enrich the class resources and allow differentiation in class.

Songs and Rhymes

Introduction

Songs, associated with actions, movement, games and language, help children to be creative and more able to express themselves and develop their different skills. There are songs that can be used to stimulate imagination, telling stories, counting, teaching alphabet, words and concepts in various subject areas (such as parts of the body and their uses, grammar, colours, etc.).

These may be in the form of rhymes, that are recited or chanted or played as games. They may be accompanied with actions to become more interesting. The actions may also help to bring out the meaning of the words and the song or rhyme. The Kenyan child is exposed to songs and rhymes from diverse cultures including western and oriental.

However words like "snow, mulberry bush, London's burning" may not be easily understood. Therefore such words may need to be changed with suitable words from the child's environment, e.g. ice, acacia bush, (known place) is burning (a thing in the local environment). Songs may also be drawn from the local communities of Kenya and the rest of Africa. You too may know a lot more and can add to this list.

Main objectives

By the end of the topic, the learner should be able to participate in songs and Rhymes presentation locally and internationally for enjoyment and entertainment.

Specific objectives

By the end of the activity, the learner should be able to:

- Sing simple songs from their immediate environment.
- Make movements to singing games.
- Sing simple songs with family themes.
- Sing simple songs on emerging issues e.g. HIV/AIDS, Integrity etc.
- Sing sacred songs
- Sing simple story songs.

CONTENT OF THE TAPE

First part: traditional Kenyan songs

The Kenyan traditional songs collected and shared during the workshop come from the following regions:

Pokot	Wajir
Turkana	Mandera
Marsabit	Nairobi
Moyale	
Garissa	

The tape produced at the end of the workshop includes:

1. Mwalimu walii – IAE Anthem , Kenya
2. Jina lako – learning through the use of senses
3. Mark where the bee – old English rhyme
4. Teddy bear – counting rhyme
5. Amtuna Monung – Pokot: bring the children to learn
6. Kitabu ngo kalamu – Pokot: book and pen, today's tools
7. Elimu ya bure – Kiswahili: take advantage of FPE
8. Agon Laan – Somali: Go to school for a bright future
9. Makalinku – Somali: Teacher
10. Ekaal yei Lokatumar – Turkana: Come we play with pebbles
11. Ngide Losukul – Turkana: Take children to school
12. Slave, slave, slave – English: a child's lamentation
13. Elimu ya bure – Duruma: Let us go to school
14. Mkwadzu – Duruma: vegetation
15. Behaviour change – English: HIV/AIDS
16. Somo wanjirena – Borana song encouraging father and mothers to educate a handicapped child.

This collection and compilation were made possible by the contributions of:

- Mujahid Otman – IAE Anthem
- Peter Amei – Pokot music and Elimu ya bure
- Abdi Noor – Somali song
- Raha Abdi and Abdinoor M. Hussein – Somali song
- Joseph Ngitira – Turkana music
- Joyce Otieno – Slave
- Zuhura Rashid and Evans Murisa – Duruma music
- Calvin Adwar – Mark where the bee
- Mary Njoroge – Teddy bear
- Leah Asego – Behaviour change
- Isurow Ahmed from Wajir District
- Rashid Hussein Abdi – Borana song
- And all the participants of the Workshop

Producers:

- Abdinoor M. Hussein – Garissa
- Abdi Ari Owsalfah – Garissa
- Raffa Abdi – Wajir
- Harima Issack – Garissa
- Abass Maarim Abdi – Mandera
- Saadia Haji Aden – Mandera
- Hulbai Gedi – Wajir
- Surow – Wajir
- Rashid Hussein Abdi - Mandera

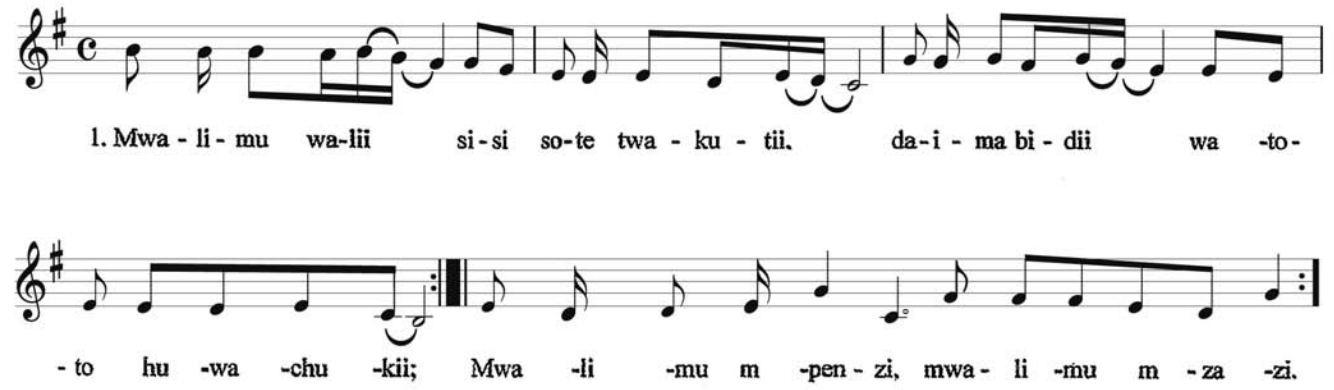
Singers:

- All participants
- Soloists: Joyce, Peter, Leah, Zuhura, Raha Abdi
  Keyboard played by Peter Amei
  Recording directed by Calvin Adwar
  Produced by Henry Gichuru and John mbithi – KIE

S. = solo
A. = all

Workshop participants sing in the recording studio

1 • MWALIMU WALII ANTHEM



Mwalimu walii sisi sote twakutii
Daima bidii watoto huwachukii
Mwalimu mpenzi
Mwalimu mzazi (x2)

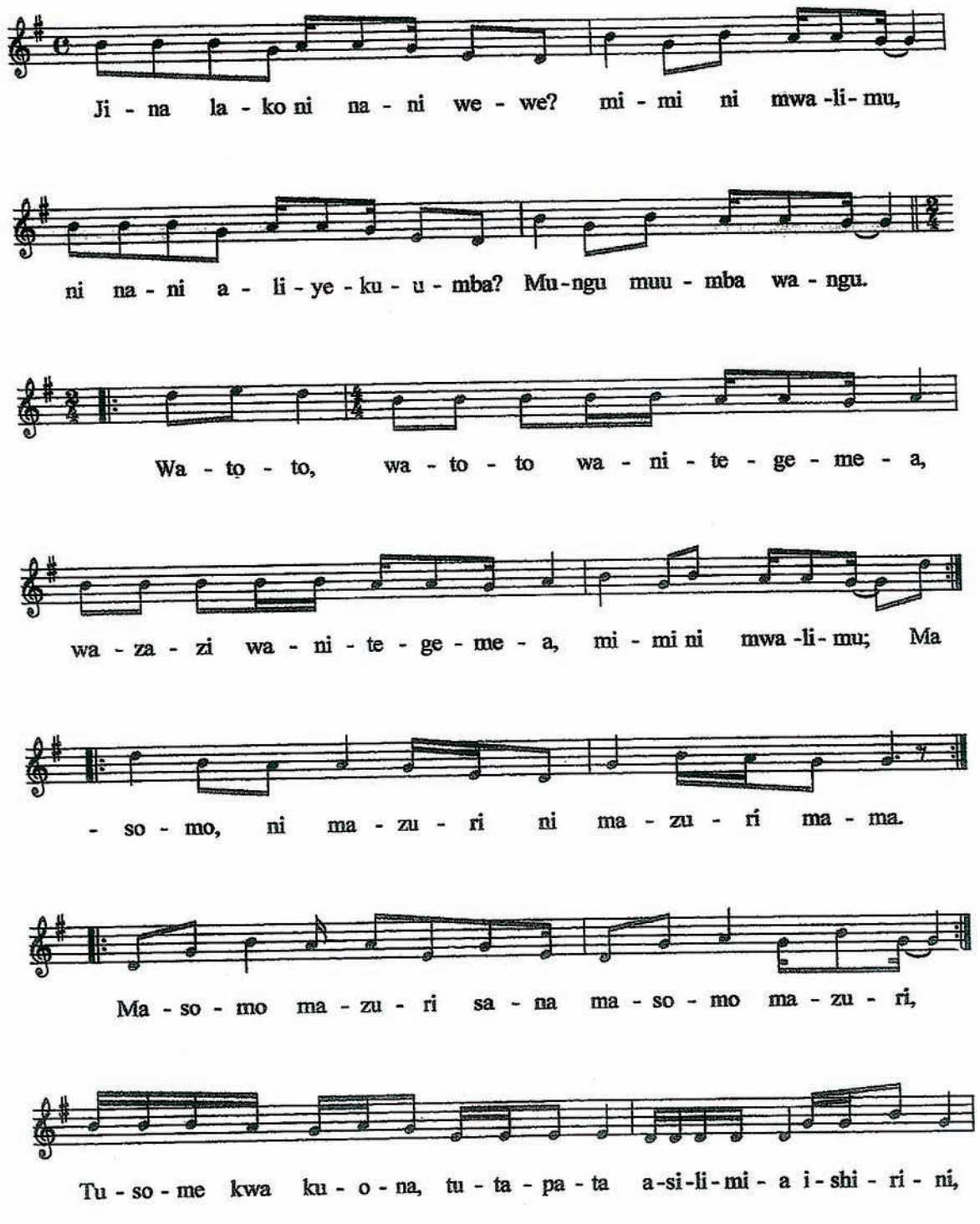
Mwalimu alimu, kusomesha una hamu
Elimu yadumu, yafaidi binadamu

Mwalimu mwerevu, una wingi uekevu
Wala huna wivu akili yako ni pevu

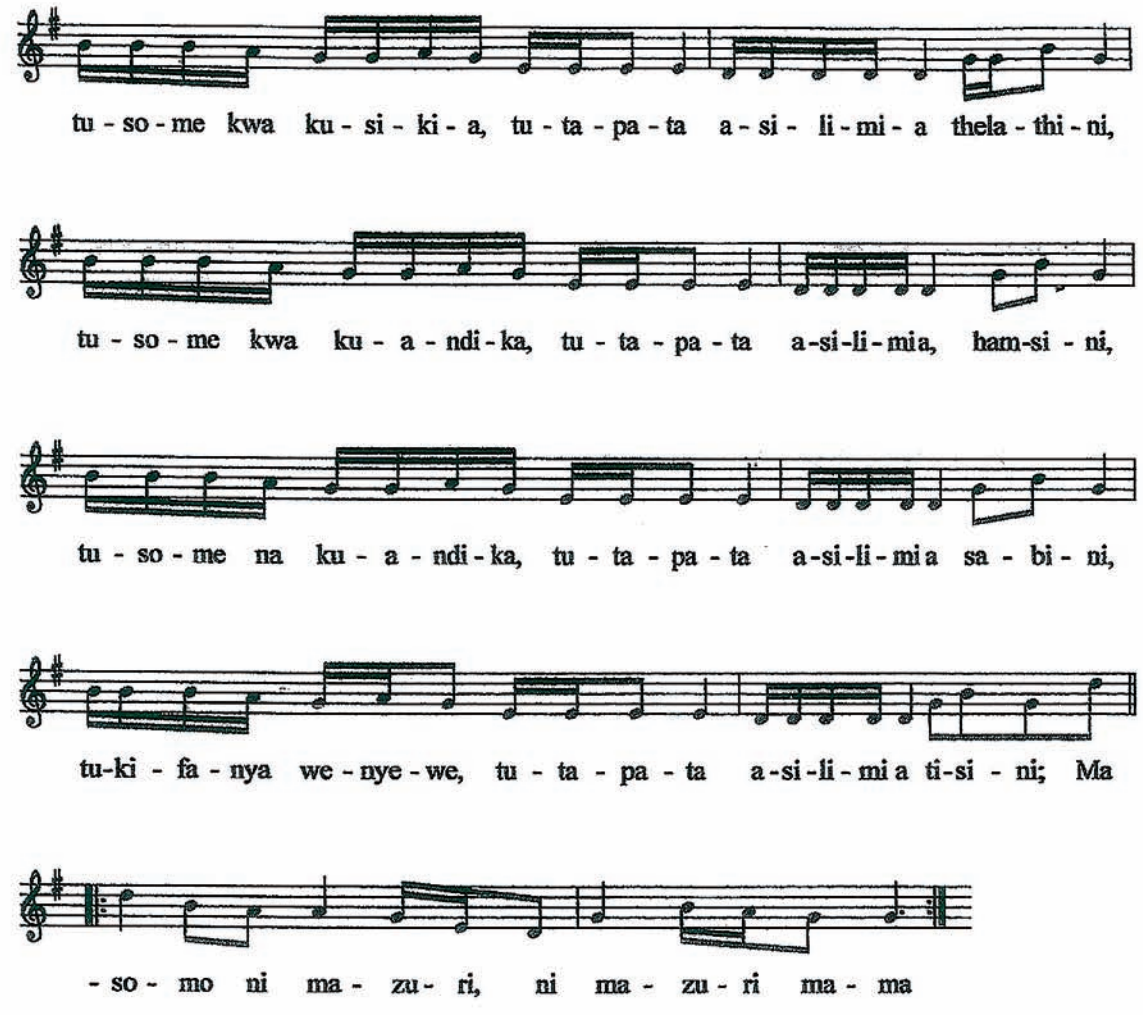
Mwalimu mundaji, mijini na vijijini,
Unda wajuaji wenye na njema siraji

Actions: While singing, dance and show love and affection for the learners. While singing "Mwalimu mpenzi" cross your arms to your chest, while singing "mwalimu mzazi" show the action of rocking a baby.

2 • JINA LAKO



2 • JINA LAKO continued



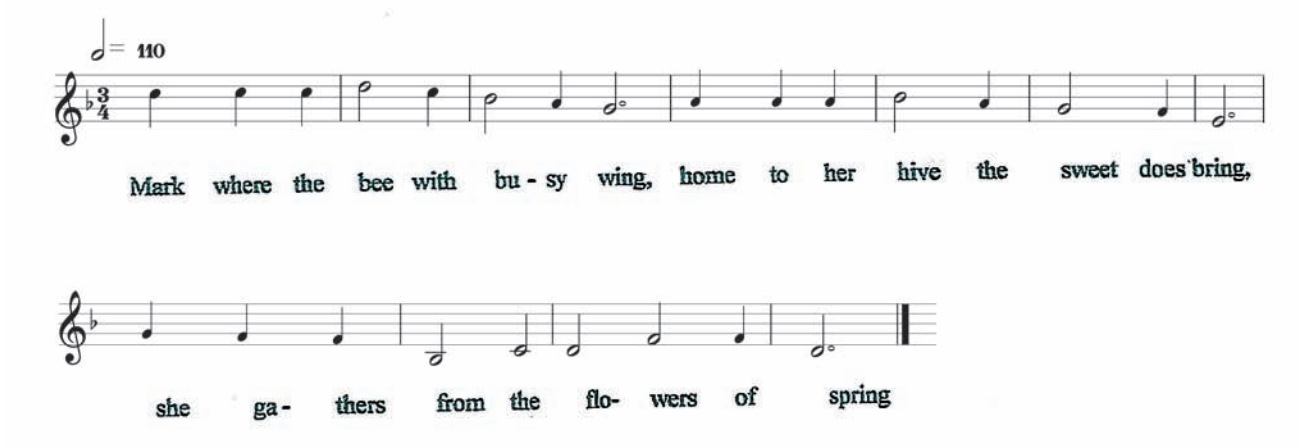
S. Jina lako ni nani wewe?
A. Mini ni mwalimu (x 2)
S. Ni nani aliyekuumba?
A. Mungu muumba wangu (x 2)
S. Watoto
A. Watoto wanitegemea (x 2)
Mimi ni mwalimu
S. Wazazi
A. Wazazi wanitegemea (x2)
Mini ni mwalimu
S. Taifa
A. Taifa lanitegemea (x2)
Mimi ni mwalimu
S. Masomo
A. Ni mazuri ni mazuri mama (x 3)
S. Masomo mazuri sana
A Masomo mazuri (x2)

Tusome kwa kuona – tutapata asilimia 20%
Tusome kwa kusikia – tutapata asilimia 30%
Tusome kwa kuandika' – tutapata asilimia 50%
Tusome na kuandika – ntutapata asilimia 70%
Tukifanya wenyewe – tutapata ailimia 90%

S. Masomo
A. Ni mazuri ni mazuri mama (x2)

Actions: At the beginning the soloist points at the singers like asking their names. They respond by pointing at themselves and singing "mimi ni mwalimu". While singing "Masomo" the song takes the Masai rhythm and the singers will jump Masai style.

