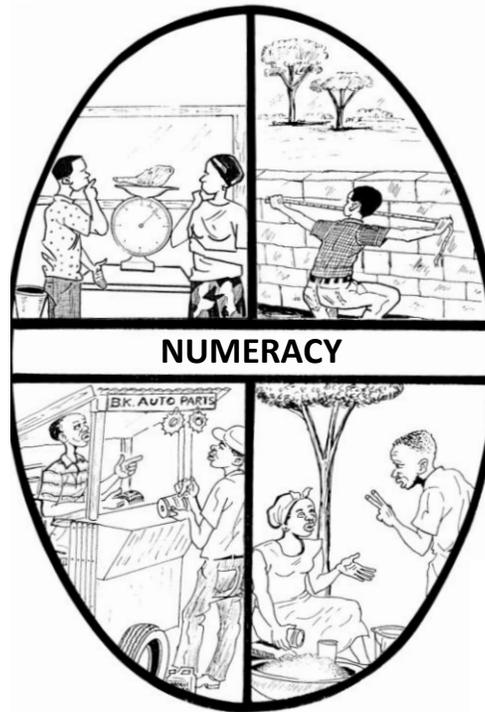


Alternative Basic Education Learner's Book for Level 1, Semester 2

Content Area: NUMERACY



August 31, 2011

Ministry of Education, Government of Liberia
With the Core Education Skills for Liberian Youth (CESLY)
Project, USAID Contract # EDH-I-00-05-00031-00

NUMERACY LEVEL 1 SEMESTER 2

LEARNER WORKBOOK

For use with the Alternative Basic Education Curriculum

This material was made possible by the support of the American people through funds from United States Agency for International Development, USAID/Core Education Skills for Liberian Youth (CESLY) Project, Contract No. EDH-I-00-05-00031-0. The contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

Module C

Lesson 26: What the Place of the Numbers Tell Us: (Place Value of Ones and Tens and Hundreds) *(Review of past lesson)*

Learning Points:

Place Value: Shows the place of each digit in the number.

- Example: 126 means $100 + 20 + 6 = 126$



Directions: Apply a place value. Fill in the blank spaces in the box:

Note: The first one is done for you.

Hundreds	Tens	Ones		Answer	Final Answer
2	0	1	=	$200 + 0 + 1$	201
1	4	2	=		
0	3	0	=		
4	5	6	=		
1	3	4	=		
3	7	8	=		



Directions: Write the place value of each set of digits in words:

Note: The first one is done for you.

a) The number 185 means: One hundred, eight tens and five ones.

b) 205 is written as = _____, _____, _____

c) 124 is written as = _____, _____, _____

d) 739 is written as = _____, _____, _____

e) 123 is written as = _____, _____, _____



Directions: Fill in the table:

Note: The first one is done for you.

	Hundreds	Tens	Ones
200 =	2	0	0
236 =			
674 =			
375 =			



Directions: Put the numbers in order of value from smallest to greatest:

539

452

573

213

112

647

213

138

210

115

347

104

Module C

Lesson 55: Reviewing Numbers to 1000 and Introduction to Using a Calculator

Learning Point:

- To enter a number on the calculator, press the keys in the same way that you would say or write the number.
- For example, to enter the number 657, you would press 6 then 5 then 7, so the screen then shows the number 657.



Directions: Write the following place value into numbers:

Note: The first one is done for you.

2 hundreds, 0 tens, 0 ones = 200

6 hundreds, 7 tens, 4 ones = _____

7 hundreds, 8 tens, 2 ones = _____

1 thousand, 0 hundred, 0 ten, 0 one = _____



Directions: Fill in the place value of each number: Note: The first one is done for you.

Digits	Thousands	Hundreds	Tens	Ones
1000	1	0	0	0
236				
674				
200				



Directions: Add the numbers with a calculator: Note: The first one is done for you.

$1000 + 300 + 40 + 5 =$

$3000 + 900 + 10 + 1 =$

$700 + 10 + 6 =$

$200 + 40 + 8 =$

$4000 + 700 + 50 + 1 =$

Module C

Lesson 56: Correct Use of a Calculator for Calculations

Learning Point:

To count numbers using a calculator, follow these steps:

- Example: $23 + 10 = 33$
- Step 1: press the buttons for each number one at a time.
- After every set of numbers, press the sign as $+$, $-$, \times or \div
- For the example above, we take $+$ sign after 23



Directions: Write the correct answer for each problem on the line below:

Add the following digits

a) 23 and 456 = _____

c) 100 and 70 = _____

b) 4 and 6 and 8 = _____

d) 154 and 37 = _____

Subtract these digits

a) 18 minus 6 = _____

b) 34 minus 10 = _____

Multiply these digits

a) 6 times 3 = _____

b) 6 times 3 = _____

**This is a calculator keyboard.
Practice entering numbers.**

Key Board			
Mt	MR	%	ON
1	2	3	÷
4	5	6	-
On/c	=	9	0



Directions: Enter each number in the calculator's memory on the left column. Use the correct sign such as + - x ÷ = when you enter the number:

Note: The first one is done for you. Look at the questions below. After you answer the questions put them into calculator format on the following page.

Add the following digits

a) 23 and 456 = _____

c) 100 and 70 = _____

b) 4 and 6 and 8 = _____

d) 154 and 37 = _____

Subtract these digits

a) 18 minus 6 = _____

b) 34 minus 10 = _____

Multiply these digits

a) 6 times 3 = _____

b) 6 times 10 = _____

Calculator Memory	Calculator Screen
--------------------------	--------------------------

Answer

2	3	+	4	5	6	=	479

Module C

Lesson 57: Introduction to the Basics of Geometry and Fundamental Shapes

Learning Points:

- Geometry means measurement of the earth and its objects.
- Example: the shapes of farmland, houses, dishes, copybooks, spoons, pencils, cars, show the shapes of geometry.



Directions: Write the name of these geometry shapes below:



This shape is called _____



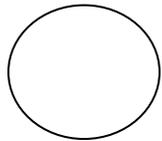
This shape is called _____



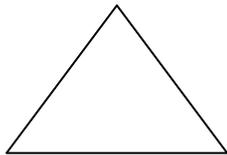
This shape is called _____



This shape is called _____



This shape is called _____



This shape is called _____



This shape is called _____

Hint: Choose the answers from this box.

triangle
square
circle
rectangle
line segment
line
angle

Module C

Lesson 58: More Fundamental Shapes: Square and Circle

Learning Point:

- A square has four equal sides.
- A circle is something like a ring, orange or the shape of the earth (globe).



Directions: Draw the following geometry figures:

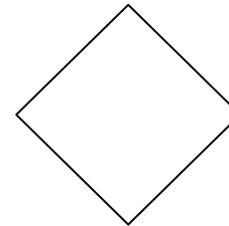
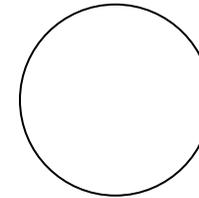
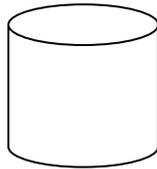
Circle

Square

Rectangle



Directions: Mark S on the square and mark C on the circle:



Module C

Lesson 59: Finding and Tallying Shapes

Learning Points:

To find a special shape do the following:

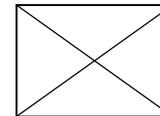
- For square & rectangle, make sure each has four sides
- Square must have four equal sides
- For circle, start in a ring moving from one point around back to the same point.

Note: Geometry is all about shapes and their properties. If you like drawing or playing with objects, then geometry is for you.



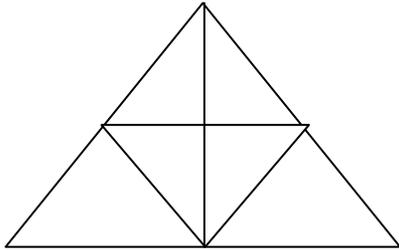
Directions: Use these objects and fill in the table below:

Example: How many triangles are there in this shape?

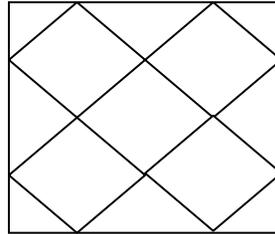


The total triangles in the shape above are 8.

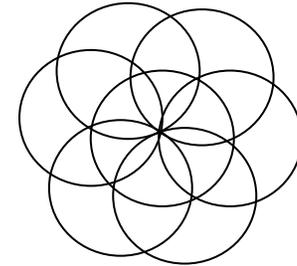
A. How many triangles can you count?



B. How many squares can you count?



C. How many circles can you count?



	Drawing A	Drawing B	Drawing C
Number of Triangles			
Number of Rectangles			
Number of Squares			
Number of Circles			

Module C

Lesson 60: Introduction to Measurement

Learning Points:

- To measure means to tell how long, tall, short, cold, hot, wide, small, big, or heavy something is.





Directions: Circle the correct answer:

1. Judy said she is feeling hot. What does she need to measure that?

a) time

b) temperature

c) thermometer

2. To measure how cold or hot something is, we call it?

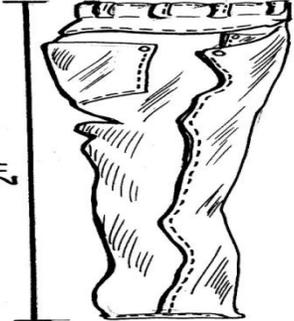
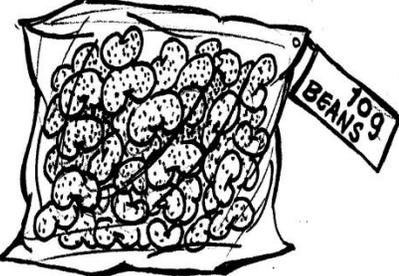
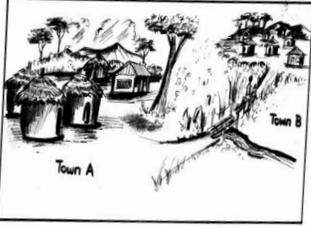
a) thermometer

b) temperature

c) time



Directions: Use these drawings to answer the problems on the next page:

 <p>230 g</p>	 <p>500 g</p>	 <p>100 g</p>
 <p>2 ft</p>	 <p>10 g</p>	 <p>50 kg</p>
 <p>20 liters</p>	 <p>1 liter</p>	<p>25 miles from Town A to Town B</p> 



Directions: Fill in the table with the correct measurement and unit of each item above:

Note: The first one is done for you.

Tomato	230 g	Trousers		From Town A to Town B	
Palm oil		Beans		Rice	
Biscuits		Milk		Water	

Telling Time



Directions: Circle the correct answer:

60 seconds is equal to: a) 1 hour b) 1 minute c) 1 day

60 minutes is equal to: a) 1 second b) 1 day c) 1 hour

24 hours is equal to: a) 1 day and night b) 1 minute c) 1 second

Module C

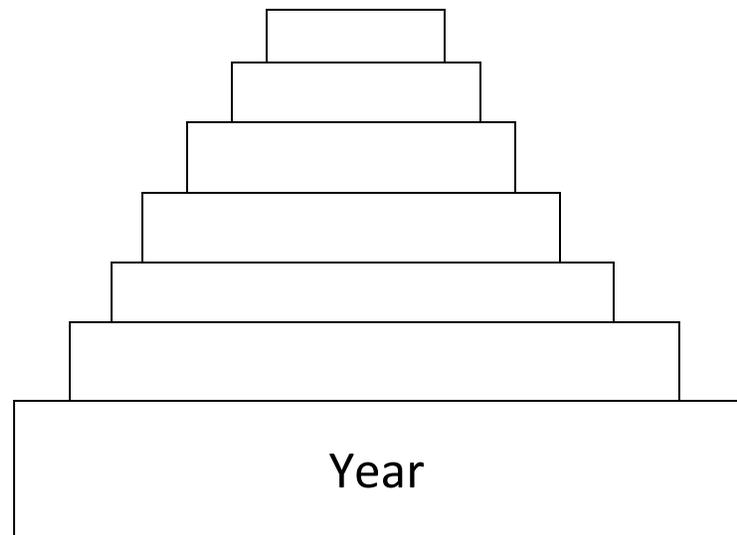
Lesson 61: Measurement of Time - Units of Time

Learning Points:

- Time is divided into parts represented by second, minute, hour, day, week, month, year, etc



**Directions: Write down the parts of time from smallest to largest in the boxes below:
Hour, Second, Day, Minute, Year, Week, Month**





Directions: Fill in each box with the correct answer. Choose the answer from the answers box below:

a) 60 seconds is equal to

e) 7 days is equal to

b) 60 minutes is equal to

f) 4 weeks is equal to

c) 24 hours is equal to

g) 12 months is equal to

d) 1 year is equal to

h) The smallest unit of time is a

**one year, one minute, one hour, one week, one month, one day & night,
365 days, one second**

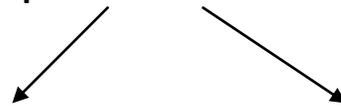
Module C

Lesson 62: Measurement of Time – Digital Clock

Learning Point:

- Digital clock is another form of time-telling machine.
- Digital clocks show us the time using numbers. The number on the left of the : is hours, and the number on the right is minutes.