3 • MARK WERE THE BEE

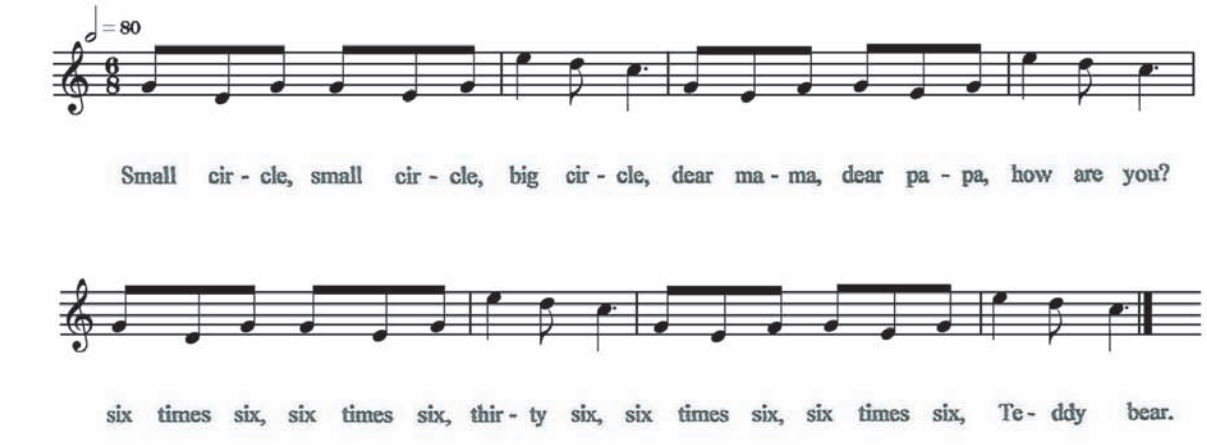


Mark were the bee with busy wings
* Home to the hive the sweet does bring
* She gathers from the flowers of spring

This is a round that can be sung in three parts:
the * mark the entry points of the 2nd and 3rd groups.
The song may be used to learn vocabulary in integration with science and language: insect, bee, wing, hive, sweets (honey), flowers, flying, gathering, spring, etc.

Actions: Line 1= a bee flying to her hive
Line 2 = the bee is carrying the nectar for making honey
Line 3 = the bee gathers nectar from the flowers

3 • TEDDY BEAR

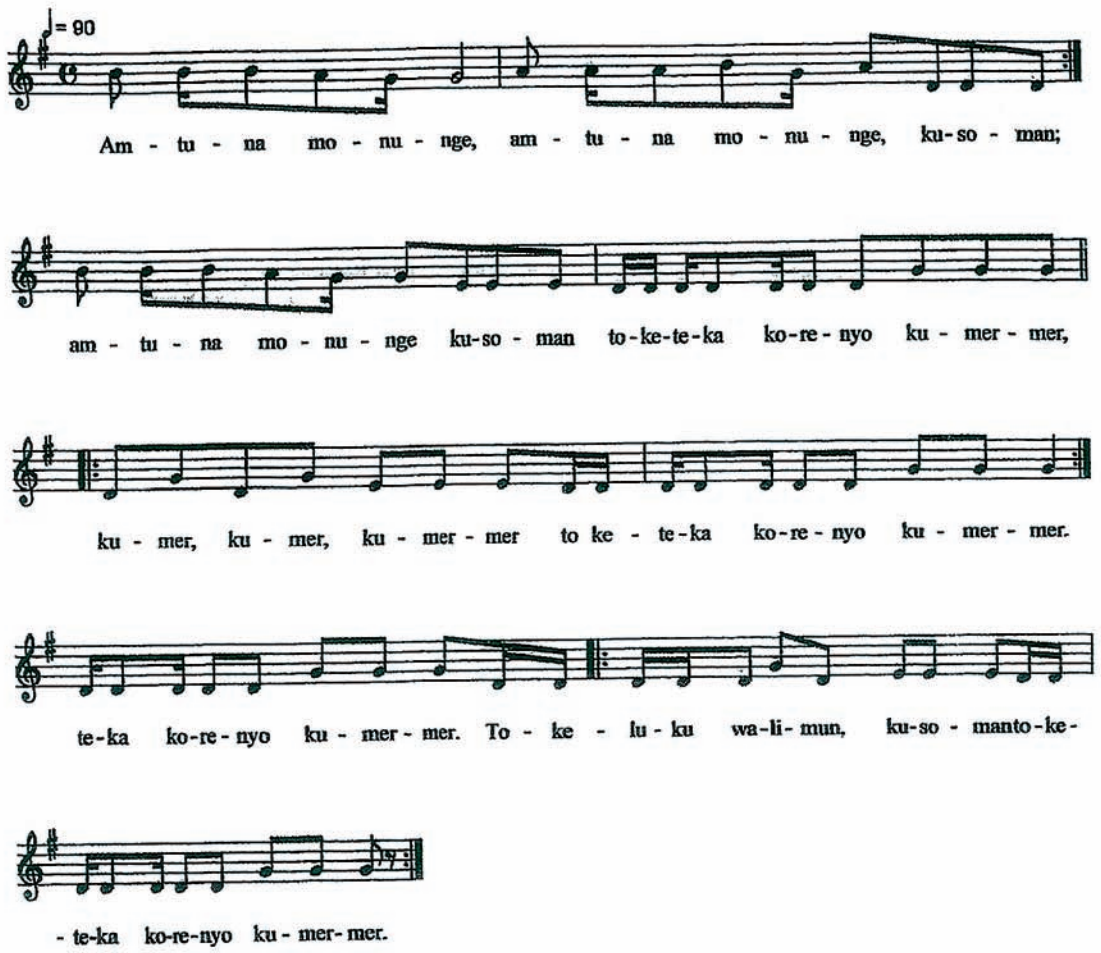


Sing as you draw:
Small circle (draw 1st eye) Small circle (draw 2nd eye)
Big circle (draw the head)
Dear mama (draw 1st ear) dear papa (draw 2nd ear)
How are you? (draw the mouth)

Six time six (draw a 6 for the 1st hand) six times six (draw 2nd hand)
(draw a 36 between the hands and a curve to give shape)
six time six (draw 1st leg) six time six (draw 2nd leg)
teddy bear (add a curve between the legs)

A teddy bear is a toy loved very much by young children.
This teddy bear poem can be used to teach maths, language and science.
Materials that can be used to make a teddy bear are staffed clothing and wool
to give a finishing. It can also be done by modelling clay or other materials.

4 • AMTUNA MONUNGE - Pokot Song



S.Amtuna, amtuna
Amtune monung'e, amtune monung'e
Kusoman (x2)

Chorus: Amtuna monung'e kusoman
Toketeka kovenyo kumermer
Kumer, kumer, kumermer
Toketeka korenyo kumermer

1- Tokeluku walimun - Kusoman toketeka korenyo kumemer
Tokeluku daktarin - Kusoman toketeka korenyo kumemer

Chorus: 2 -Tokeluku professen - Kusoman toketeka korenyo kumemer
Tokeluku kirwokut - Kusoman toketeka korenyo kumemer

Chorus: 3. Tokeluku chepsaktis - Kusoman toketeka korenyo kumemer
Tokeluku kindowu - Kusoman toketeka korenyo kumemer

Translation
Bring children to learn.
They will build our land to prosperity.

1 – They will become
teachers – doctors
2 – They will become
professors – chiefs
3 – They will become
nurses – leaders

Actions: The song underlines the importance of free primary education. The singers will mime the actions of teachers, doctors, nurses, chiefs.

Education is the base of good living.

6 • KITABU NGO KALAMU

Chorus: Kitabu ngo kalamu nyopo konyinu
Oh – Tono monung sukul kusoman
Tokunyoru kasinekwa

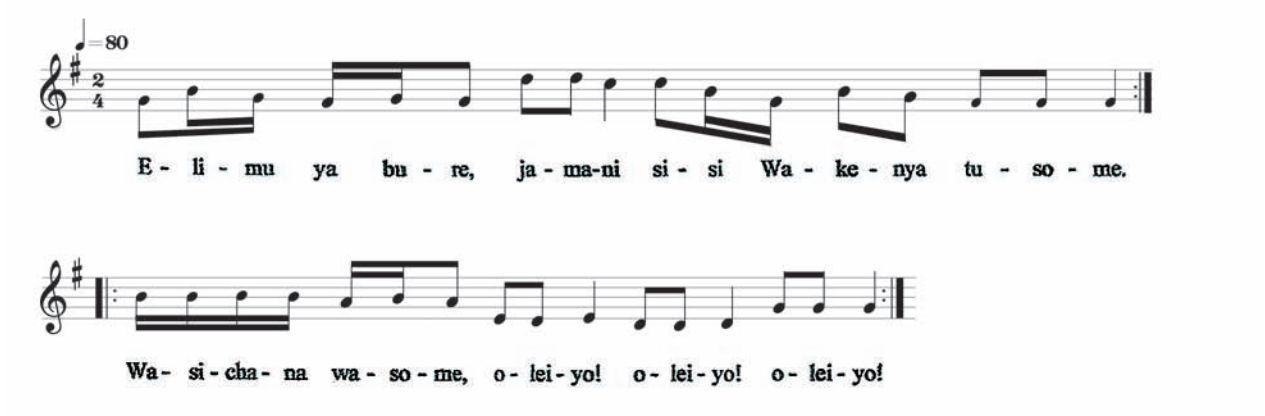
1. Luku walaka walimun – Kusoman….
Luku walaka daktarin –
Luku walaka dotin –

2. luku walaka kirwokot
luku walaka disitin
luku walata karanin
luku walata pasten

Translation
Chorus: Nowadays everything comes through the book and the pen
Oh, put the children in school
They will learn and get employment
1 – Some will become teachers/doctors/district officers - They will learn and get employment
2 - Some will become chiefs – D. C. – clerks - pastors - They will learn and get employment

Action:
The song motivates children to come to school. It helps to develop the sense of rhythm by clapping and jumping so it can be integrated with P.E. activities, particularly for games. Learners are in a circle and clap their hands rhythmically. Few learners jump high at the centre of the circle in turns. Balancing of the body through kinaesthetic sense is enhanced.

7 • ELIMU YA BURE



S. Elimu ya bure
a. Jamani sisi wa Kenya tusome (x2)
1. Wasichana wasome – oleiyo, oleiyo, oleyio
Wavulana wasome
Vilema wasome
Viziwi wasome
Vipofu wasome
2.Tusome kwa bidii - oleiyo, oleiyo, oleyio
Tufukuze ujinga
Tuondoe maradhi
Tuondoe na njaa

Translation
This song motivates learners to embrace education in their localities. Learners with special needs are mentioned in the song. Learners are challenged to reflect on the national philosophy in social studies and good health through science.

Action:
While singing "Oleiyo" you have to accompany with Masai movements. When a girl is mentioned she should come in front of the class carrying a book. The same applies for the boy and special needs learners.

8 • AGOON LAAN (Area of origin: North Eastern Province)

Agoon laan wa iftiin laani (x2)
Waagaal iyo iles laani

Oogadha (x2)
Walalayal oogadha

Ooadha (x2)
Dugsiyadha ooadha

Translation
Lack of knowledge is like living in the darkness, to be in a house without a vision
Be aware (x2) Brothers/sisters be aware
Please go (x2) you should go to school

Action:
Show gestures indicating lack of knowledge and being in a house without a vision Pretend to be walking to school.

9 • MACALINKUU (Teacher) (Somali Song)

Macalinku dalkiisa ayuu dacaad vyahaay
Ururaha laduubaan buu idhiin difacya
Wa daan kiisa dihinayu da-rar-tiisa maalaya
Qorshaha dheqsaan bvu dag dag ufulinayo

All: Diyaar baan nahoo
Madaliihi nadadasho
Dhabciin meeyao howshee
Caadhow namada gaaye
Dar daraan kaal nafar taay
Kuda dhal galeeyna (x2)

Translation:
If a teacher is loyal to the country he protects the teaching image and profession from all sorts of damage. It motivates the pupil to become useful and a potential leader in all walks of life. The teacher is ready to implement all educational policies at any cost. He is always ready to fight ignorance of any kind using his teaching skills.

Actions: this song can be very effective during teachers meeting or teachers/parents meeting.

10 • EKAAL EYEI LOKATUMAN (Turkana song and game)

S. Ekaalia
A. Eyei lokatumania

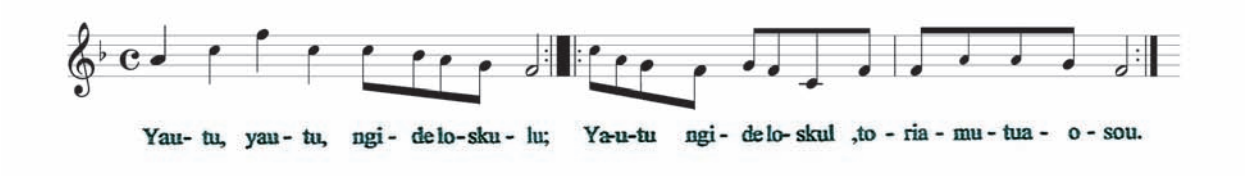
S. Esikiria
A. Eyei Lokatumania

A: Apeunia, peunia ng'akile
Ekurudo lotimerikol
Peunia ng'alepon kaita ilikwel
Natimonyang'a topere moia
Aneurio touro ng'ibaren
Urr!
Arobo; tanta – robo – ta
Arobo; tanta – robo - ta

Translation
There are fatty animals like camels, donkeys etc. When they produce young ones the owner gets a lot of milk, blood, etc
Meaning: pastors enjoy the products of their animals and are proud of their profit

Action:
The players sit in a circle and hold stones in their hands. They sing the song and move the stones from one person to another. Whoever does not move his stone on time fails the game. Those who pass the stones following the rhythm of the song are the winners.
A similar song is sung in Kiswahili and is very well known as "Marobo".

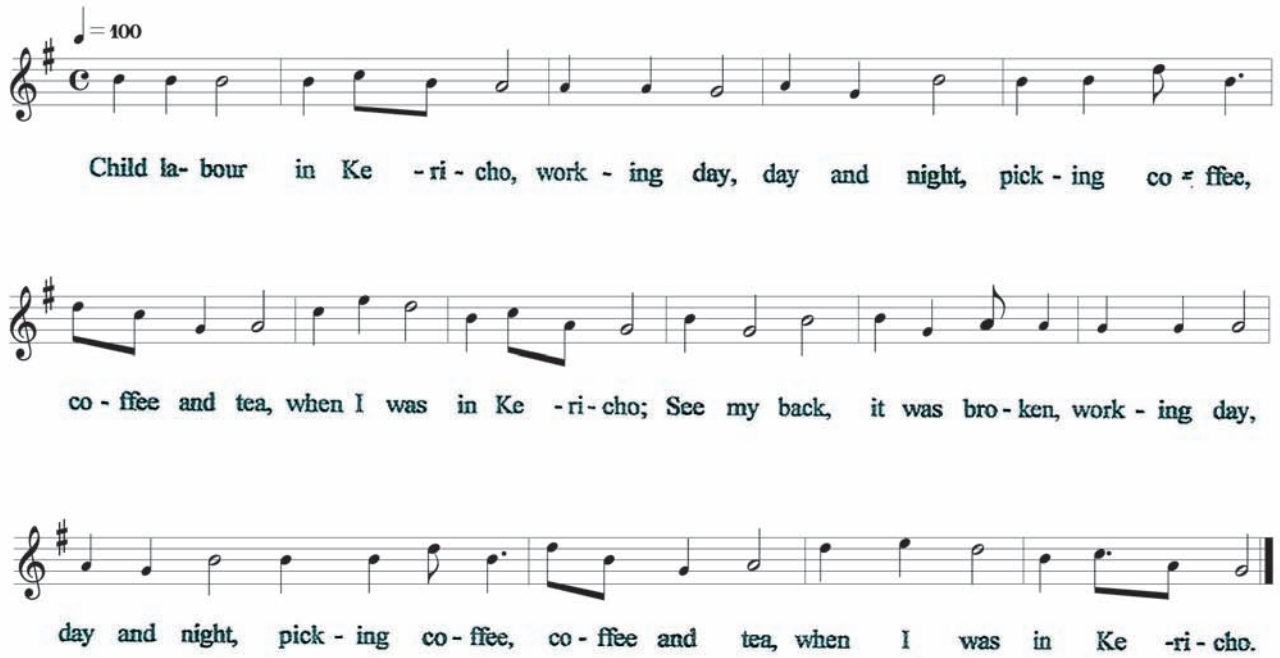
11 • NGIDE LOSUKUL



S. Yautu, yautu
A. Ngide losukulu (x2)
Yautu ngide losukul, yoviamutu aosou

Translation:
Bring, bring children to school (x2) Bring children to school to be educated
The song should be sung in public to educate the community and motivate parents to send their children to school.

12 • CHILD LABOUR



Child labour in Kericho
Working day, day and night
Picking coffee, coffee and tea
When I was in Kericho.
See my back it was broken
Working day, day and night
Picking coffee, coffee and tea
When I was in Kericho

Child labour in Garissa
Working day, day and night
Fetching water, water on cart
When I was in Garissa.
See my leg it was broken
Working day, day and night
Fetching water, water on carts
When I was in Garissa

Child labour in Nairobi
Working day, day and night
Carrying baby, baby all night
When I was in Nairobi.
See my arm it was broken
Working day, day and night
Carrying baby, baby all night
When I was in Nairobi

Meaning of the song::
The song is on child labour in some of the towns in Kenya. It is also used to teach parts of the body as well as naming the places the children come from.