Example: 6 : 30



Left side equals hours Right side equals minutes

Digital Clocks



Directions: Write the time of each clock in the box below:



Digital Clocks



Directions: Complete the answers below:



5 hours and _____ minutes



_____ hours and 36 minutes

Module C

Lesson 63: Introduction to Reading Measurement Scales: Preparing to Use Thermometers

Learning Points:

- Measurement scale helps us to measure what we want.



Directions: Complete the patterns of counting numbers.

Note: The first 6 boxes are done for you.

1.

2	4	6	8	10	12				20	
---	---	---	---	----	----	--	--	--	----	--

2.

10	15			30			45			60
----	----	--	--	----	--	--	----	--	--	----

3.

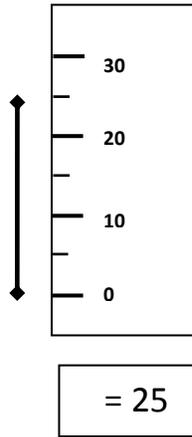
10	20			50			80			110
----	----	--	--	----	--	--	----	--	--	-----



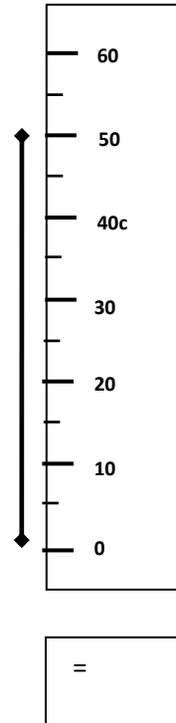
Directions: Write the reading for each measurement in the box below it:

Example: First scale reads 25

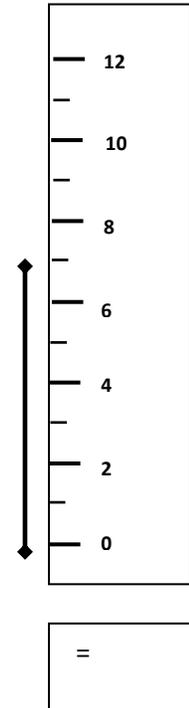
#1



#2



#3



Choose all answers from the box.

25, 7, 50

Module C

Lesson 64: Measuring Temperature

Learning Points:

- The temperature tells how hot or cold something is.
- A thermometer is made of a small tube with a liquid inside.
- Temperature is measured in degrees Celsius or Fahrenheit.



Directions: Circle the correct answer:

1. In Liberia, temperature is measured in:

- a) Celsius degree b) Fahrenheit degree c) both a & b

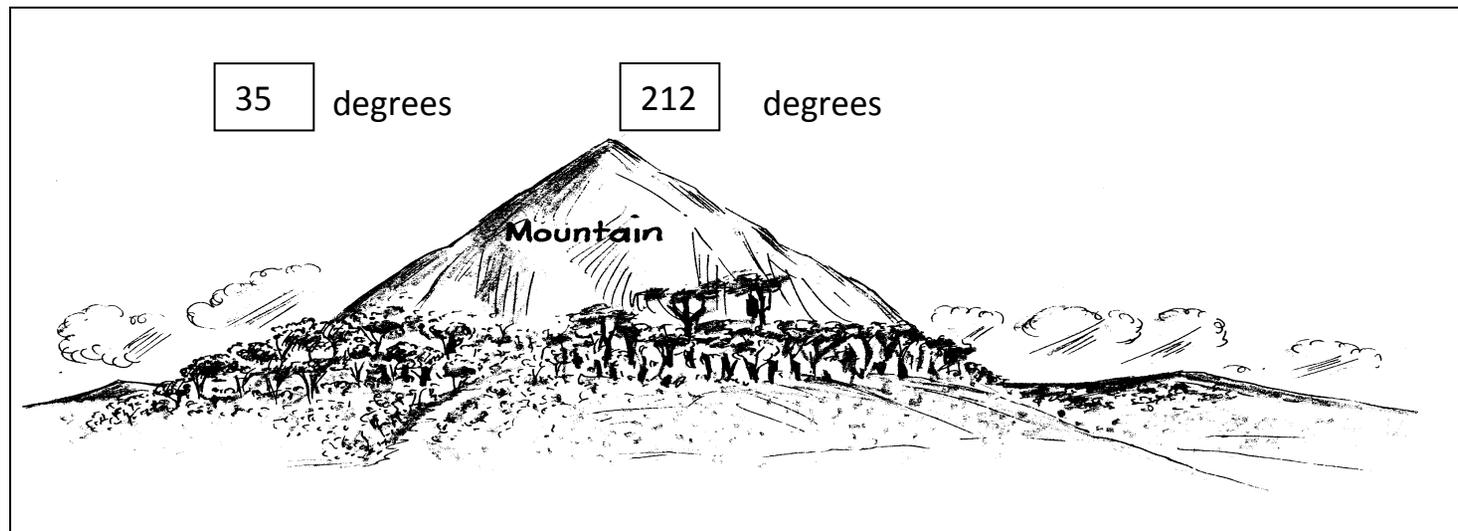
2. The desert is one of the hottest places on earth.

- a) True b) False

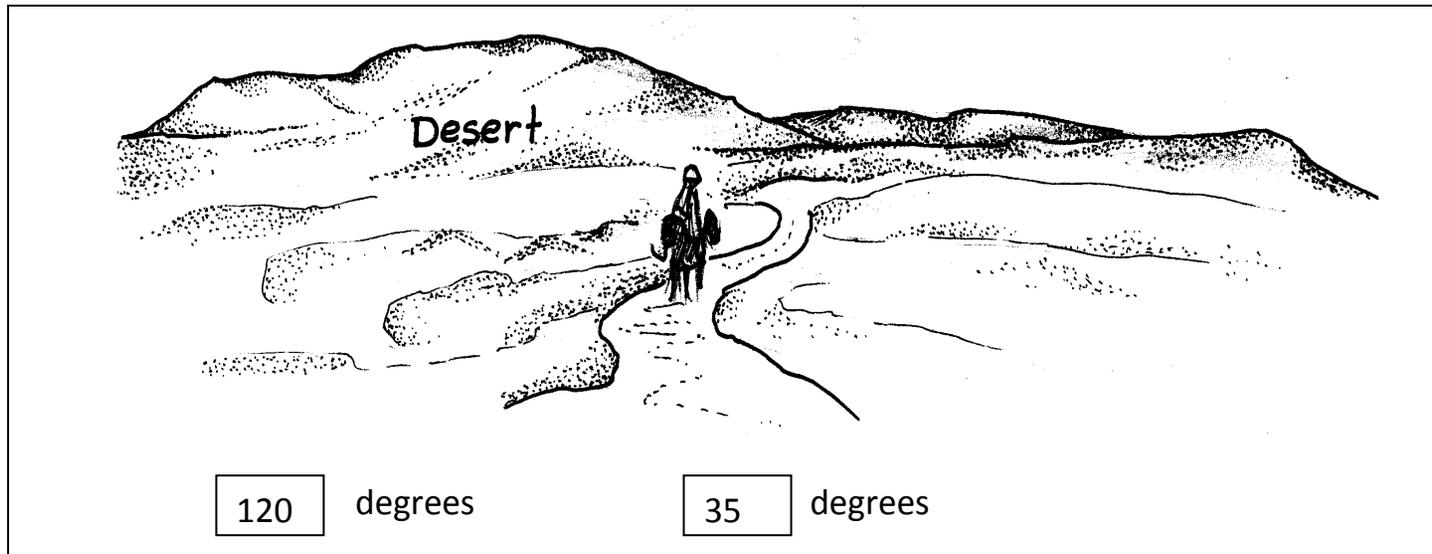


Directions: Mark X in the box which shows the correct temperature of top of a mountain and in the desert:

What do you think would be the temperature (in Fahrenheit) on top of the mountain?



What do you think would be the temperature (in Fahrenheit) in the desert?



Module C

Lesson 65: Measurement of Length – Standard and Non-Standard Units

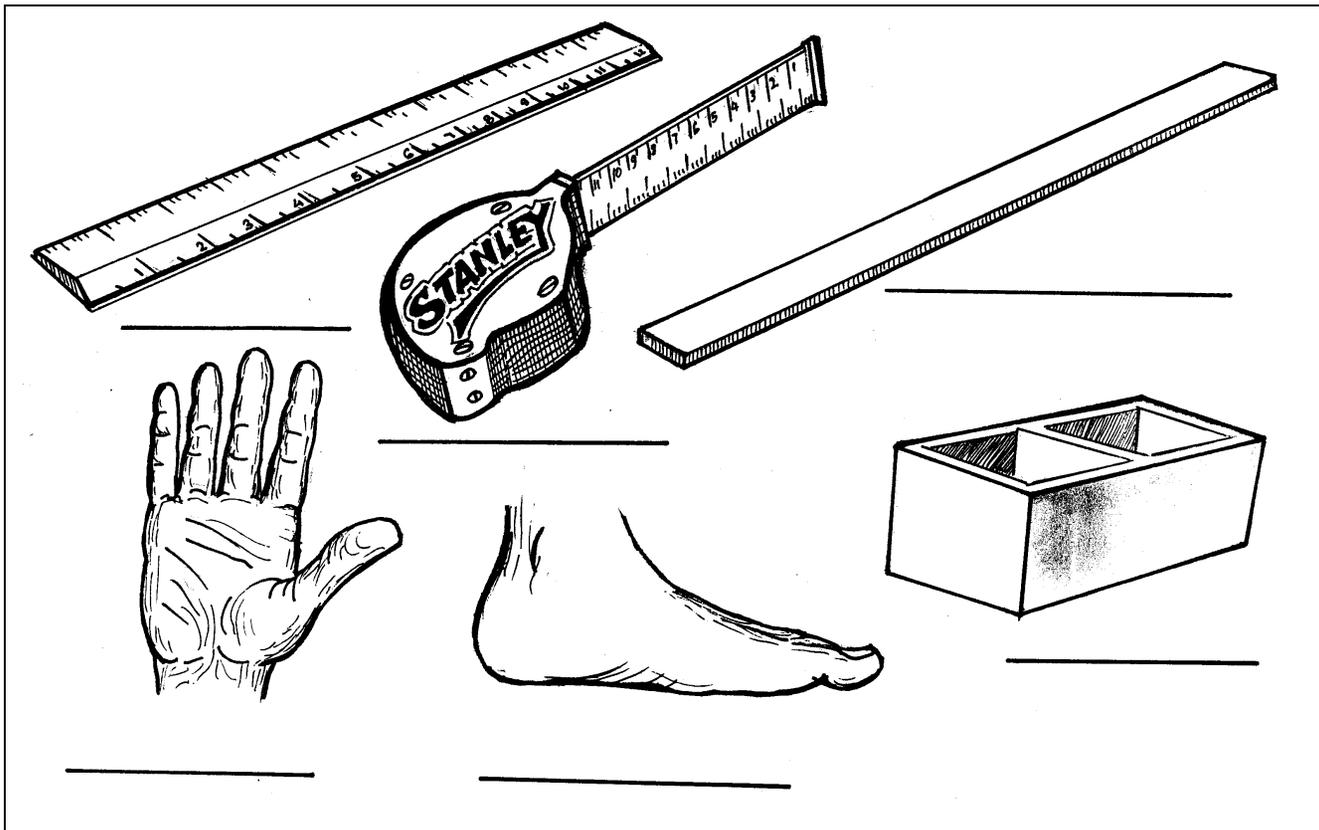
Learning Point:

- Standard units of length include inch, foot, yard and mile.
- Non-standard units of length include string, straight edge, etc.



Directions: Write the name of each tool on the line below. Find possible answers in the box:

tapeline, ruler, string, straight edge, fingers, human foot, block



Module C

Lesson 66: Using Feet and Inches

Learning Point:

- Inch is the smallest unit for measuring distance.
For example: 12 inches = 1 foot.

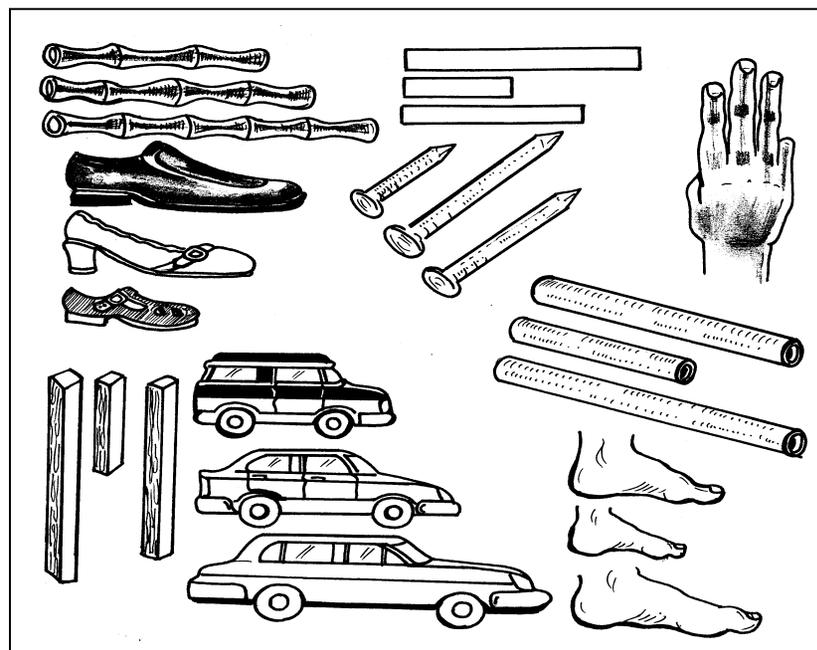


Directions: There are 9 (nine) different sets of items below. For each set, circle the shortest one and mark X on the longest one:



Directions: Estimate how long each item would be in real life.