Actions: When parts of the body are mentioned the learners should touch them. They can also try to mime the actions of carrying the water or the baby.

Teaching & Learning Materials Manual•September 2005 page 120

13 • ELIMU YA BURE (Duruma Song)

Elimu ya bure inang'alang'ala
Babaye mwaka, nakuambira Margaret
Naadze weeh, naadze,
Takala ni jumatano
Namala kamuone Dama adzire
We kwani vino mambo nsawa
Naadze wee (x2)
Mambo nsawa (repeat line 5 and 6)

Translation:
The composer is asking Margaret's father to let her go to school because education is free and important. He is going to disseminate the same message to Dama who is a maid.

Actions: dancing accompanied with shakers and chivuti (flute)

14 • MWADZU (Tamarind tree)

Minhi yosi inamaruwa hata mkwadzu una maruwa
Minhi yosi inamaruwa hata mkwadzu una bwaga
Minhi yosi ina maruwa hata mkwadzu una maruwa

NB: the word underlined is the name of a plant, you can add more lines using other plants, like mbibo (cashew nut tree) mkunde (peas plant) etc.

Meaning of the song: it shows the wonders of the tamarind tree: its flowers are rarely seen but the fruits are produced and enjoyed. The other plants are just added to prolong the song.

15 • BEHAVIOUR CHANGE

AIDS will kill
Those who don't care
Unless you change, and change today (x2)

Think of the pain
You are dying in vain
Unless you change and change today (x2)
Ooh yes
Unless you change and change today

This is a song on HIV/AIDS that is sung by the children to encourage each other, especially the orphans. The song is sung in pairs standing in a circle. When they shout the slogan "Change your behaviour!" they look at each other.

16 • SOMO WANJIREMA

(Borana song encouraging mothers and fathers to bring the handicapped child to school since knowledge is part of life).

Somo wanjirena x 2
Somo wanjirena
Aboo na somsisi
Ayoo na somsisi
Balaa eel inqabyetee
Dudaa quur inqabyetee
Nafaa arka inqabyete
Nafa miil inqabyete
Uranangaatini sunnin kena waqaa
Somo wanjirena x 2

Translation:
Addressing fathers and mothers to bring their handicapped child to school since knowledge is part of life.

Father take me to school
Mother take me to school
Never say: I am blind
I am deaf
I am physically handicapped (without legs and hands)
I am mentally crippled

And throw me away without me being recognized as a gift from God.

Actions:
The song underlines the importance of recognizing the handicapped child within our society as part of us. The singers will touch the parts of the body mentioned and also try to mime the action of the disabled child or person and as well as pretend to be a father and mother of handicapped.

Second part: English rhymes and songs for children

These songs come from different compilations of songs for children and should be used only for educational purposes. The tape cannot be duplicated in order to preserve copyrights.

Method:

Every time you teach a new song allow the children to sing first a known song for motivation. Then write the words of the new song and talk about it to make sure the learners understand the meaning.
Sing the whole song once, and then teach line by line as the children repeat after you. It is generally advisable to prepare visual aids for each song or rhyme in order to convey the meaning of the song and offer a variety of interesting activities. Some flash cards with both words and pictures will allow a lot of matching, ordering, guessing and other games. Integrate music as much as possible with other subjects and use them as often as you can to make lessons interesting and generate fun. You don't need to keep the songs only for music lessons; you can have your learners singing at any time as far as the song is relevant for what you are teaching and creates a positive participatory atmosphere in class.

RHYMES

1 • Numbers

1 2 THIS IS MY SHOE
3 4 SHUT THE DOOR
5 6 PICK UP STICKS
7 8 LAY THEM STRAIGHT
9 10 A GOOD FAT HEN

Activities:
The rhythm of this poem is very important. While learners repeat the rhyme they should clap their hands and click their fingers alternatively: one – clap, two – click, this is my – clap, shoe – click, etc. To make it more interesting they can play the rhythm in pairs as follow.
Two learners facing each other
a. One: clap your hands
b. Two: clap your right hand with your partner's right hand
c. This is my: clap your hands
d. Shoe: clap your left hand with your partner's left hand
Continue like that till the end of the song

2 • A lazy boy's week

On Sunday I sleep
On Monday I get up
On Tuesday I eat
On Wednesday I wash
On Thursday I dress
On Friday I am ready
And on Saturday….
No school on Saturday!!!

Activities:
To help memorising the text of the poem, divide the class in two groups. With one group the teacher will say a name of the day and the class will respond with the corresponding action.
With the second group the teacher will say the action and the group will respond with the name of the day. If flash cards with the name of the days and pictures of the actions are prepared, a lot of activities involving sequencing and matching can be done and learners can practice speaking and reading skills.

2 • A lazy boy's week

Where are my glasses,
where, oh where?
On the table
or under the chair?
I'm looking here,
I'm looking there,
Where are my glasses,
where, oh where?
Oh! Here they are, on my nose!

Activities:
Teacher could prepare a big pair of glasses with cardboard and wear them while reciting the poem. The "here" and "there" in the poem should be underlined by ample gestures to convey the meaning. Learners will enjoy acting the poem while wearing those big cardboard glasses.
The poem could be followed by a game: a learner leaves the room and one of his/her object is hidden in the classroom. Returning to the class he/she can ask as many questions as possible in order to find the missing item. Example: "Where is my pencil? Is it on the table? Is it under the chair? Is it ...." The number of questions and the kind of prepositions practiced during the game will depend on the class level and on the objectives of the lesson.

SONGS

1 • Ten green bottles

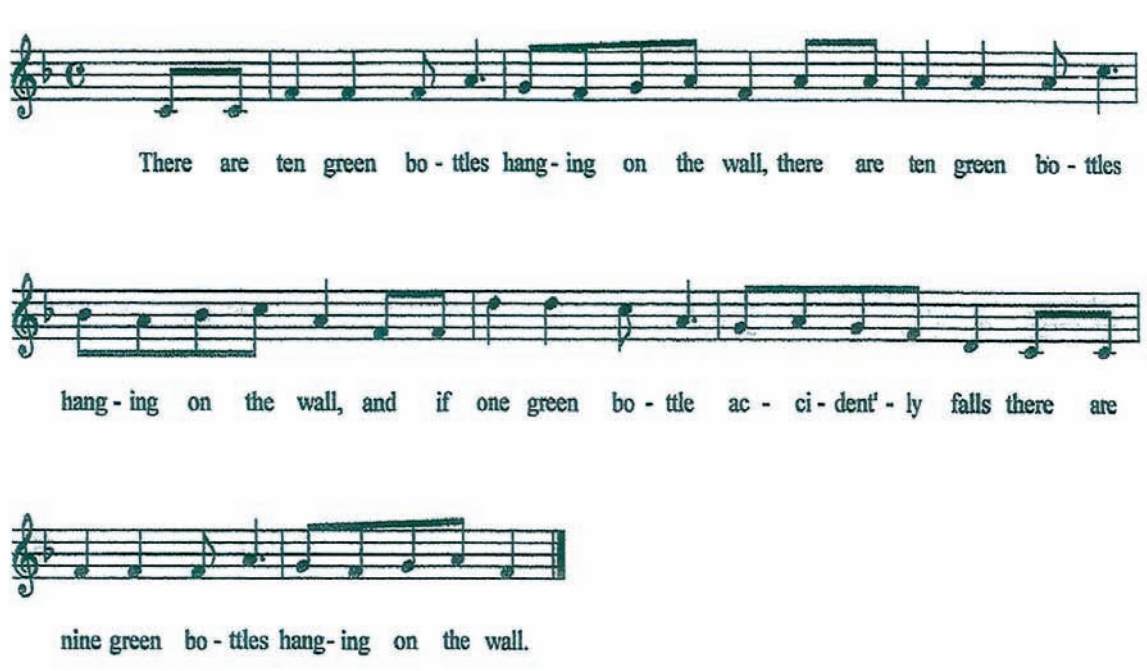
There are ten green bottles hanging on the wall,
There are ten green bottles hanging on the wall
and one green bottle accidentally falls,
there are nine green bottles hanging on the wall

There are nine green bottles hanging on the wall,
There are nine green bottles hanging on the wall
and one green bottle accidentally falls,
there are eight green bottles hanging on the wall

There are eight green bottles hanging on the wall,
There are eight green bottles hanging on the wall
and one green bottle accidentally falls,
there are seven green bottles hanging on the wall

There is one green bottle hanging on the wall
There is one green bottle hanging on the wall
and one green bottle accidentally falls,
there are no green bottles hanging on the wall

Activities:
To represent the ten green bottles and give learners the opportunity to act during the singing, some examples are offered here.
1: use 10 plastic bottles and line then on a wall or a table and while singing the song one bottle at a time will be removed and put on the floor. As another option the teacher could move the bottles two at a time, or none at all and modify the song correspondently. Example: "… and two green bottles accidentally fall, there are….."
The second: 10 children on a line facing the class. While singing the song one child at a time will sit on the floor so the class will see the number of children reducing from 10 to none and counting backwards will become more realistic.



2 • Head and shoulders

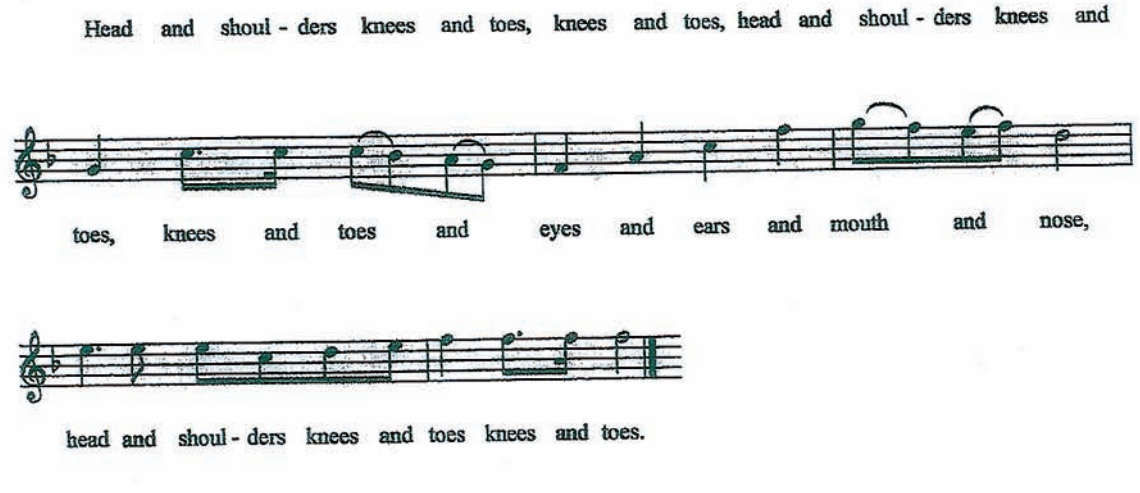
Head and shoulder knees and toes,
knees and toes. (x 2)

And eyes and ears and mouth and nose.

Head and shoulder knees and toes,
knees and toes.

(to be repeated many times)

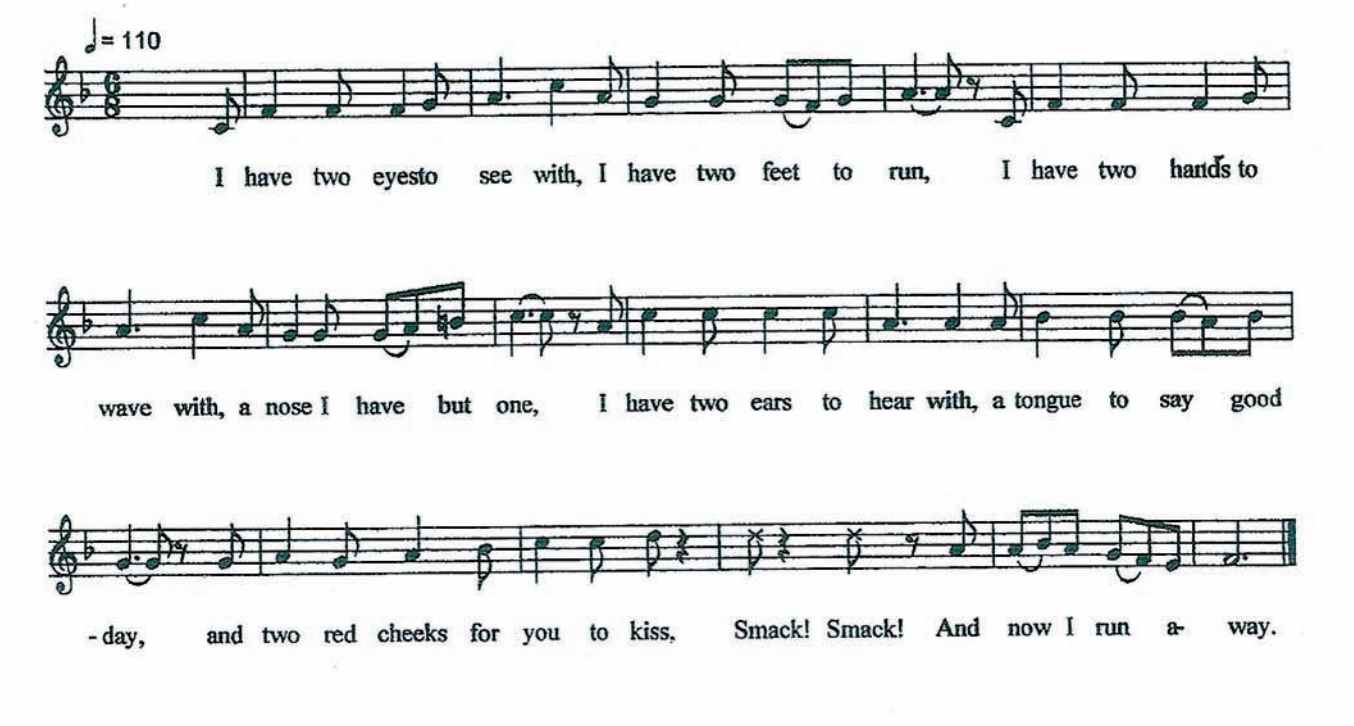
Activities:
This song should always be accompanied by appropriate movements. A number of learners face the class and touch the part of the body mentioned by the song while the rest of the class sing. At the beginning the teacher demonstrates the actions, later on the learners do the activity themselves. To make it more interesting the song can be sang initially very slowly and increasingly faster as learners become familiar with the song and the actions. It is a great song to be used to energise the class and stimulate participation.



3 • I have two eyes

I have two eyes to see with
I have two feet to run
I have two hands to wave with
A nose I have but one
I have to ears to hear with
A tongue to say "Good day"
And two red cheeks for you to kiss
(smack...smack....)
And now I run away

Activities:
While singing the learners should touch the part of the body that is mentioned in the song and mime the action (stamping feet, waving hands). When imitating the sound of kisses (smack or other sound) the gesture of blowing a kiss to someone can be mimed.



4 • Can you tell me?

Can you tell me, can you tell me
what the little girls are doing?

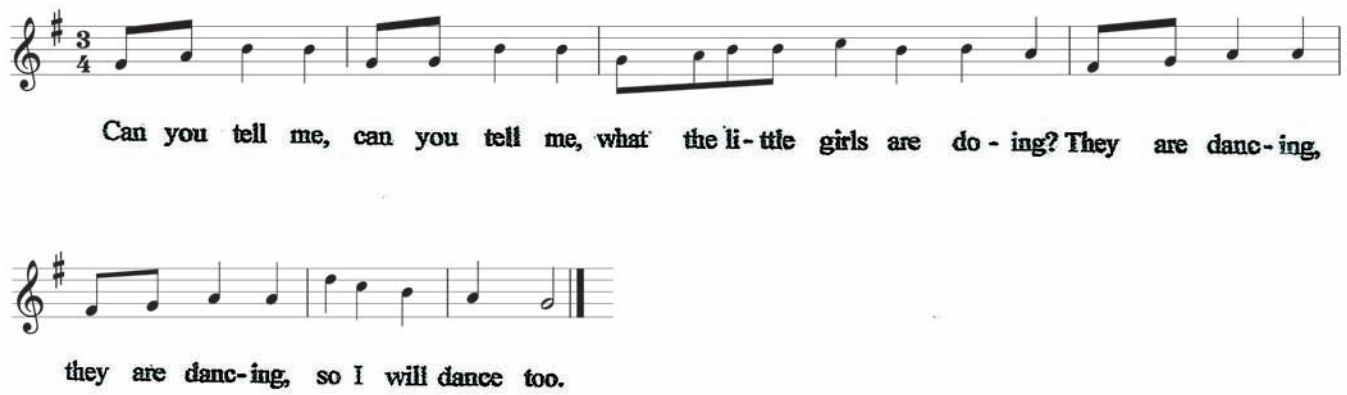
They are dancing, they are dancing
So I will dance too.

Can you tell me, can you tell me
what the little boys are doing?

They are jumping, they are jumping
So I will jump too.

(To be continued with many more actions)

Activities:
In order to sing this song two pairs of learners, two boys and two girls, should be called to the front of the class to lead the song. After the two initial actions already indicated (dancing – jumping) they will have to take turns to mime as many actions as they can while the class will continue singing. Example: boys will mime running and the class will sing: " they are running, they are running, so I will run too". Girls will mime talking and the class will sing "They are talking they are talking so I will talk too" and so one. It is a great song for revising the vocabulary relating to everyday actions.