Write the measurement beside each item:



Module C

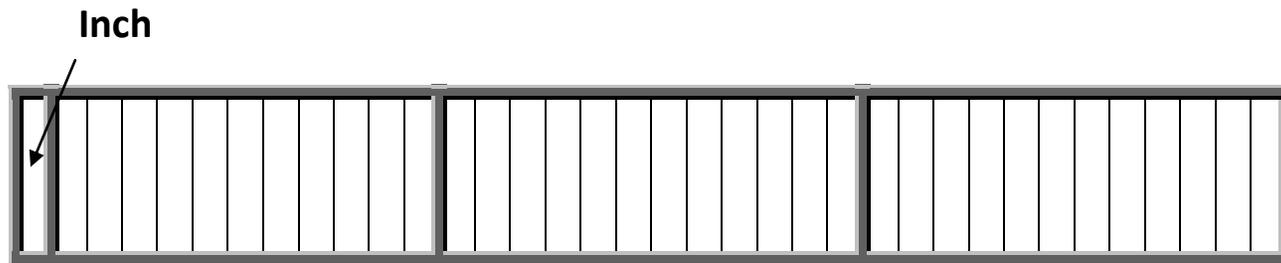
Lesson 67: Using Yards and Feet

Learning Points:

- An inch is smaller than a foot.
- 12 inches = 1 foot
- 3 feet = 1 yard



Directions: Write the number(s) that answer the question:



How many inches in one foot? _____



How many feet in one yard? _____



How many inches in one yard? _____

Judy is measuring a yard of cloth (from her chest to the fingers).



Directions: Write the answer of each question below:

A) She has measured 1 yard. How many feet has she measured? _____

B) How many inches has she measured? _____

C) If she measures 2 yards, how many feet will she measure? _____

Module C

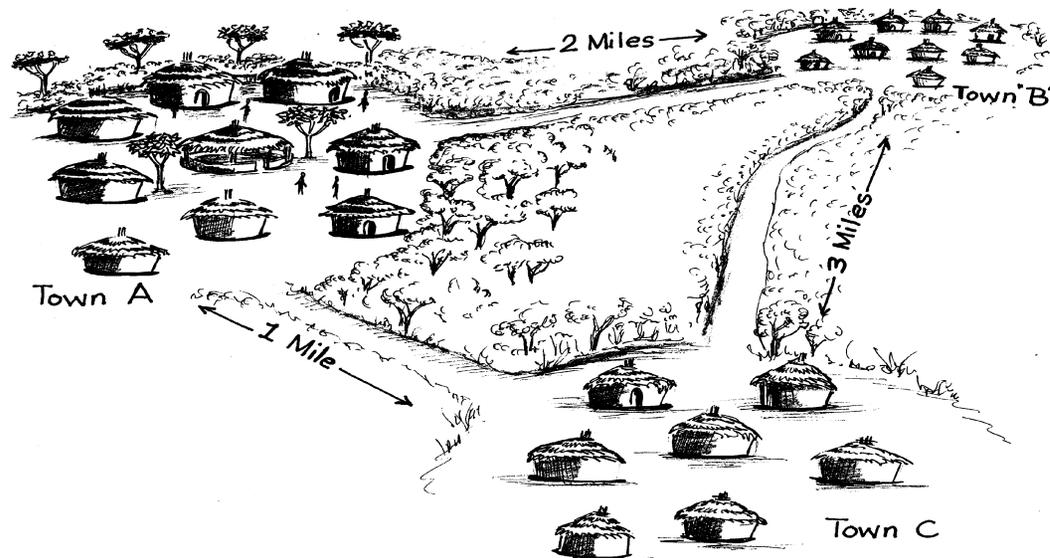
Lesson 68: Practicing Measurement and Estimation

Learning Points:

- 1 yard is equal to 3 feet



Directions: Use this drawing to write the answers for each question below:





Directions: Write the correct answer:

a) How far is it from Town A to Town B? _____

b) How far is it from Town A to Town C? _____

c) How far is it from Town A to Town C through Town B? _____

d) What is the total distance if you walk from Town A to Town C through B and then you continue back to Town A? _____



Directions: Match each object with the letter of the unit of measurement that would be most appropriate for measuring that object. Write each unit of measurement in the box below:

The length of a football field

The height of a 4 year old

Boy

Football Field

The length of an eddoe

Eddoe

The length of pencil

Monrovia

Gbarnga

Distant between Monrovia and Gbarnga

- A) Mile
- B) Foot
- C) Pound
- D) ounces

- E) Inches
- F) Yard
- G) Pint
- H) Quarts



Directions: Use the boxes below to put in order each unit of measurement from smallest to largest: foot, inch, mile and yard:

Module C

Lesson 69: Measuring Weight - Pounds

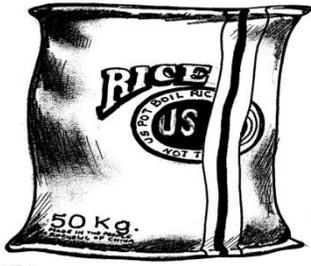
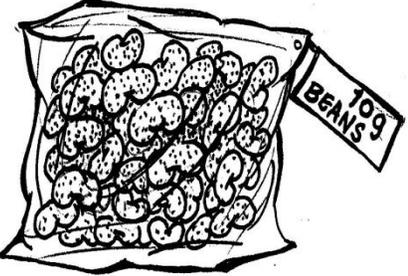
Learning Points:

- Weight measures how heavy something is.
- In Liberia, the standard unit used to measure weight is pound (lb).
- In other countries, the standard unit used to measure weight is kilogram (kg).



Directions: Use the table on the next page and write the weight of each object in the column after the object:

Note: The first one is done for you.

 <p>230 g</p> <p>Tomato</p>	 <p>500 g</p> <p>Biscuit</p>	 <p>100 g</p> <p>Palm Oil</p>
 <p>50 k g</p> <p>Bag of rice</p>	 <p>10 g</p> <p>Bag of beans</p>	 <p>30 g</p> <p>Milk</p>



Directions: Fill in the chart using the objects above. Write the weight of each solid object:

Note: The first one is done for you.