5 • Black sheep

Baa baa black sheep
have you any wool?
Yes Sir, yes Sir,
three bags full.

One for my Master and one
for my Dame
One for the little boy
that cries down the lane.

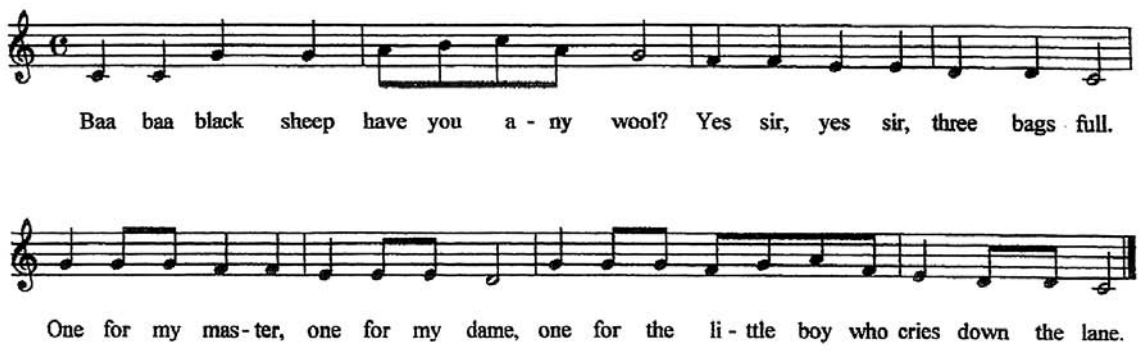
(to be repeated)

Activities:
These two are very popular nursery rhymes. The teacher needs to explain the meaning of unusual words, like

- Master and Dame, they are two old words meaning the head of the household and the lady of the house.
- Hickory, dickory, dock have no meaning, they try to imitate the sound of the clock.

Learning traditional nursery rhymes in a foreign language can be very interesting, even if the language is not particularly useful for learners' everyday life. It helps to understand the culture and the traditions of the country where the rhymes come from and to know what children in that country sing at pre-school and primary level.

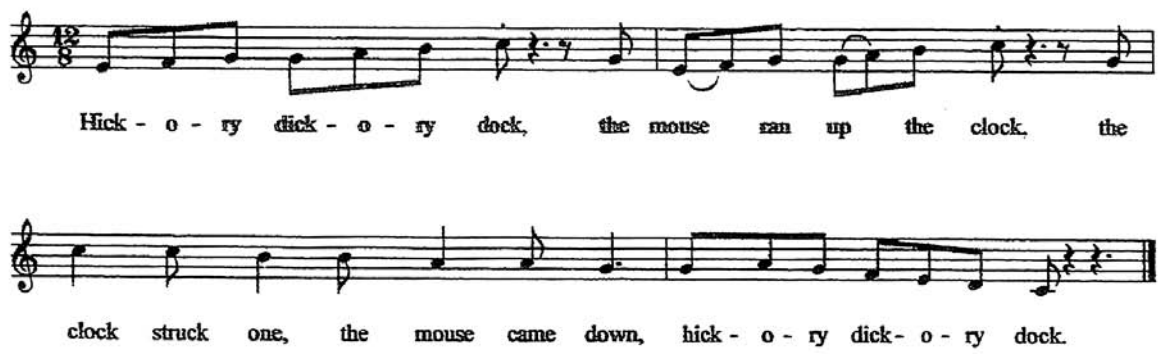
To adapt them to the learners' environment, why not making a song in the local language using the same tune?



6 • Hickory dickory dock

Hickory dickory dock
The mouse ran up the clock

The clock struck one,
the mouse came down
Hickory dickory dock



7 • Here we go round the mulberry bush

Here we go round the mulberry bush,
the mulberry bush, the mulberry bush,
Here we go round the mulberry bush,
on a cold and frosty morning

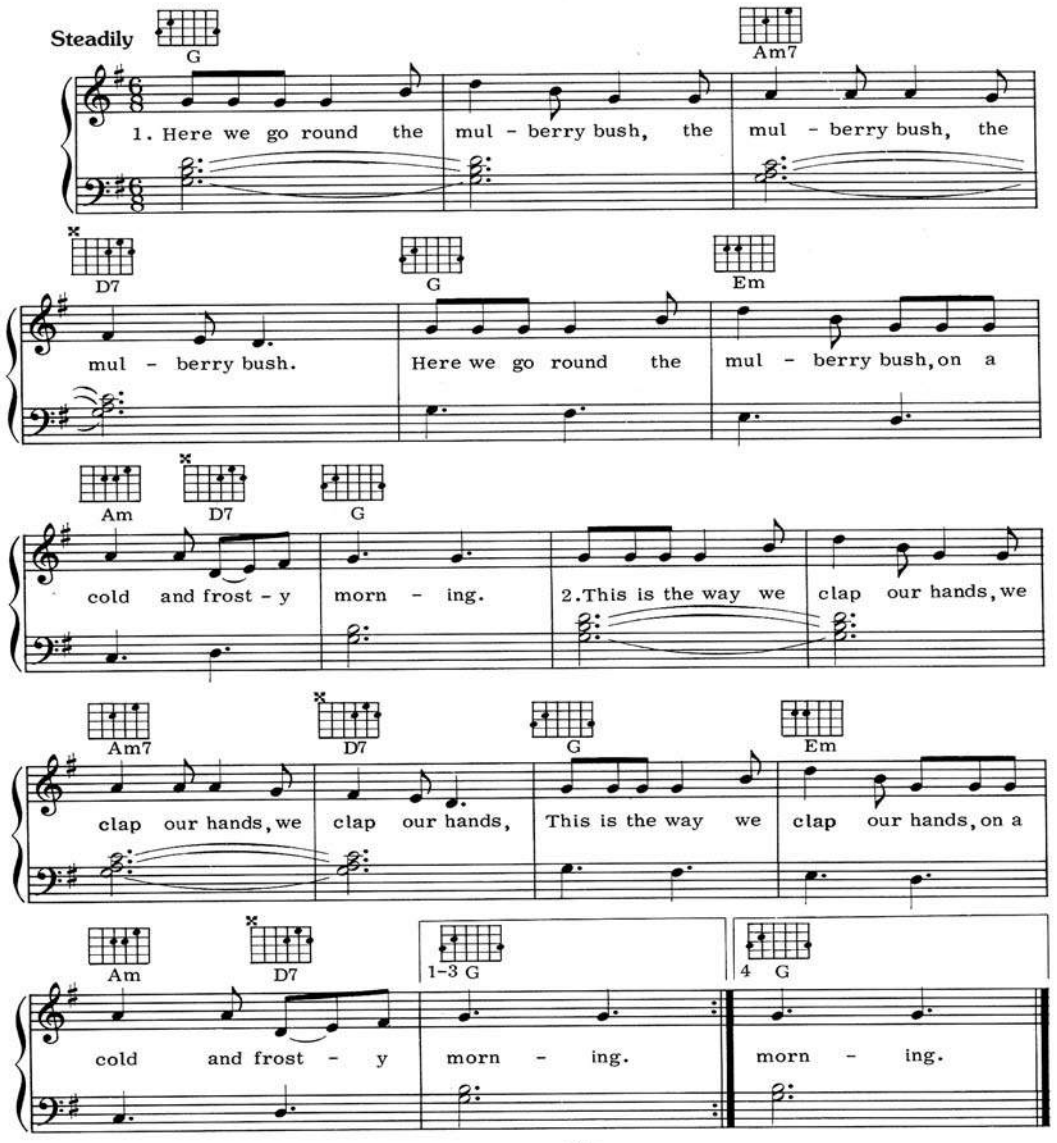
This is the way we wash our hands, wash our hands, wash our hands
This is the way we wash our hands, on a cold and frosty morning

This is the way we dry our hands, dry our hands, dry our hands

This is the way we dry our hands, on a cold and frosty morning
This is the way we clap our hands, clap our hands, clap our hands

This is the way we clap our hands, on a cold and frosty morning
This is the way we jump our path, jump our path jump our path

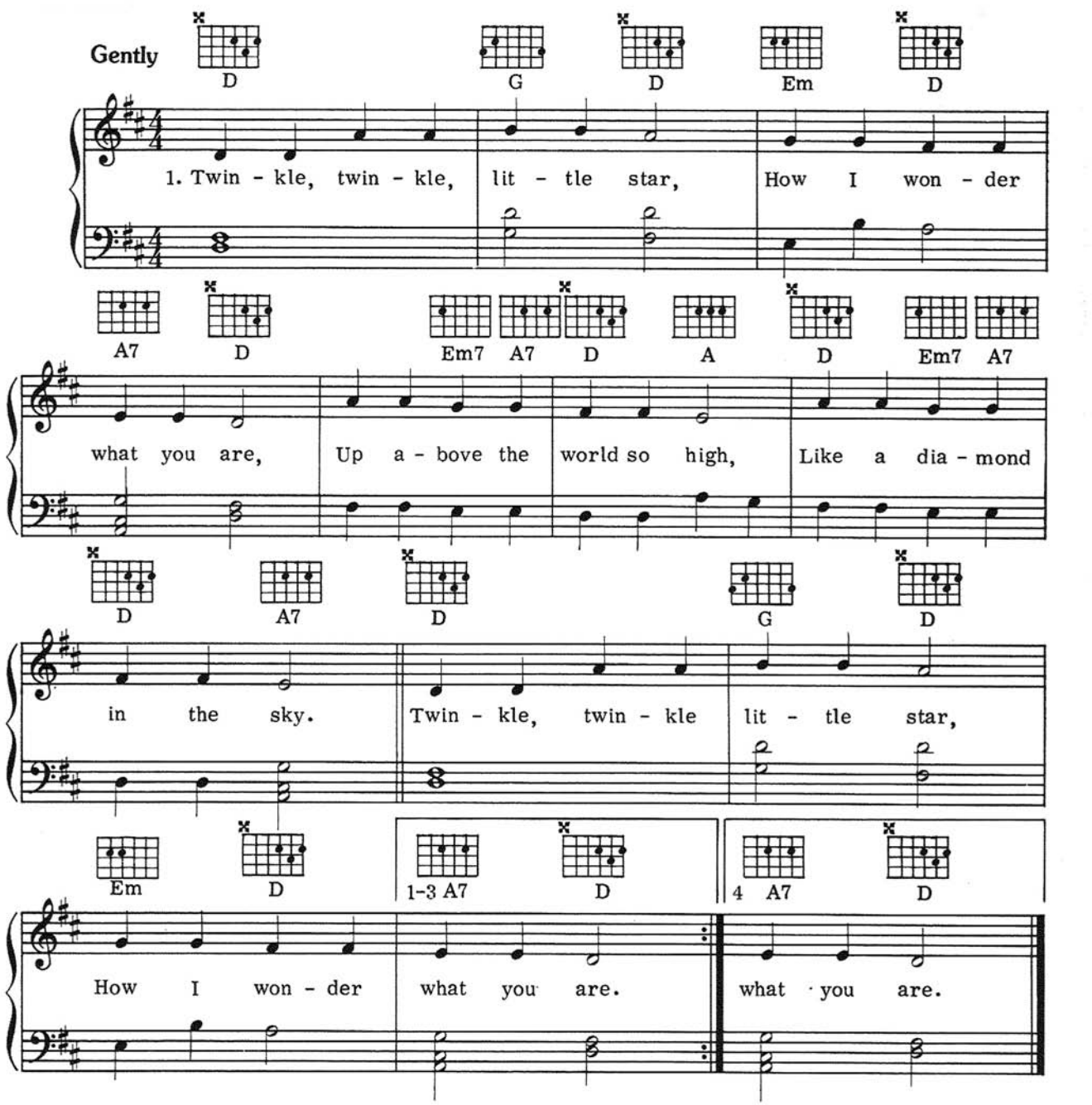
This is the way we jump our path, on a cold and frosty morning



8 • Twinkle twinkle little star

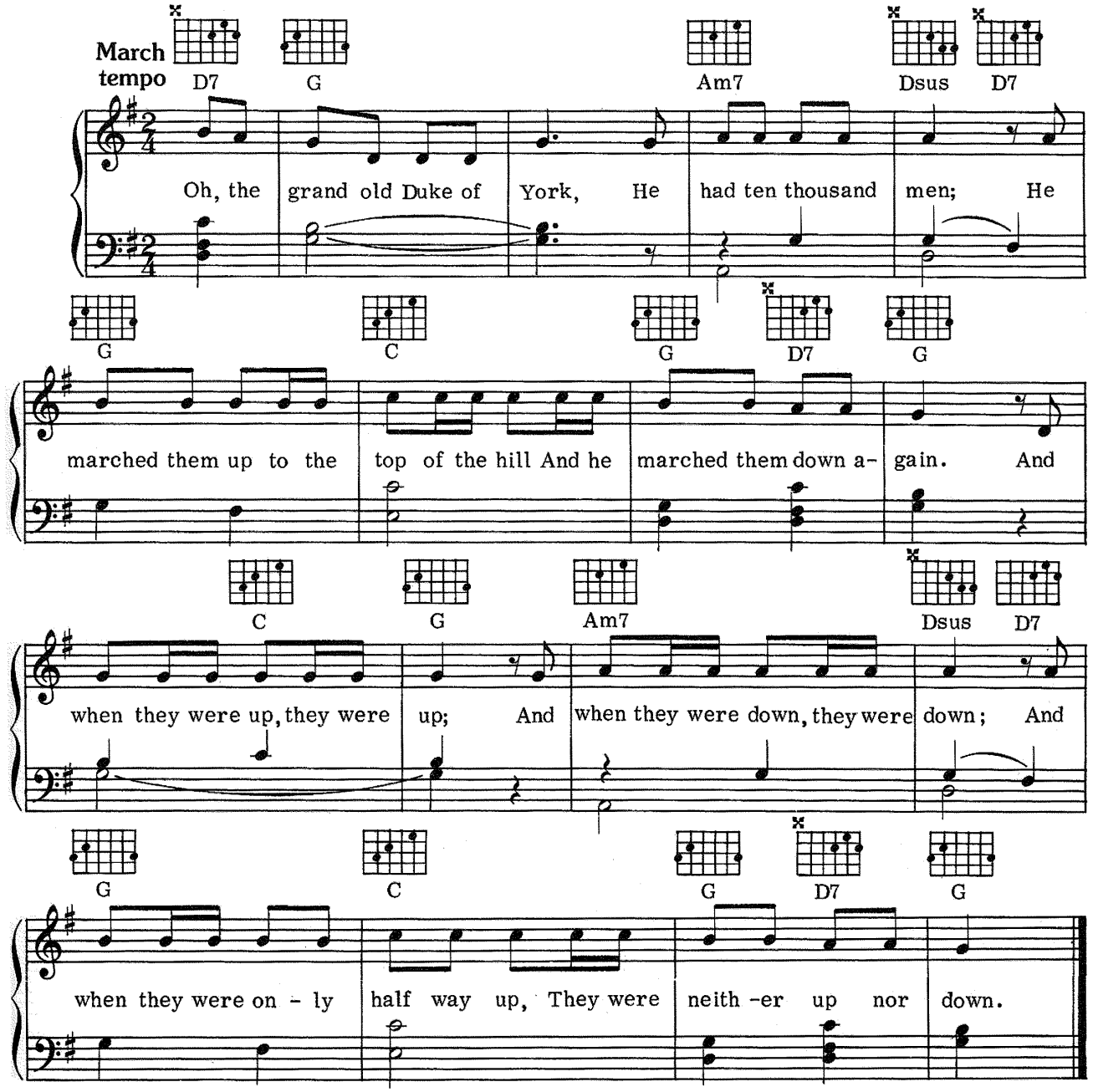
Twinkle, twinkle little star, how I wonder what you are.
Up above the world so high, like a diamond in the sky
Twinkle, twinkle little star, how I wonder what you are

Then a traveller in the dark thanks you for your tiny spark
He could not see where to go if you didn't twinkle so.
Twinkle, twinkle little star, how I wonder what you are



9 • The grand old Duke of York

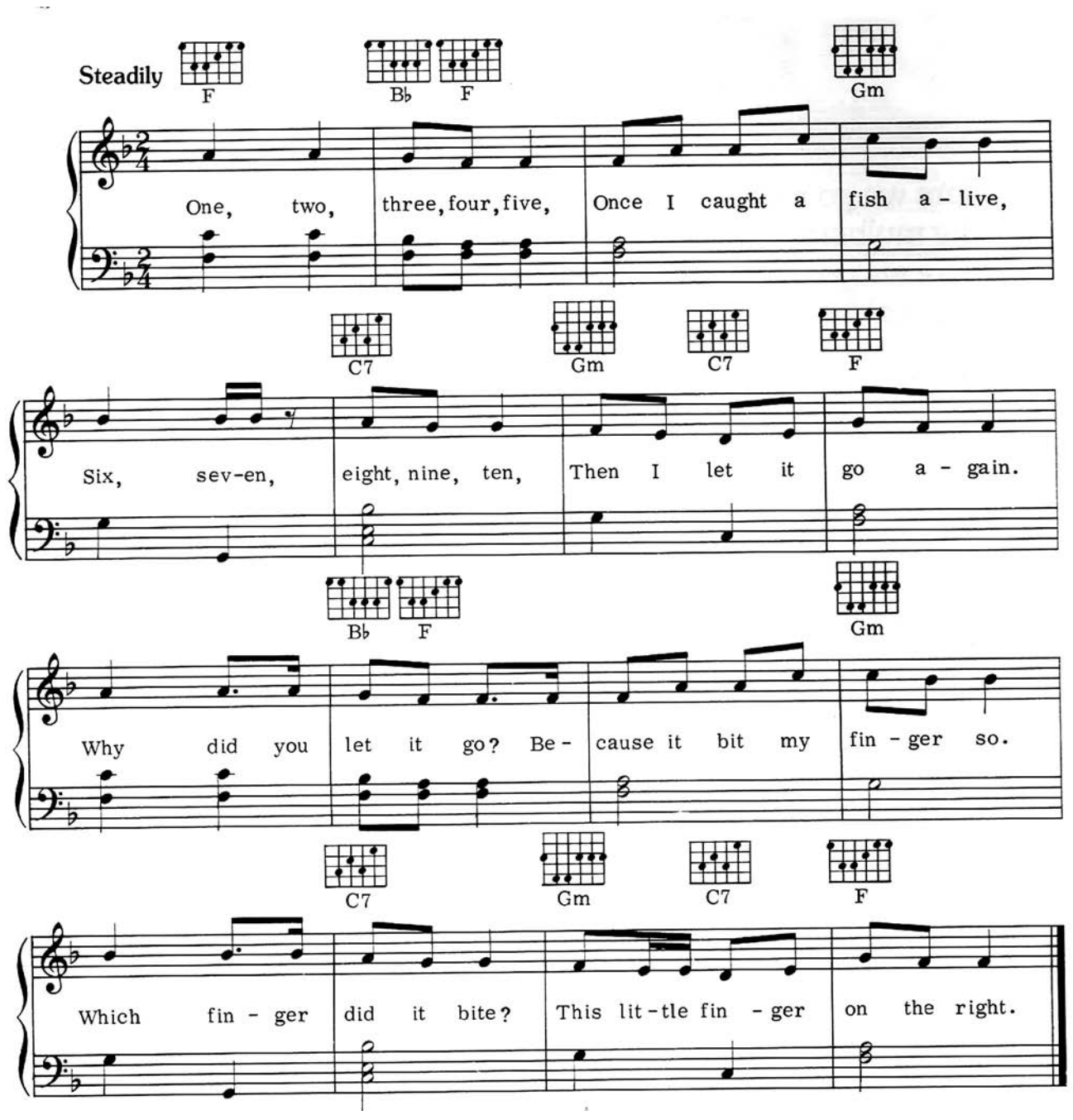
The grand old Duke of York he had ten thousand men
And marched them up to the top of the hill
And marched them down again
And when they were up they were up
And when they were down they were down
And when they where only half way up, they were neither up nor down.



10 • One two three four five

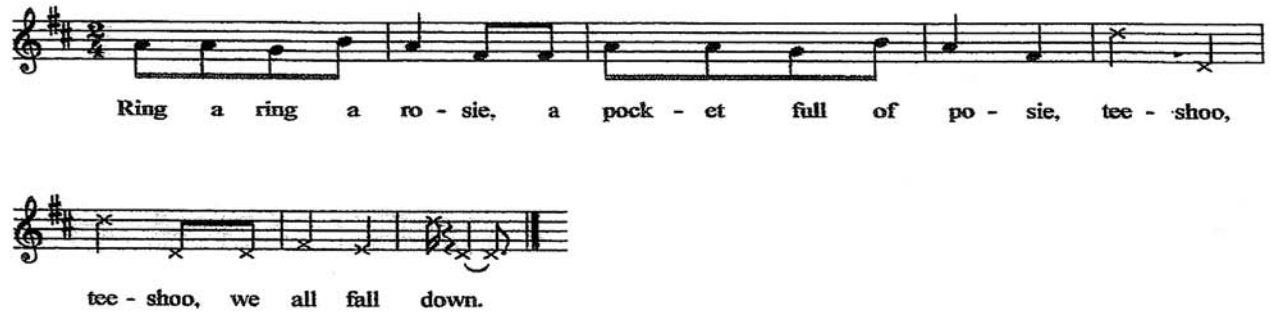
One two three four five,
once I caught a fish alive.
Six seven eight nine ten,
then I let it go again.

Why did you let it go?
Because he bit my finger so.
Which finger did it bite?
This little finger on the right.



11 • Ring a ring a rosie

Ring a ring a rosie, a pocket full of posie
Teeshoo, teeshoo, we all fall down.
The bird upon the steeple it's high above the people
Teeshoo, teeshoo, we all fall down.
The wedding bells are ringing and boys and girls are singing
Teeshoo, teeshoo, we all fall down.



12 • The farmer

The farmer is in his den, the farmer is in his den
Hee hi, hee hi, the farmer is in his den.

The farmer wants a wife, the farmer wants a wife,
Hee hi, hee hi, the farmer wants a wife.

The wife wants a child, the wife wants a child,
Hee hi, hee hi, the wife wants a child.

The child wants a nurse, the child wants a nurse,
Hee hi, hee hi, the child wants a nurse.

The nurse wants a dog, the nurse wants a dog
Hee hi, hee hi, the nurse wants a dog.

We all catch the dog, we all catch the dog,
Hee hi, hee hi, we all catch the dog

13 - In the attic (same tune as "Old McDonald has a farm")

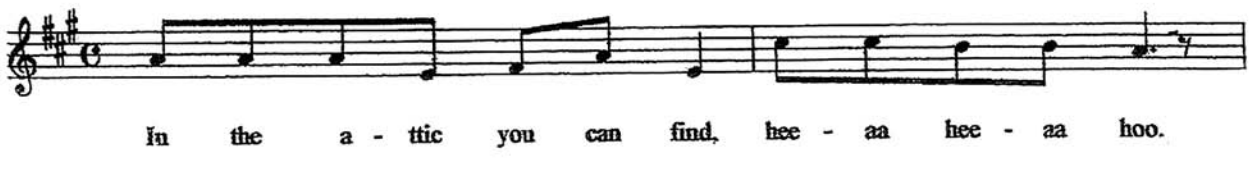
In the attic you can find, Heeaa heeaa hooo
All the things you have in mind, Heeaa heeaa hooo

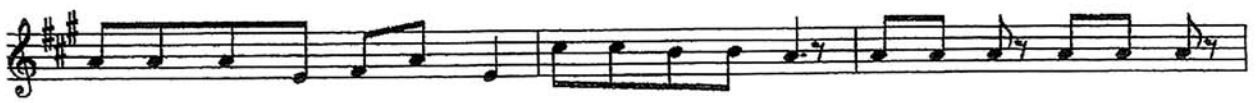
Car, car ,car – doll, doll, doll - book, book, book - hat, hat, hat
In the attic you can find, Heeaa heeaa hooo

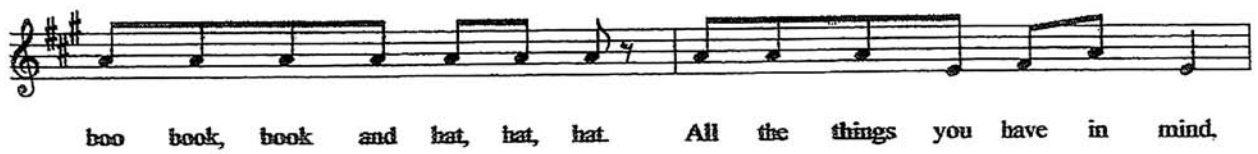
All the things you have in mind, Heeaa heeaa hooo

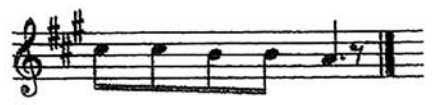
Note: Instead than the attic, change the theme to be classroom, home, school, etc, to suit the learners.

Ex: In the classroom you can find, Heeaa-heeaa-hoo
All the things you have in mind
A pen, pen, pen, and a book, book, book, and a chair, chair, chair, etc









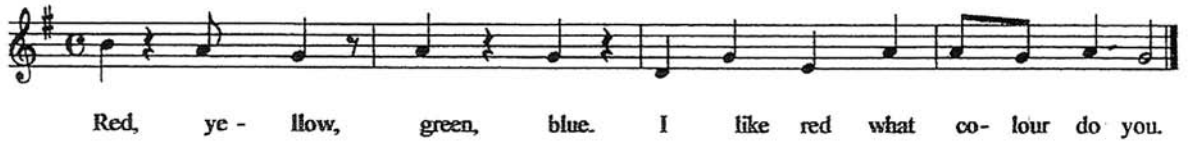
14 • What colour do you like?

Red, yellow, green, blue
I like red, what colour do you?

Red, yellow, green, blue
I like I like yellow, what colour do you?

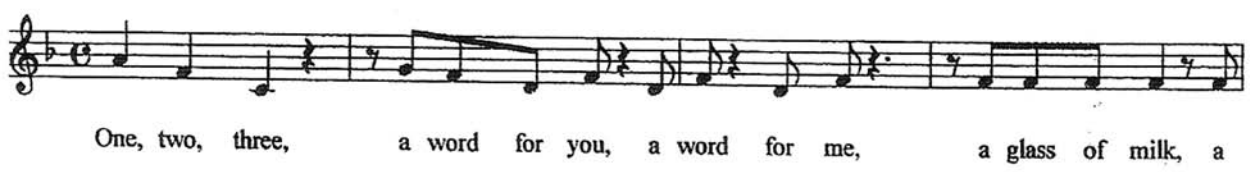
Red, yellow, green, blue
I like green, what colour do you?

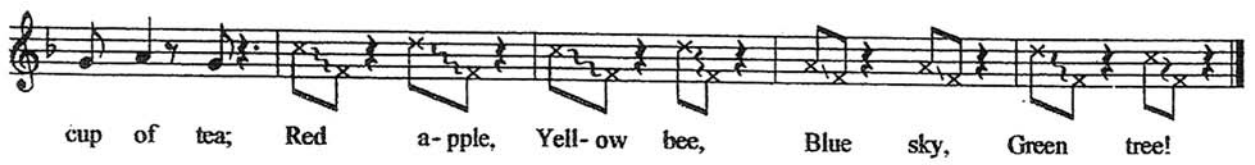
Red, yellow, green, blue
I like blue, what colour do you?



15 • A word for you, a word for me

One, two, three, a word for you, a word for me
A glass of milk, a cup of tea
Red - apple, Yellow-bee
Blue - sky, Green - tree





16 - This is the way (same music as "Here we go round the mulberry bush")

This is the way we brush our teeth, brush out teeth, brush our teeth,

This is the way we brush our teeth, early in the morning.

This is the way we brush our hair, brush our hair, brush our hair,

This is the way we brush our hair, early in the morning.

This is the way we comb our hair, comb our hair, comb our hair,

This is the way we comb our hair, early in the morning.

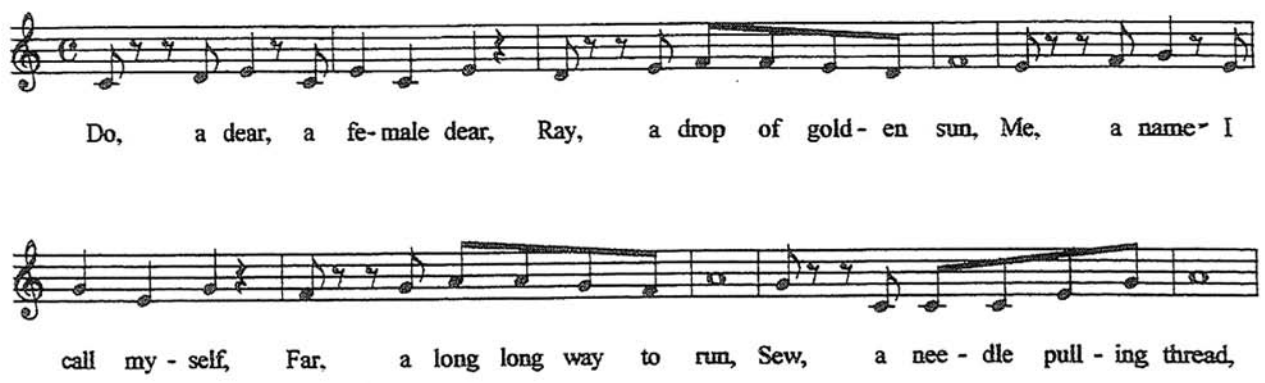
(Please add actions that can be done in the morning before the learners come to school)

17 • DO – RE – MI

Doe, a deer, a female deer
Ray, a drop of golden sun
Me, a name I call myself
Far, a long long way to run
Sew, a needle pulling thread
La, a note to follow sol
Tea, a drink with jam and bread
And that will bring us back to do.

Doe, a deer, a female deer
Ray, a drop of golden sun
Me, a name I call myself
Far, a long long way to run
Sew, a needle pulling thread
La, a note to follow sol
Tea, a drink with jam and bread
And that will bring us back to do.

DO – RE – MI – FA – SOL – LA – SI – DO



14 • What colour do you like?

I know an old lady who swallowed a fly
I don't know why she swallowed a fly
I guess she will die.

I know an old lady who swallowed a spider
That wriggled and jiggled and tickled inside her
She swallowed the spider to catch the fly
But I don't know why she swallowed a fly
I guess she will die.

I know an old lady who swallowed a bird
Now, how absurd to swallow a bird!
She swallowed the bird to catch the spider
That wriggled and jiggled and tickled inside her
She swallowed the spider to catch the fly
But I don't know why she swallowed a fly
I guess she will die.

I know an old lady who swallowed a cat
Now, fancy that, to swallow a cat!
She swallowed the cat to catch the bird,
She swallowed the bird to catch the spider
That wriggled and jiggled and tickled inside her
She swallowed the spider to catch the fly
But I don't know why she swallowed a fly
I guess she will die.

Now I know an old lady who swallowed a dog
Now, what a hog, to swallow a dog!
She swallowed the dog to catch the cat,
She swallowed the cat to catch the bird,
She swallowed the bird to catch the spider
That wriggled and jiggled and tickled inside her
She swallowed the spider to catch the fly
I don't know why she swallowed a fly
I guess she will die.

Now I know an old lady who swallowed a horse - She is dead, of course!

19 • How much is the dog?

How much is the dog in the window?
The one with the waggly tail.
How much is the dog in the window?
I do hope that doggie is for sale.
I must take a trip to California
And leave my poor daddy alone
If he has a dog he won't be lonesome
And doggie will have a good home

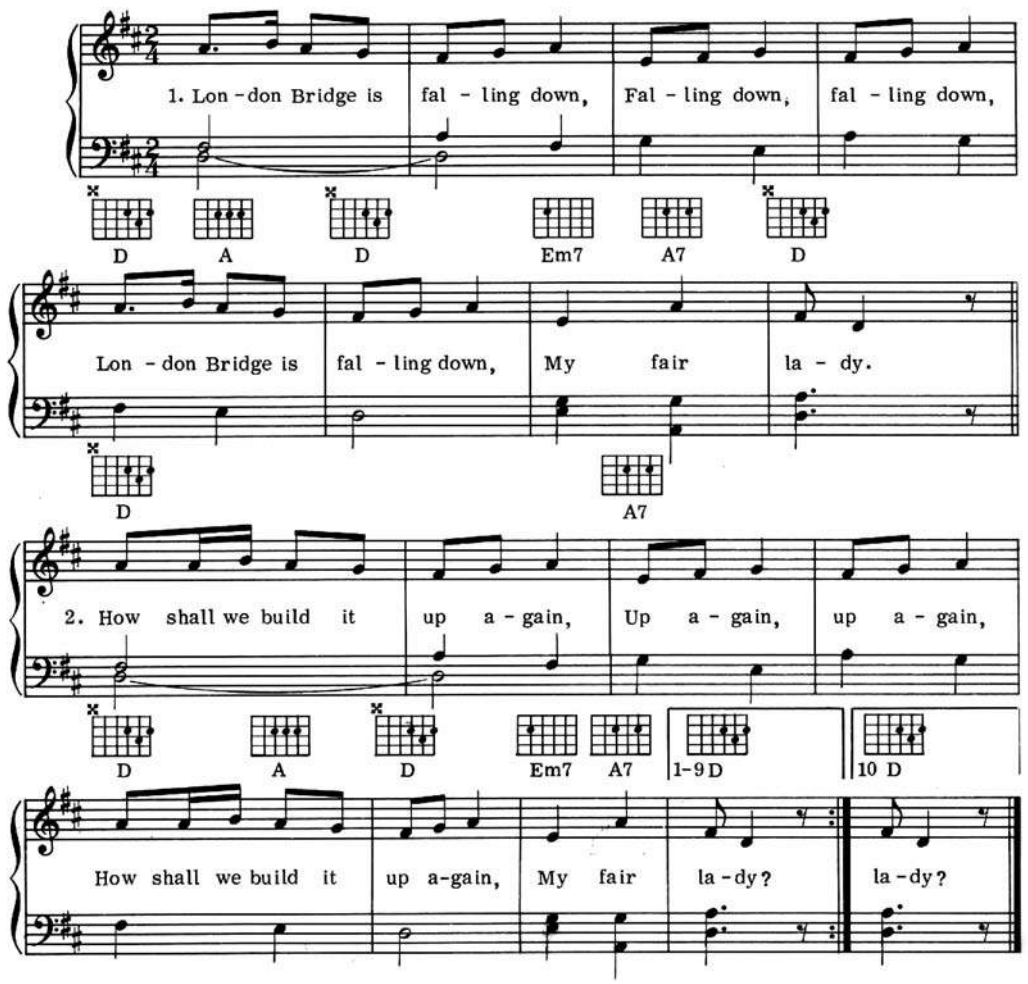
I don't want a birdie or a kitty
I don't want a parrot at all,
I don't want a bowl of little fishes
I can't take a goldfish for walk

How much is the dog in the window?
The one with the waggly tail.
How much is the dog in the window?
We do hope that doggie is for sale.
I must take a trip to California
And leave my poor daddy alone
If he has a dog he won't be lonesome
And doggie will have a good home

Note: Change the name "California" to suit the learners' environment.