Name of Object	Weight
Bag of Rice	50 kg
Carton of biscuits	
A can of tomato	
A bag of beans	

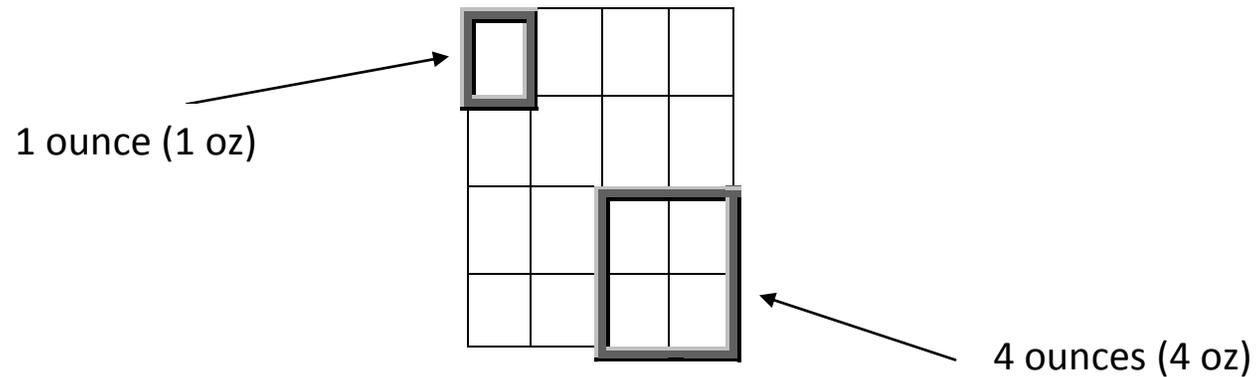
Module C

Lesson 70: Measuring Weight – Ounces

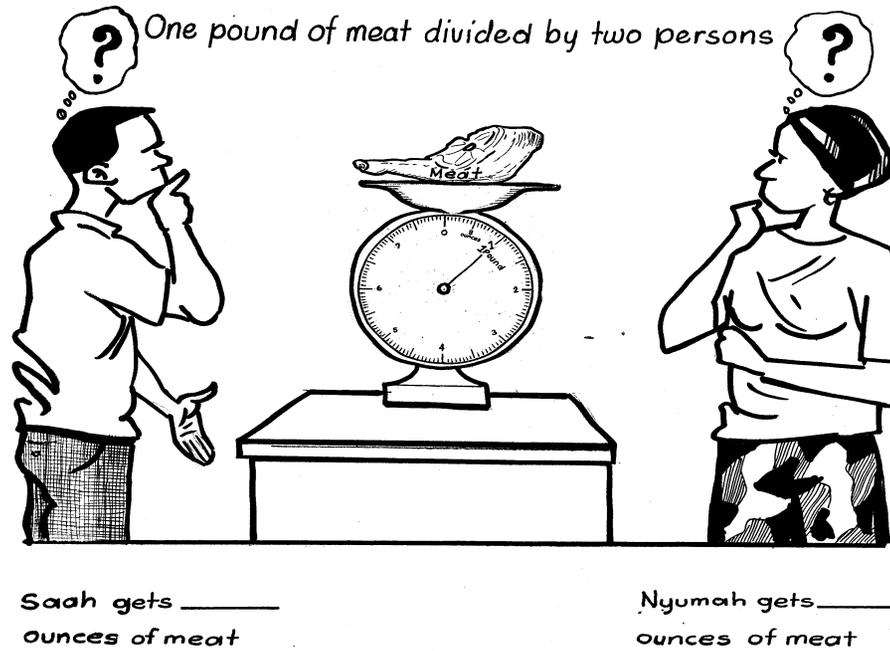
Learning Points:

- Ounces are much smaller than pounds.
- 1 pound = 16 ounces
- If you divide 1 pound into four equal parts, each part will have 4 ounces.

1 pound of meat (1lb)



Saah and Nyumah are measuring a pound of meat



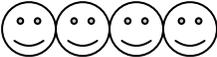
Directions: Check the box with the correct answer:

How many ounces of meat will each get?

- 2 ounces of meat 4 ounces of meat 8 ounces of meat 16 ounces of meat



Directions: Check the box with the correct answer:

If 4 persons () divide 1 pound of meat then how many ounces of meat does each person get? Place an X in the box next to the right answer.

a. 2 ounces of meat

c. 4 ounces of meat

b. 8 ounces of meat

d. 16 ounces of meat

Module C

Lesson 71: Measuring Volume (Capacity) – Gallons, Quarts and Pints

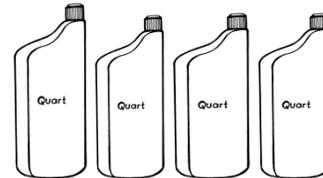
Learning Points:

- Volume is a measurement of the amount of liquid.
- Standard units to measure volume include gallon, quart and pint

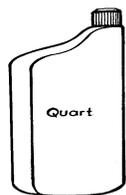


1 gallon

equals
=

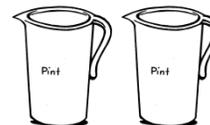


4 quarts



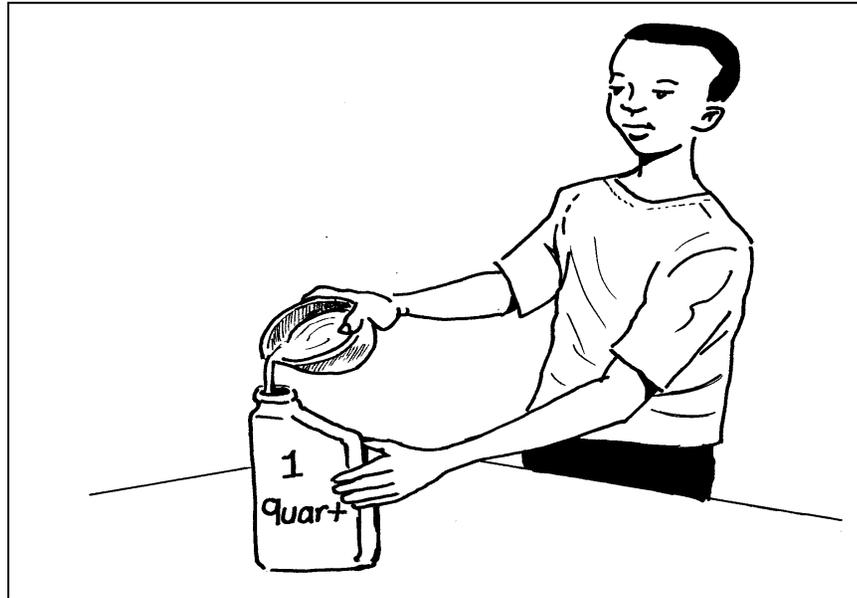
1 quart

equals
=



2 pints

Learner Milton Weah is measuring quarts of oil.



Directions: Check the correct box:

How many pints of oil does he need to fill the quart?

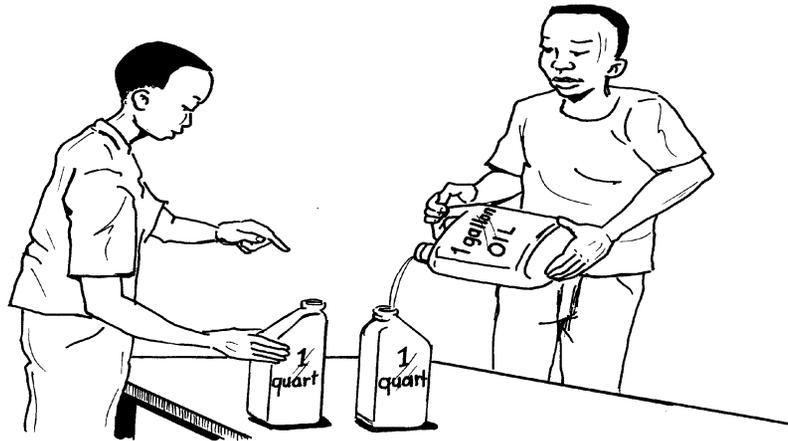
1 pint

2 pints

3 pints

4 pints

Milton Weah and Ebenezer Nyanti are dividing a gallon of oil equally between them.



Directions: Check the correct box below:

How many quarts does each person receive?

a. Each person receives 1 quart

b. Each person receives 2 quarts

Module C

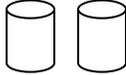
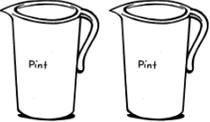
Lesson 72: Using Volume Units to make Oral Rehydration Solution (Cups, Ounces)

Learning Points:

- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon



Directions: Circle the box which has the correct answer:

2 cups 	equals	2 pints 	1 pint 
2 pints 	equals	1 quart 	2 quarts 
2 quarts 	equals	1 gallon 	2 gallons 

Module C

Lesson 73: Proportional Drawing and Map-making

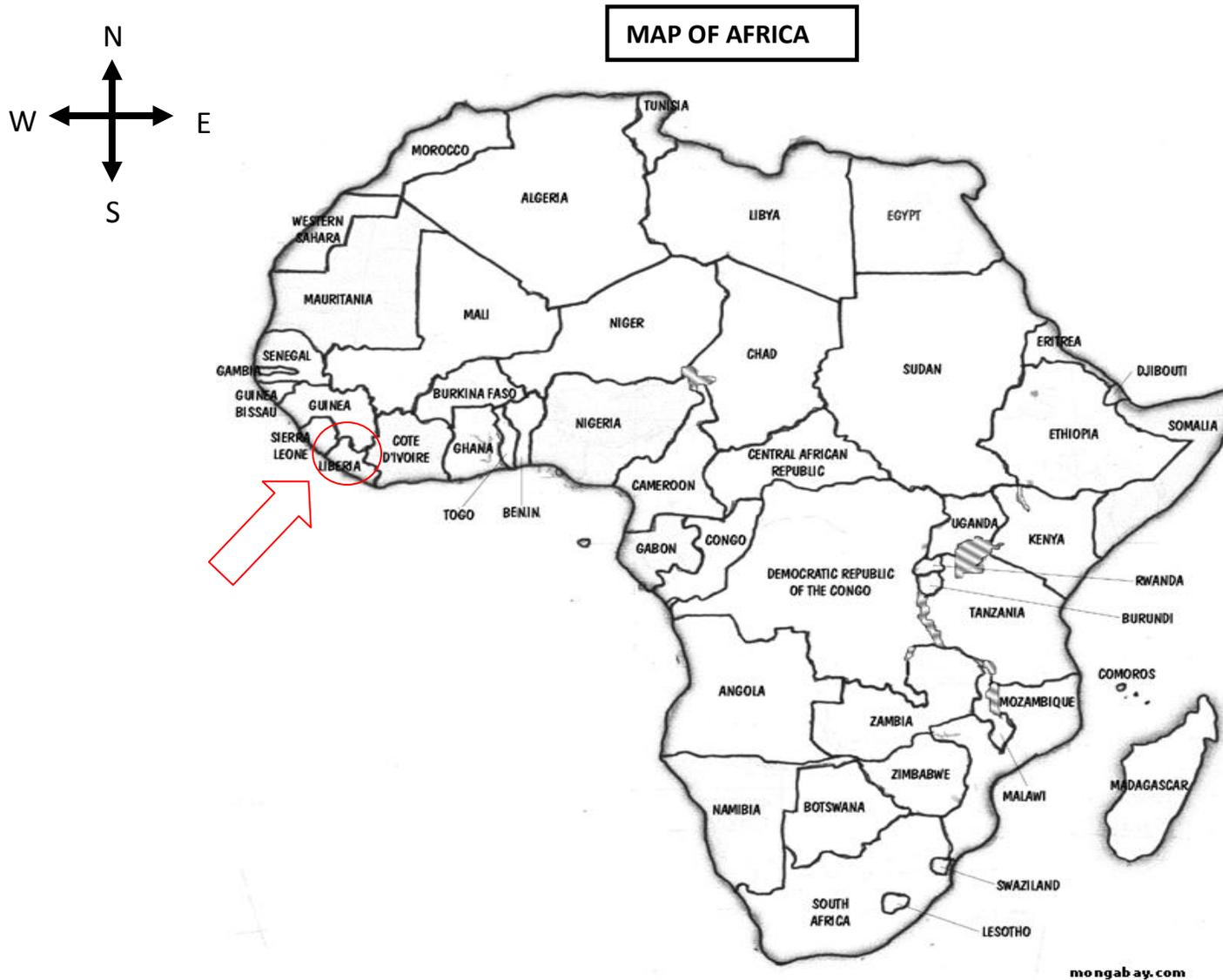
Learning Point:

- Maps are simply pictures of where places are.



Directions: Locate and circle the neighboring countries of Liberia using the map on the next page:

- a) Ivory Coast b) Sierra Leone c) Republic of Guinea



Module C

Lesson 77 -78: Map Reading

Learning Points:

- Liberia is part of the place (region) called West Africa.
- Liberia has common boundary with three countries (Sierra Leone, Guinea and Ivory Coast.
- The big water body called the Atlantic Ocean is on the south side of Liberia.