20 • London bridge

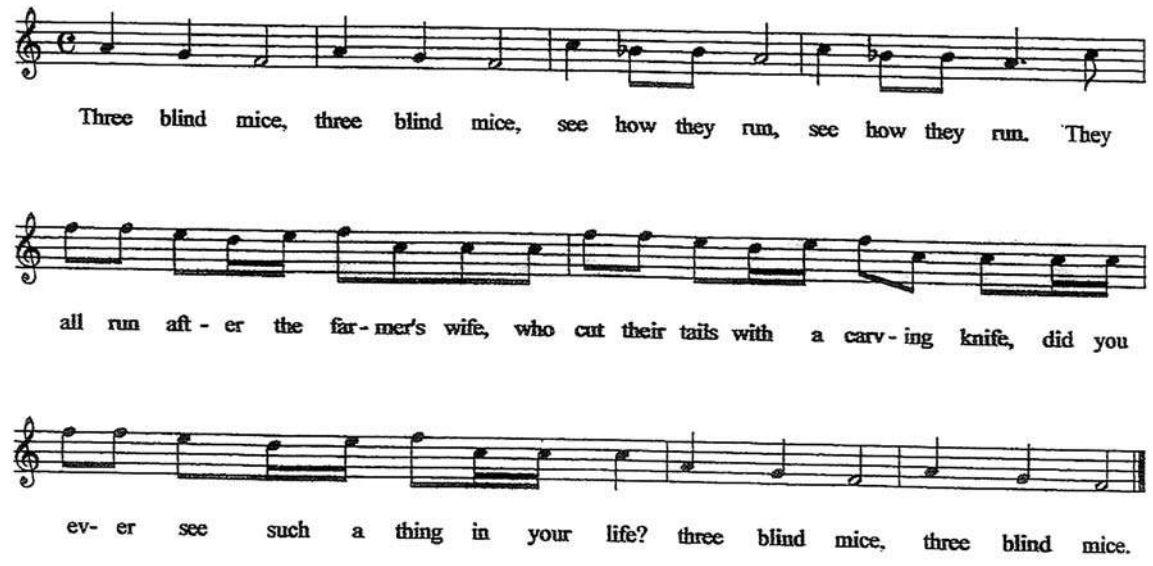
London bridge is falling down, falling down, falling down
London bridge is falling down, my fair Lady.
Build it up with iron and steel, iron and steel, iron and steel
Build it up with iron and steel, my fair Lady
Iron and steel will bend and bow, bend and bow, bend and bow
Iron and steel will bend and bow, my fair Lady
Build it up with wood and clay, wood and clay, wood and clay
Build it up with wood and clay, my fair lady
Wood and clay will wash away, wash away, wash away
Wood and clay will wash away, my fair lady
Build it up with stones so strong, stones so strong , stones so strong
Build it up with stones so strong my fair Lady.
London bridge is falling down, falling down, falling down
London bridge is falling down, my fair Lady.



Note: Change London with a more familiar geographical name to suit the learners' environment.

21 • Three blind mice (a round song)

Three blind mice, three blind mice
See how they run, see how they run
They all went up to the farmer's wife
Who cut their tails with a carving knife
Did you ever see such a thing in your life?
Three blind mice, three blind mice



22 • Ten in a bed

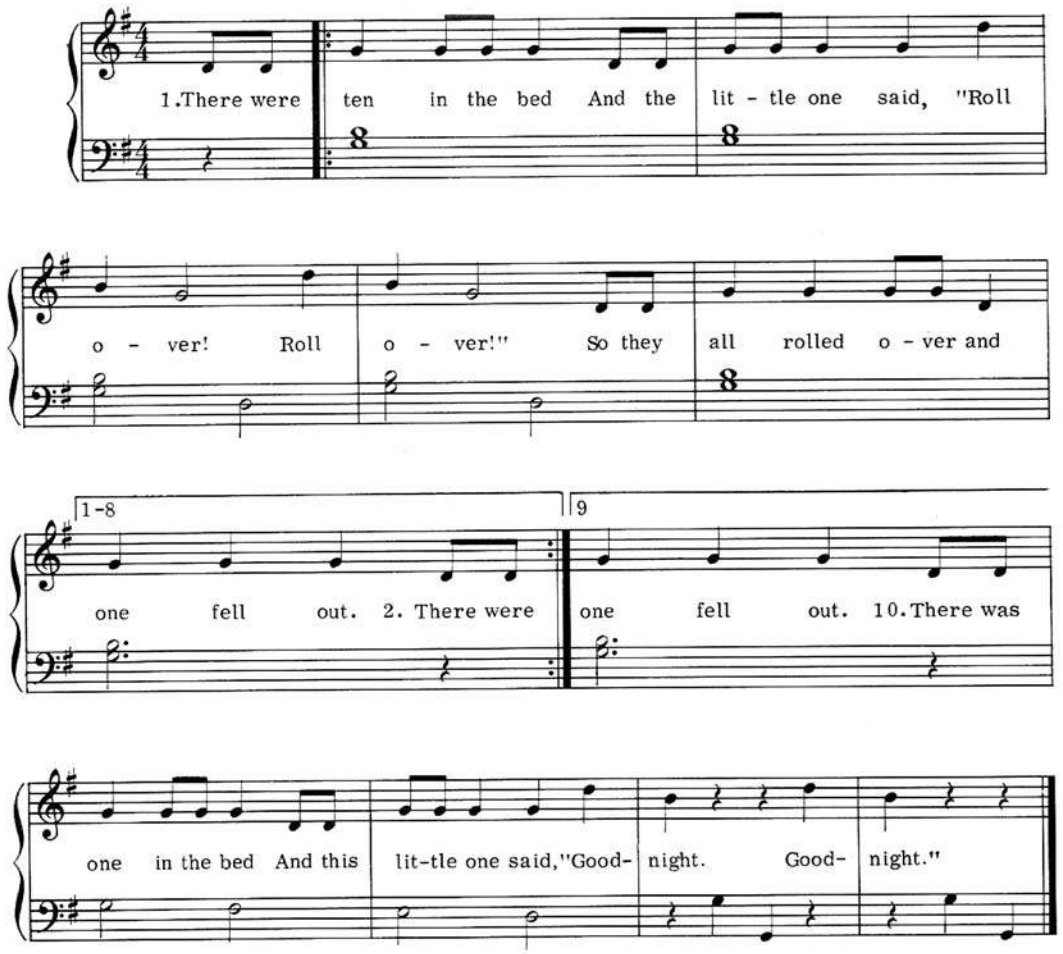
There were ten in a bed
and the little one said
"Roll over! Roll over"
So they all rolled over
and one fell out.

There were nine in the bed
and the little one said
"Roll over! Roll over!"
So they all rolled over
and one fell out.

(to be continued till only one is left)
There was one in the bed
and the little one said
"Good night! Good night!"

Activities:
They can be similar to the "Ten green bottles" song. Ten plastic bottles or other cylindrical objects can be used and rolled on a table, or a group of ten children can roll on the floor and move away one at the time.

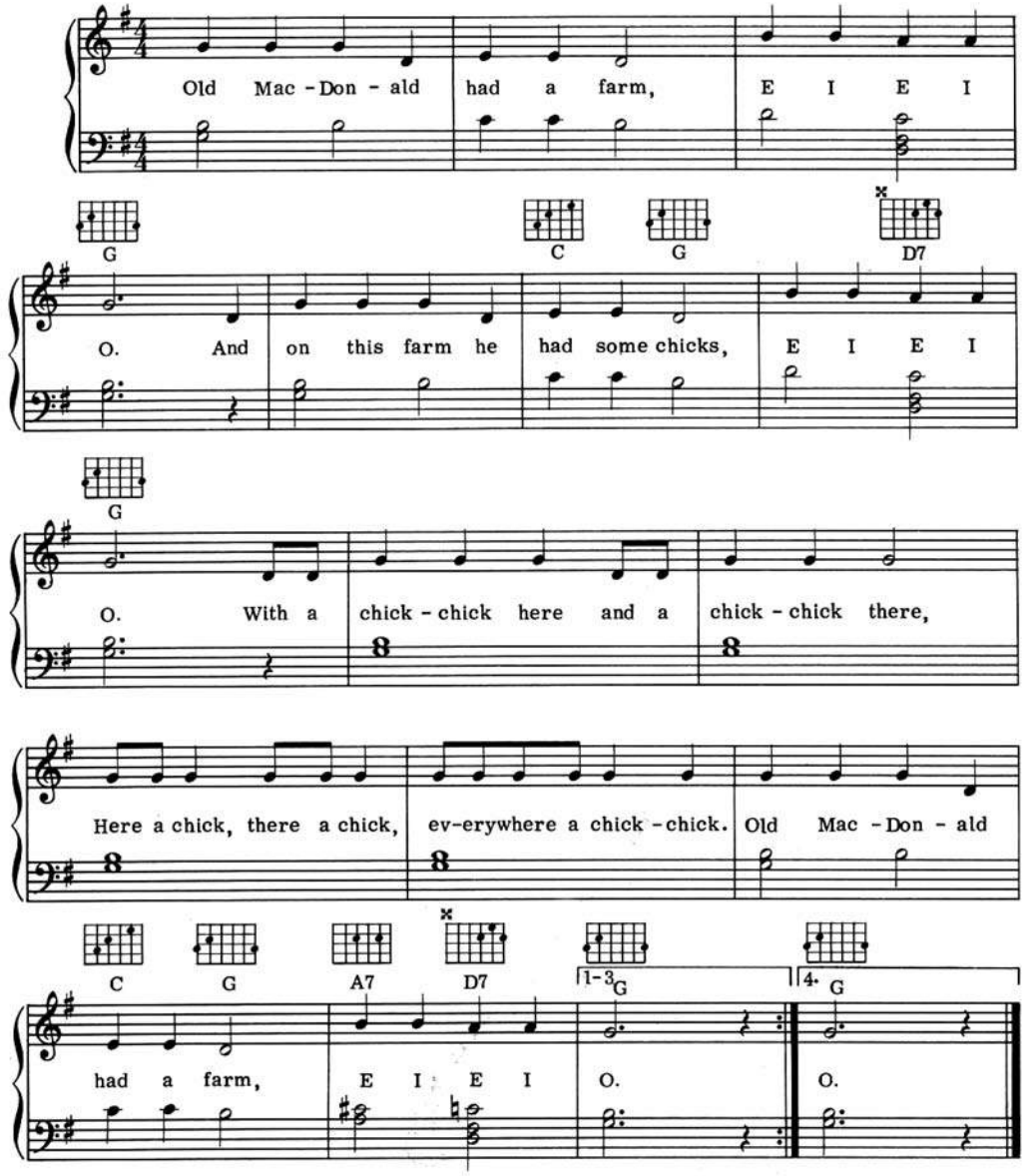
The ten children in the song can also be well represented by puppets; during the song they will fall from a big bed one at a time. The puppets should be moved by ten learners hiding behind a wall, or a table or a piece of cloth.



23 • Old MacDonald had a farm

Old Macdonald had a farm. E.I.E.I.O.
And on his farm he had some chicks, E.I.E.I.O.
With a chick-chick here and a chick-chick there,
Here a chick, there a chick, everywhere a chick – chick.
Old MacDonald had a farm, E.I.E.I.O.
Old Macdonald had a farm. E.I.E.I.O.
And on his farm he had some ducks, E.I.E.I.O.
With a quack-quack here and a quack-quack there,
Here a quack, there a quack, everywhere a quack quack.
Old MacDonald had a farm, E.I.E.I.O

Old Macdonald had a farm. E.I.E.I.O.
And on his farm he had some sheep, E.I.E.I.O.
With a baa-baa here and a baa-baa there,
Here a baa, there a baa, everywhere a baa-baa.
Old MacDonald had a farm, E.I.E.I.O
Old Macdonald had a farm. E.I.E.I.O.
And on his farm he had some dogs, E.I.E.I.O.
With a wouf -wouf here and a wouf-wouf there,
Here a wouf, there a wouf, everywhere a wouf-wouf
Old MacDonald had a farm, E.I.E.I.O



24 • Nick nack paddy wack

This old man, he plaid one,
He played nick nack on my drum,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he played two,
He played nick nack on my shoe,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid three,
He played nick nack on the tree,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid four,
He played nick nack on the door,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid five,
He played nick nack on the hive,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

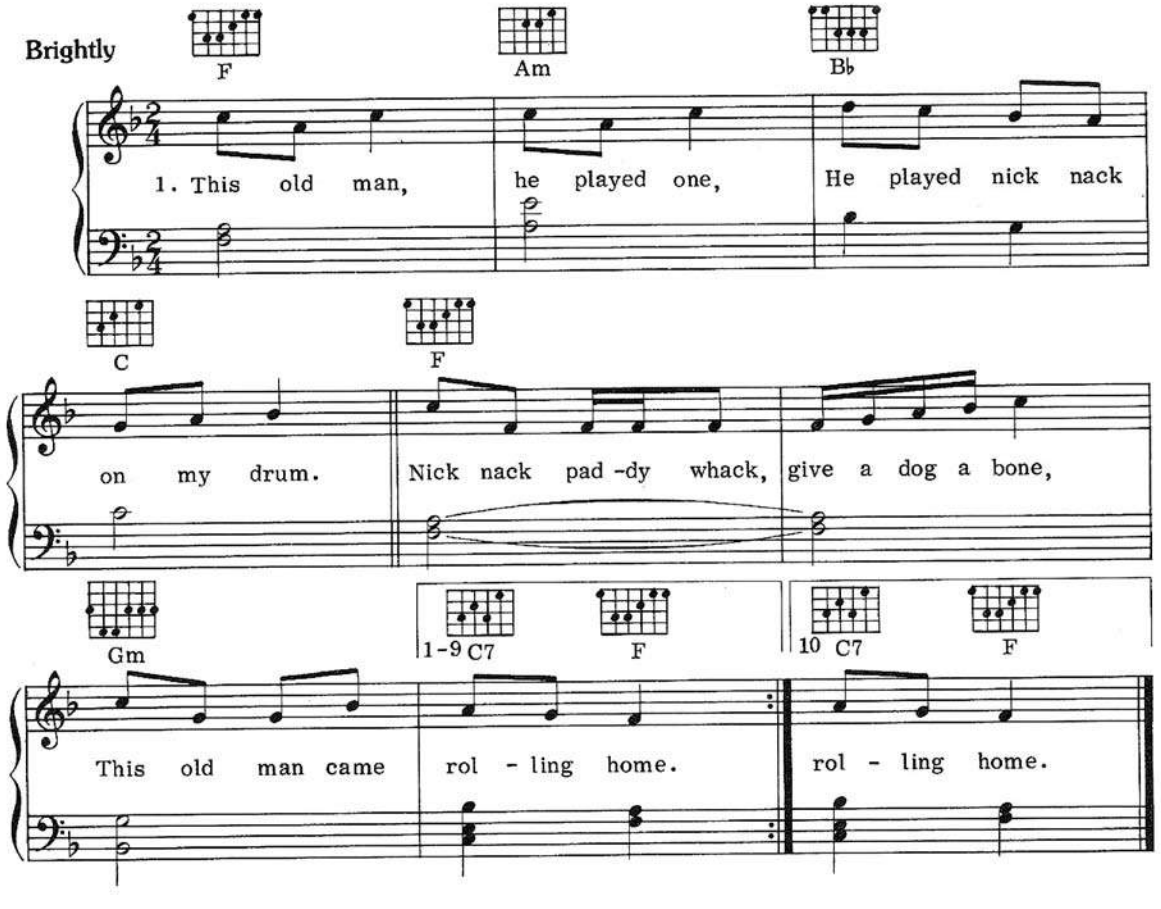
This old man, he plaid six,
He played nick nack with some sticks,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid seven,
He played nick nack up to Heaven,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid eight,
He played nick nack on the gate,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid nine,
He played nick nack on a line,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home.

This old man, he plaid ten,
He played nick nack with the hen,
Nick nack paddy wack, give a dog a bone,
This old man came rolling home



25 • My bonnie lies over the ocean

My bonnie lies over the ocean
My bonnie lies over the sea,
My bonnie lies over the ocean
Oh bring back my bonnie to me.

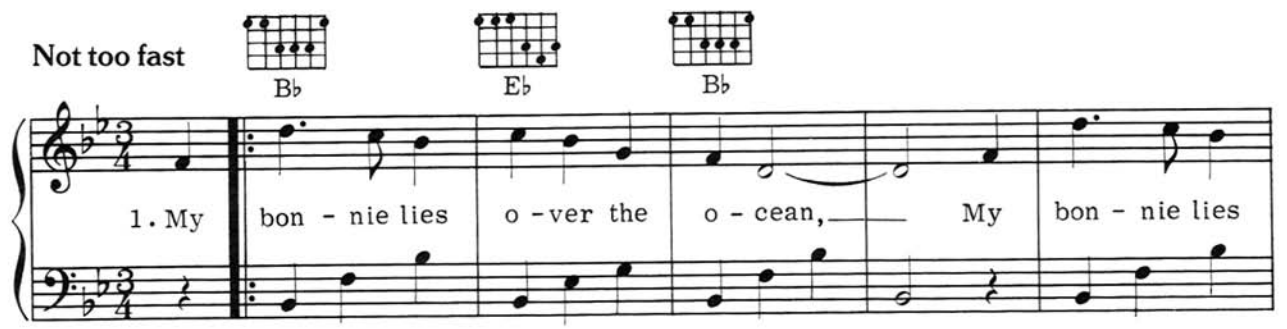
Bring back, bring back
Oh bring back my bonnie to me, to me.
Bring back, bring back,
Oh bring back my bonnie to me.

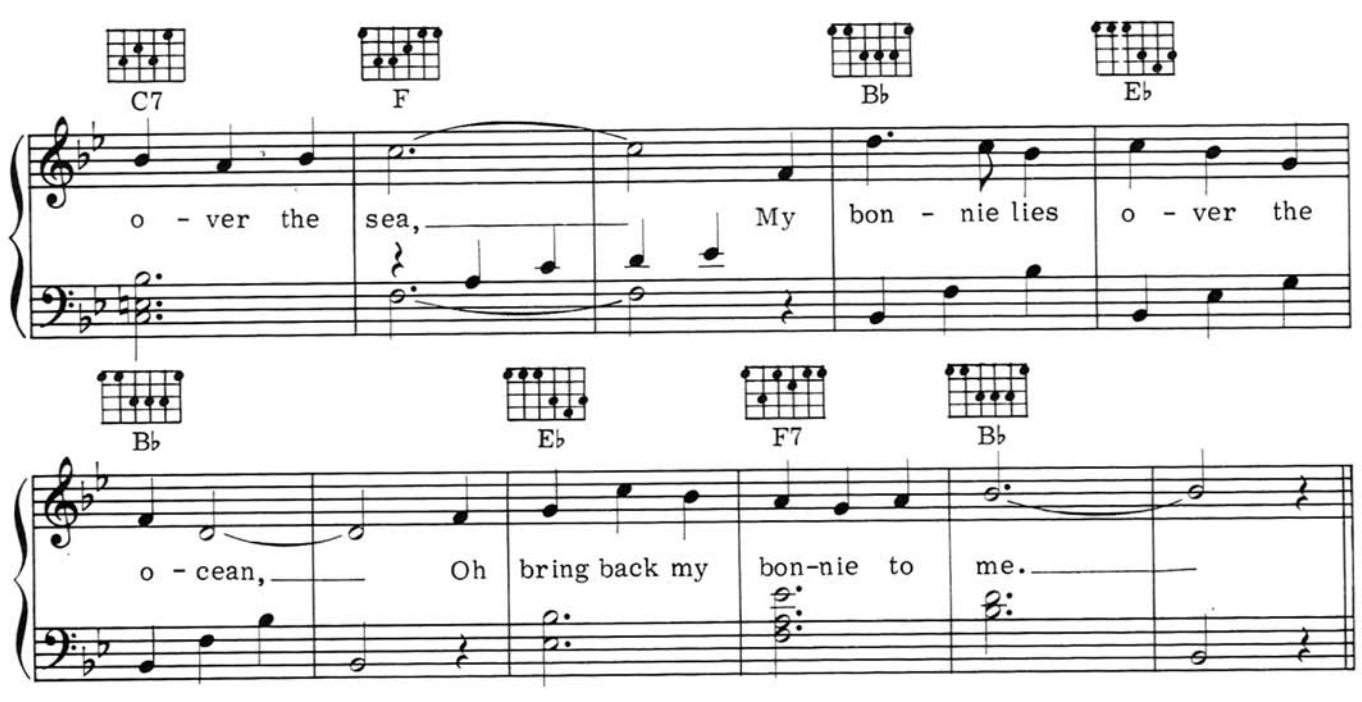
Oh blow ye winds over the ocean
Oh blow ye winds over the sea
Oh blow ye winds over the ocean
And bring back my bonnie to me

Bring back, bring back
Oh bring back my bonnie to me, to me.
Bring back, bring back,
Oh bring back my bonnie to me.

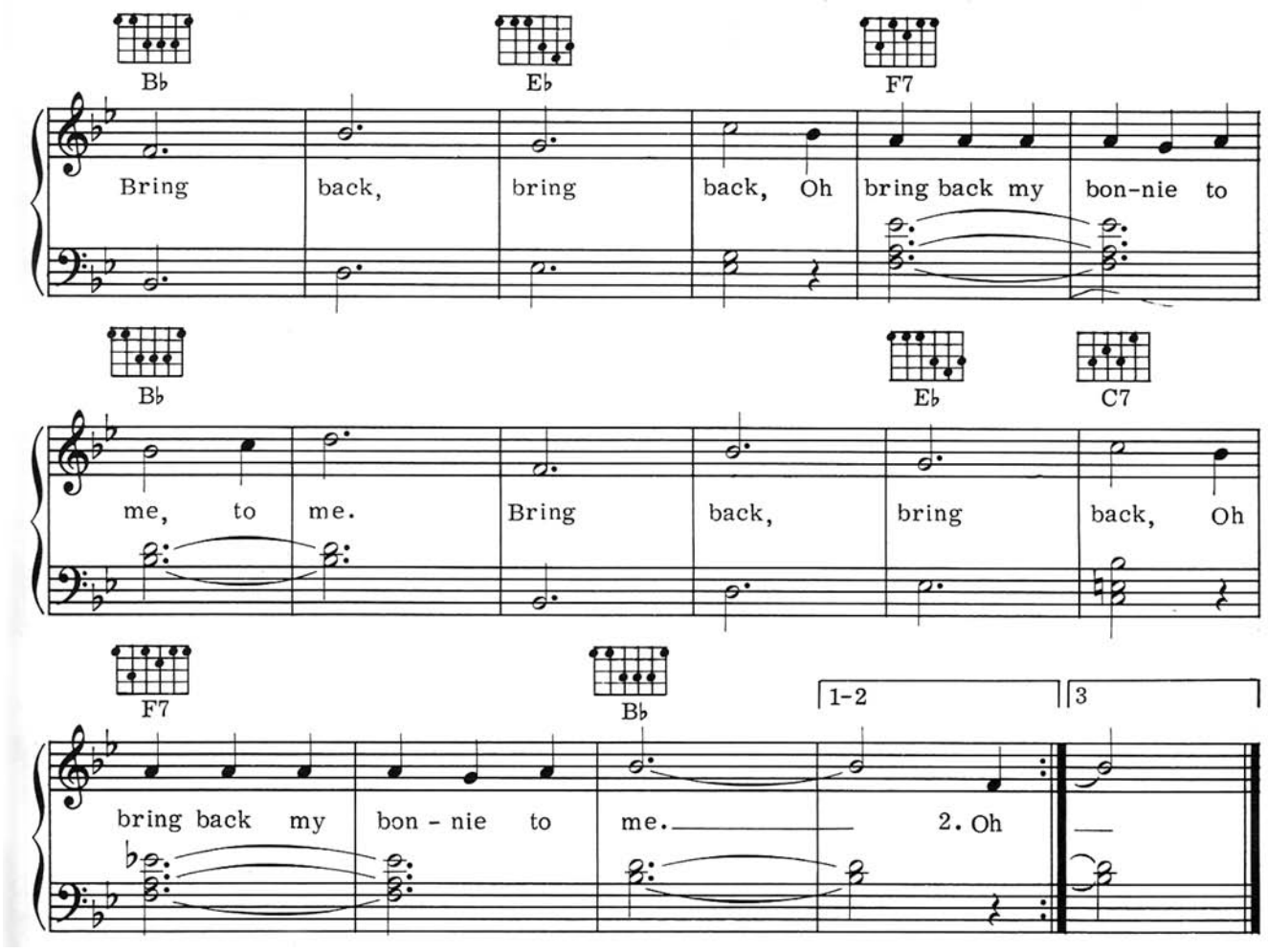
The winds have blown over the ocean,
The winds have blown over the sea,
The winds have blown over the ocean,
And brought back my bonnie to me.

Bring back, bring back,
Oh bring back my bonnie to me, to me.
Bring back, bring back,
Oh bring back my bonnie to me.





25 • My bonnie lies over the ocean (Continued)



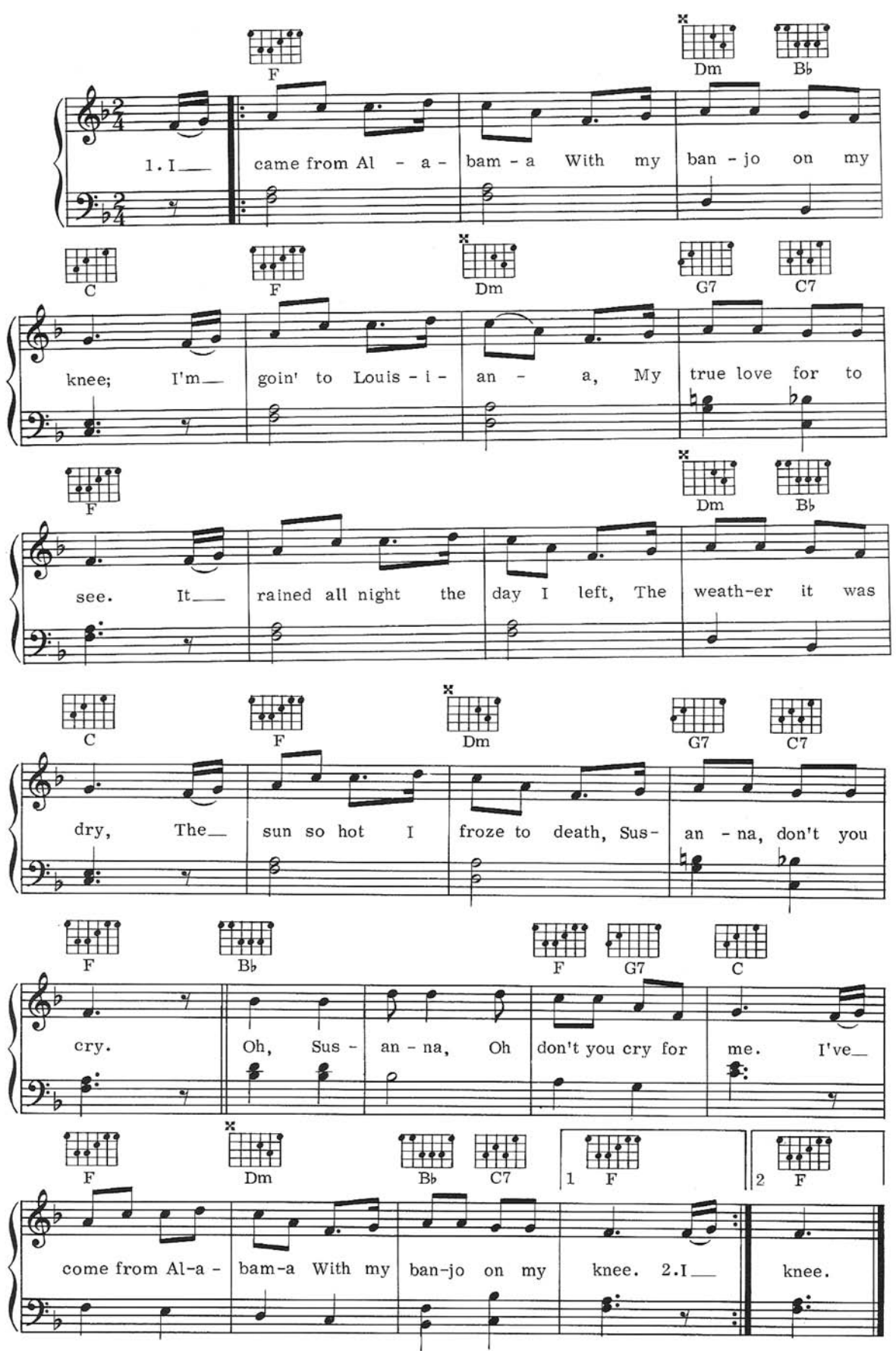
26 • Oh, Susanna

I come from Alabama with my banjo on my knee,
I am going to Louisiana my true love for see.
It rained all night the day I left the weather it was dry,
The sun so hot I froze to death, Susanna don't you cry.

Oh Susanna, oh don't you cry for me,
I have come from Alabama with my banjo on my knee.

I had a dream the other night when everything was still,
I thought I saw Susanna a-coming down the hill.
The buckwheat cake was in her mouth; a tear was in her eye;
Says I: "I'm coming from the South, Susanna, don't you cry"
Oh Susanna, oh don't you cry for me,
I have come from Alabama with my banjo on my knee.

26 • Oh, Susanna (Continued)



27 • A froggy went a-courting

A froggy went a-courting and he did ride, ah-hum, ah-hum,
A froggy went a-courting and he did ride, ah-hum, ah-hum,
A froggy went a-courting and he did ride
Sword and pistol by his side, ah-hum, ah-hum.

He rode down to Missy Mouse's door, ah-hum, ah-hum,
He rode down to Missy Mouse's door, ah-hum, ah-hum,
He rode down to Missy Mouse's door
Where he had been many times before, ah-hum, ah-hum.

He took Missy Mouse upon his knees, ah-hum, ah-hum
He took Missy Mouse upon his knees, ah-hum, ah-hum
He took Missy Mouse upon his knees
Said: "Miss Mouse will you marry me?" ah-hum, ah-hum.

"Without my Uncle Rat's consent," ah-hum, ah-hum
"Without my Uncle Rat's consent," ah-hum, ah-hum
"Without my Uncle Rat's consent,"
"I wouldn't marry the President." Oh-no, oh-no.

Uncle Rat laughed and shook his fat sides, ho-ho, ho-ho
Uncle Rat laughed and shook his fat sides, ho-ho, ho-ho
Uncle Rat laughed and shook his fat sides,
To think his niece would be a bride, ho-ho, ho-ho.

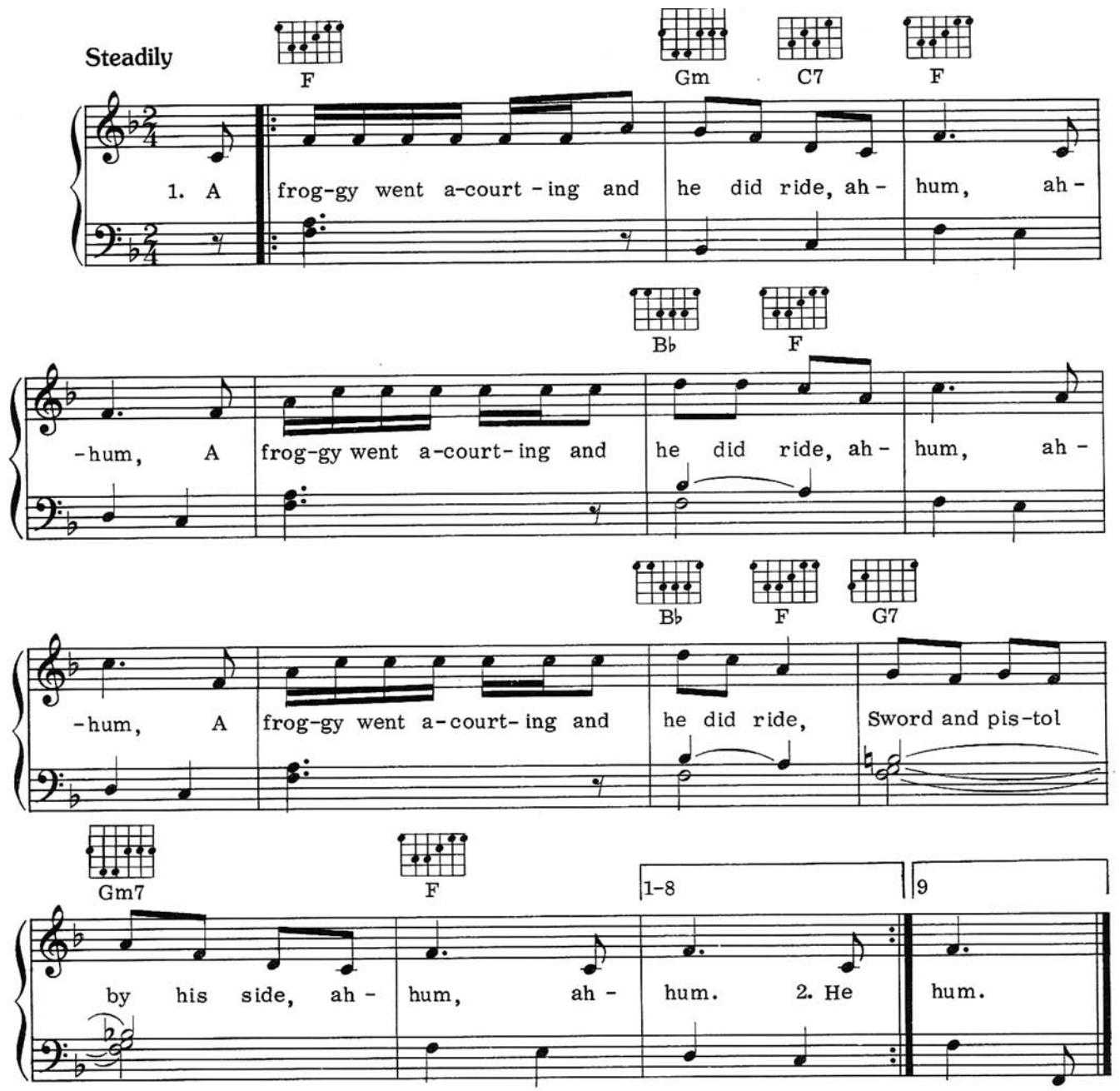
"Where will the wedding breakfast be?" er-hum, er-hum
"Where will the wedding breakfast be?" er-hum, er-hum
"Where will the wedding breakfast be?"
"Way down yonder in the hollow tree." er-hum, er-hum.

"What will the wedding breakfast be?" er-hum, er-hum,
"What will the wedding breakfast be?" er-hum, er-hum,
"What will the wedding breakfast be?"
"Fried mosquito and back-eyed pea" yum-yum, yum-yum.

They all went sailing across the lake, ah-hum, ah-hum
They all went sailing across the lake, ah-hum, ah-hum
They all went sailing across the lake,
And got swallowed by a big black snake, oh-no, oh-no.

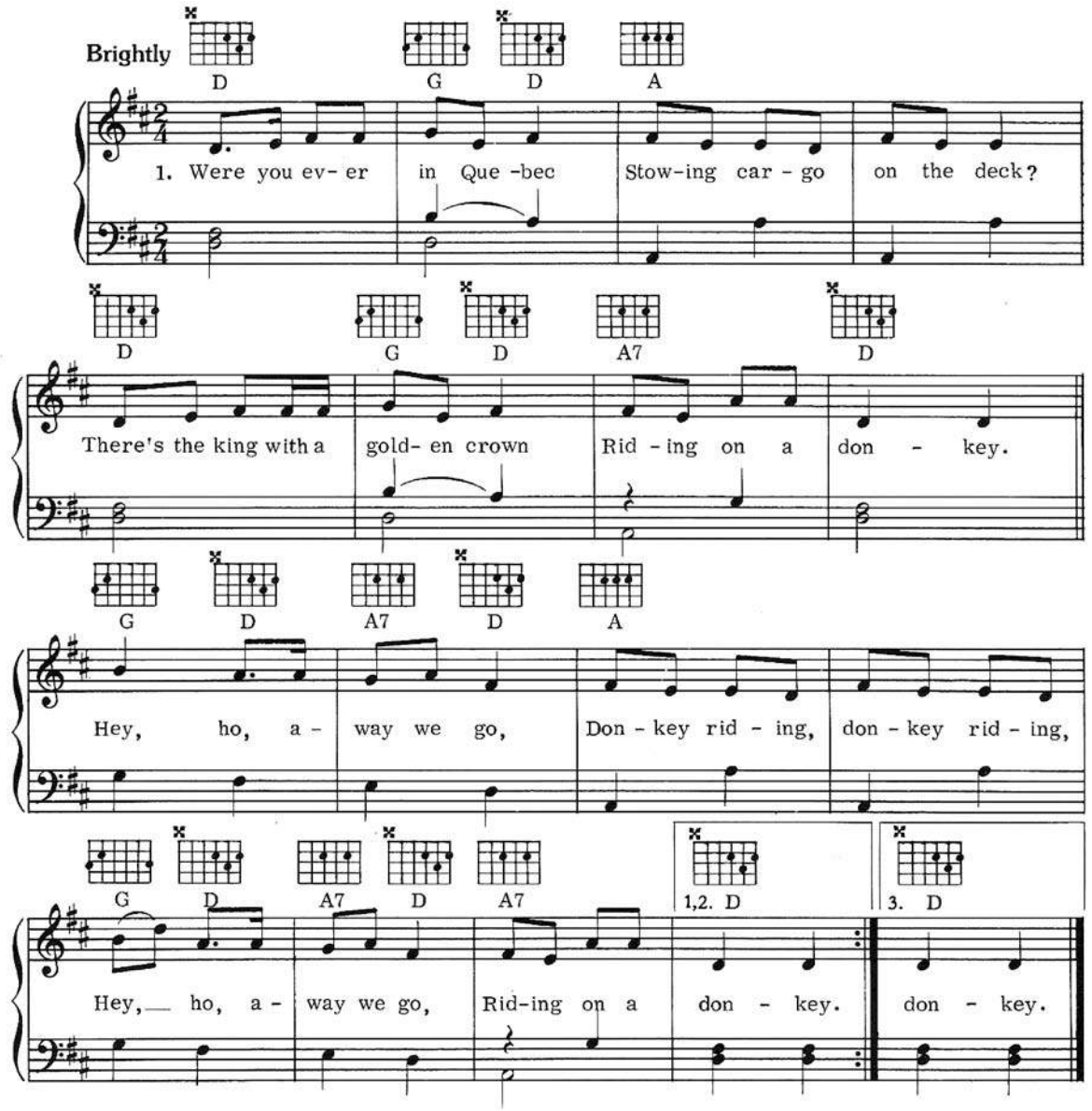
There's bread and cheese upon the shelf, er-hum, er-hum
There's bread and cheese upon the shelf, er-hum, er-hum
There's bread and cheese upon the shelf,
If you want anymore, you can sing it yourself, er-hum, er-hum.

27 • A froggy went a-courting (Continued)



28 • Donkey riding

Were you ever in Quebec, stowing cargo on the deck?
There's the king with the golden crown, riding on a donkey.
Hey ho, away we go, donkey riding, donkey riding,
Hey ho, away we go, riding on a donkey.
Were you ever off Cape Horn, where it is always fine and warm,
And seen the lion and the unicorn riding on a donkey?
Hey ho, away we go, donkey riding, donkey riding,
Hey ho, away we go, riding on a donkey.
Were you ever in Cardiff Bay, where the folks all shout "Hurray!
Here comes John with his three years' pay, riding on a donkey?"
Hey ho, away we go, donkey riding, donkey riding,
Hey ho, away we go, riding on a donkey.



List of Participants in the Two Workshops

N.	Name	School	District
1	Leah Asego	Ayany P.S.	Nairobi
2	Mary Njoroge	Loresho P.S.	Nairobi
3	Josephine Opondo	MM Chandaria	Nairobi
4	Joyce Otieno	Ngunyumu	Nairobi
5.	Elizabeth Koimet	KIE	Nairobi
6.	Elizabeth Kiama	KIE	Nairobi
7.	Dr. Hezron Mwangi	KIE	Nairobi
8.	Andrew Gatonye	KIE	Nairobi
9.	Calvin Adwar	Joseph Kangethe	Nairobi
10.	Stephen Lokwari	Msiy Won Pfy Msiywan	West Pokot
11.	Moese Lomasa	Naramam	West Pokot
12.	Peter Amei	Kacheliba	West Pokot
13.	Zuhura Rashid	Tsimba	Kwale
14.	Evans Murisa	Chengoni	Kwale
15.	Sr. Ruth Musyoka	Kinango	Kwale
16.	Teresia M. Etan	TAC Kanamkemer	Turkana
17.	Ngitira Joseph	Nakurio	Turkana
18.	Florence L. Miiyan	Napepet	Turkana
19.	Sofia Kachora	St. Mary's	Moyale
20.	Gollo Wolasa	Nana Primary	Moyale
21.	Rashid Hussein Abdi	Daua Integrated	Mandera
22.	Sayida Haji	Adan	Mandera
23.	Abdi Ali	Young Muslim	Garissa
24.	Abdinoor Hussein	Sankuri	Garissa
25.	Yussuf Omondi	Garissa TTC	Garissa
26.	Hassan Sangoro	Al-Earon	Garissa
27.	Halima Issack	Boyo Town	Garissa
28.	Hulbay Gedi	Waberi Primary	Wajir
29.	Surow Ahmed	Jagbaru	Wajir
30.	Raha Hassan	Rahma	Wajir
31.	Dika Ramata	Bubisa	Marsabit
32.	Paul Lechovhai	Gatab	Marsabit
33.	Bunge Daino	Sakuu	Marsabit
34.	Maurice Emali	QASO	Turkana
35.	Bernard K, Kassiwai	Focal Point Officer	West Pokot

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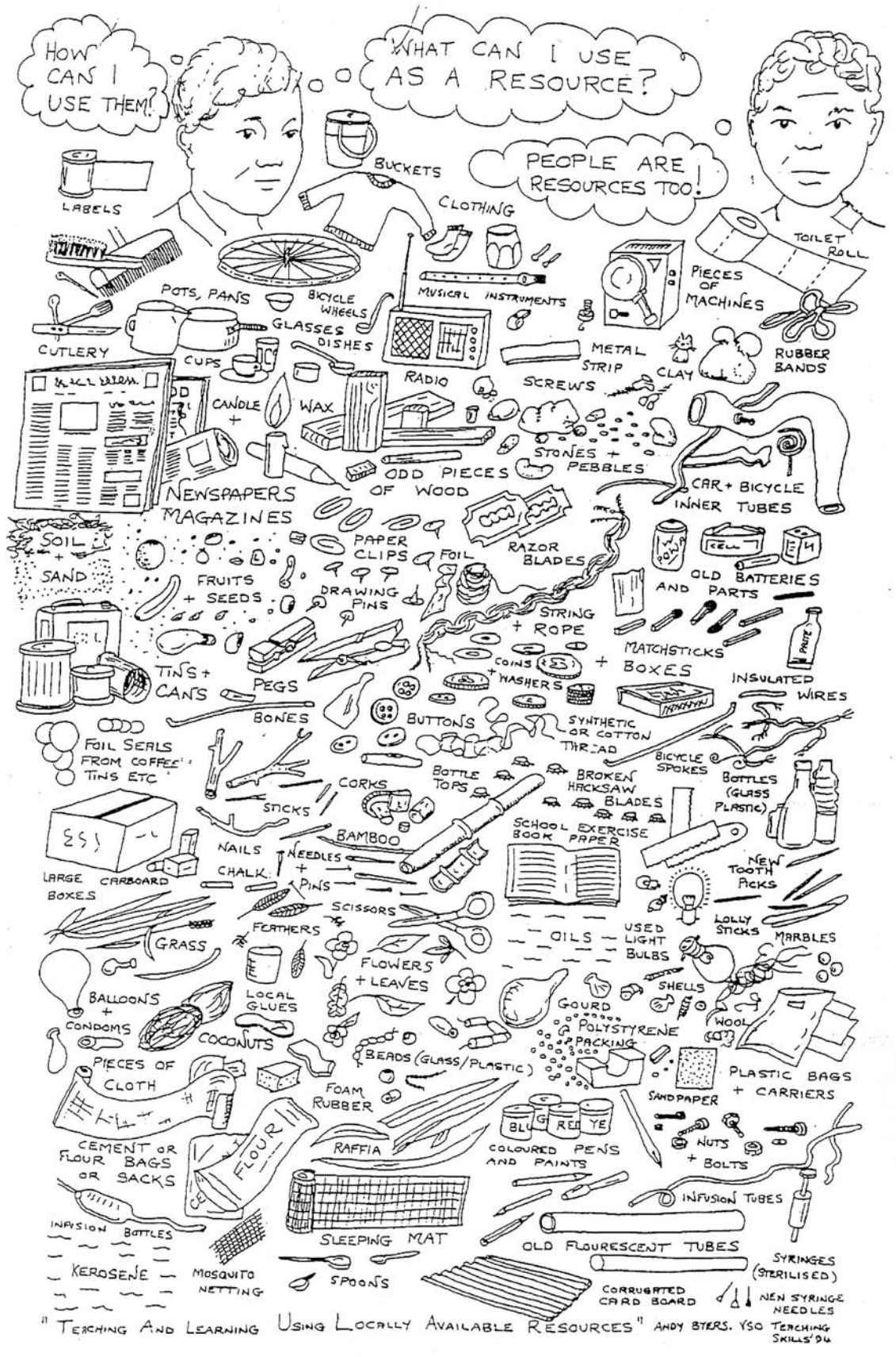

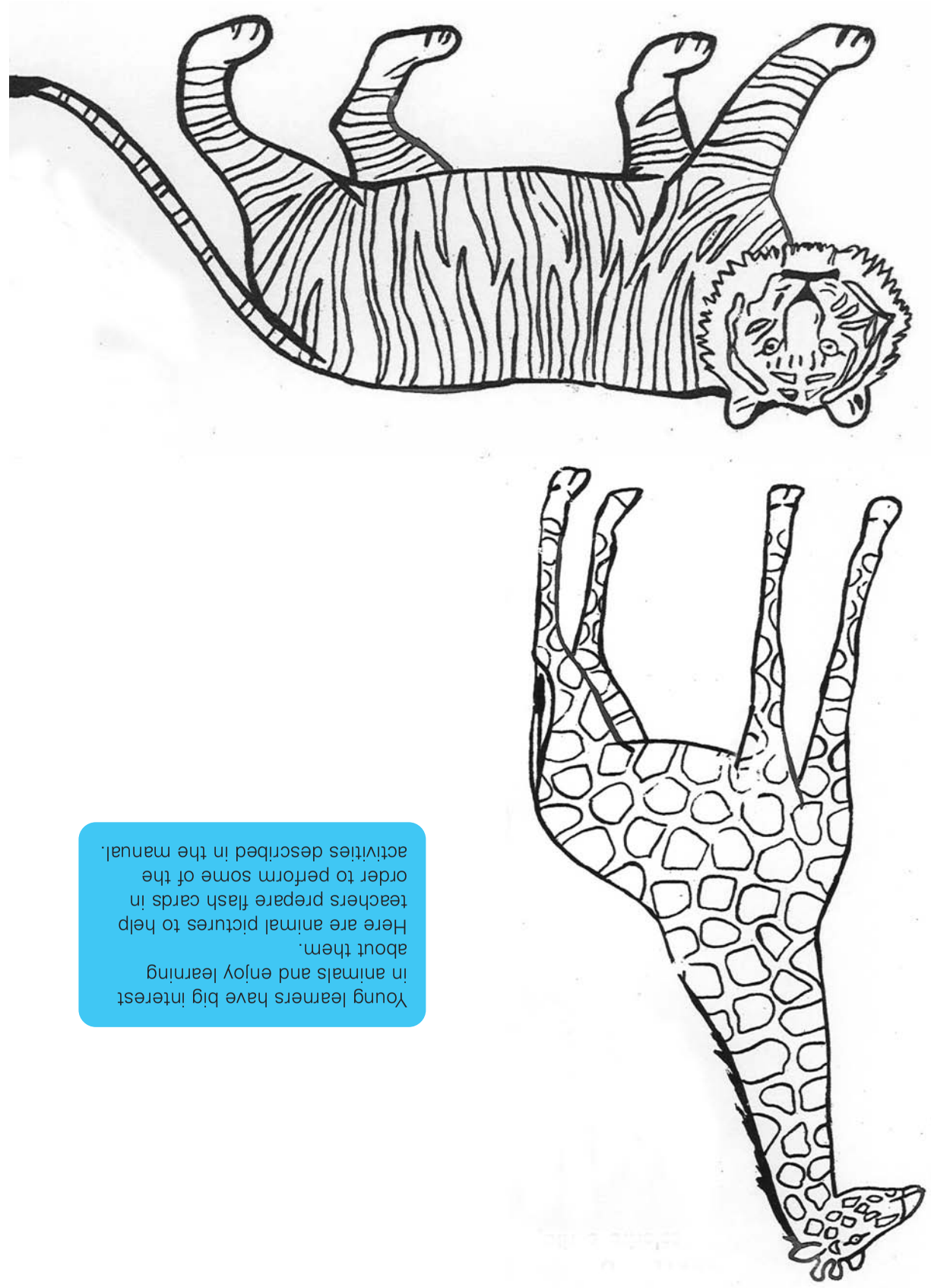

Young learners have big interest in animals and enjoy learning about them.
Here are animal pictures to help teachers prepare flash cards in order to perform some of the activities described in the manual.