Directions: Using the map of Liberia on the next page, circle the following places:

- a) Sierra Leone b) Ivory Coast c) Guinea d) Atlantic Ocean

MAP OF LIBERIA



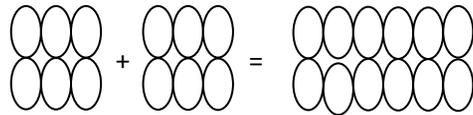
Module D

Lesson 82: Addition and Subtraction Practice: 3 – Digit Numbers

Learning Point:

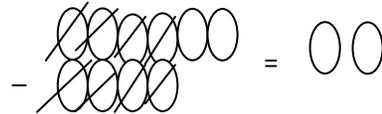
- When you add numbers or objects, you make it bigger.

Example:



- When you subtract numbers or objects, you make it smaller.

Example:



- When you add or subtract numbers, you must arrange the number under each other or put it in vertical order.

Example:

3	5	4
+	2	3
	5	8
		5

Add each single digit in each column and write the answer under each column.



Directions: Add the following 3-digit numbers:

$$\begin{array}{r} 354 \\ + 232 \\ \hline \end{array}$$

$$\begin{array}{r} 247 \\ + 175 \\ \hline \end{array}$$

$$\begin{array}{r} 386 \\ + 258 \\ \hline \end{array}$$

$$\begin{array}{r} 167 \\ + 228 \\ \hline \end{array}$$

$$359 + 347 = \underline{\hspace{2cm}}$$

$$729 + 157 = \underline{\hspace{2cm}}$$



Directions: Subtract the following 3-digit numbers:

$$\begin{array}{r} 567 \\ - 357 \\ \hline \end{array}$$

$$\begin{array}{r} 273 \\ - 132 \\ \hline \end{array}$$

$$\begin{array}{r} 462 \\ - 192 \\ \hline \end{array}$$

$$\begin{array}{r} 321 \\ - 210 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ - 646 \\ \hline \end{array}$$

$$\begin{array}{r} 934 \\ - 423 \\ \hline \end{array}$$

$$\begin{array}{r} 468 \\ - 237 \\ \hline \end{array}$$

$$\begin{array}{r} 853 \\ - 552 \\ \hline \end{array}$$

Module D

Lesson 83: Adding /Subtracting 4–Digit Numbers

Learning Point:

When you add or subtract numbers, do the following:

- Always start from your right.
- Line up the numbers under each other.
- Start to add or subtract from your right to your left.
- If the answer of each single lined up number is equal to more than 10, write the second number under the digit and carry the first number to the other digit on your left.

Example:

The diagram shows the addition of 3648 and 2739. The numbers are aligned by place value. Arrows point from the digits in the original problem to the corresponding digits in the result, with annotations explaining the carry-over process.

$$\begin{array}{r} 3648 \\ +2739 \\ \hline 6387 \end{array}$$

(8 + 9 = 17. Write 7 and carry 1 to the next set of digit which is 4 and 3)

(4 + 3 + 1 = 8 in the second line)

(6 + 7 = 13. Write 3 and carry 1 over).

(3 + 2 + 1 = 6. This is last set of numbers on your left).



Directions: Add the following 4-digit numbers

$$\begin{array}{r} 4\ 2\ 3\ 1 \\ +\ 3\ 5\ 6\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1\ 3\ 5\ 4 \\ +\ 2\ 6\ 4\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6\ 4\ 6\ 2 \\ +\ 2\ 4\ 1\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5\ 3\ 5\ 4 \\ +\ 2\ 6\ 3\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8\ 4\ 7 \\ +\ 5\ 7\ 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3\ 9\ 6 \\ +\ 6\ 4\ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5\ 3\ 7\ 2 \\ +\ 1\ 8\ 4\ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2\ 6\ 5\ 8 \\ +\ 2\ 7\ 4\ 5 \\ \hline \end{array}$$

Module D

Lesson 84: Adding Lists of Numbers

Learning Point:

- Addition is the same, whether you put few or many things together. It changes a smaller thing to a bigger one.

Example: $2 + 3 + 4 + 6 = 15$.



Directions: Add the following list of numbers below:

$$\begin{array}{r} 2 \ 4 \\ 1 \ 3 \\ + 2 \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \ 6 \\ 4 \ 5 \\ + 2 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \ 4 \\ 3 \ 6 \\ + 8 \ 3 \\ \hline \end{array}$$



Directions: Add the following list of numbers below:

$$\begin{array}{r} 1 \quad 4 \quad 2 \\ 2 \quad 5 \quad 6 \\ + 2 \quad 0 \quad 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 3 \\ 1 \quad 7 \\ 3 \quad 5 \\ + 2 \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 3 \quad 6 \\ 2 \quad 0 \quad 5 \\ + 7 \quad 3 \quad 6 \\ \hline \end{array}$$

Module D

Lesson 85: More Practice with Subtraction

Learning Points:

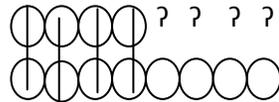
When you subtract 2 or more digit number with borrowing, follow this pattern below.

- First line up the numbers under each other.
- Start to subtract from ones column to the tens column.
- If the first number in the ones column is smaller than the number below, borrow one ten from the number in the tens column.
- The number you borrow is 10 + the number in the ones column.
- Then subtract the number.

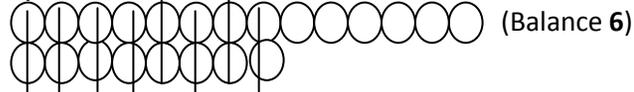
Example:

$$\begin{array}{r} 454 \\ -28 \\ \hline = 26 \end{array}$$

$4 - 8 = ?$ You cannot take 8 from 4.

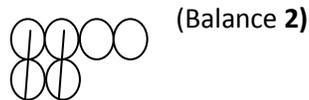


So you borrow 1 ten from the number in the tens column. $4 + 10 = 14$.



Now you can subtract 8 from 14 and the answer is **6**. Write the 6 under the ones column.

Now 4 remains in the tens place. $4 - 2 = 2$. Write this under the tens column.





Directions: Write the answer of the following subtraction problems:

$$\begin{array}{r} 75 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ - 37 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ - 19 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ - 18 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ - 45 \\ \hline \end{array}$$

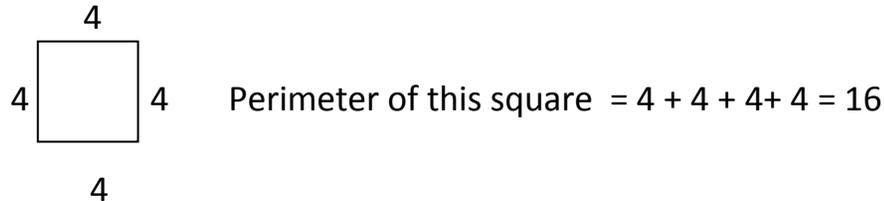
$$\begin{array}{r} 46 \\ - 29 \\ \hline \end{array}$$

Module D

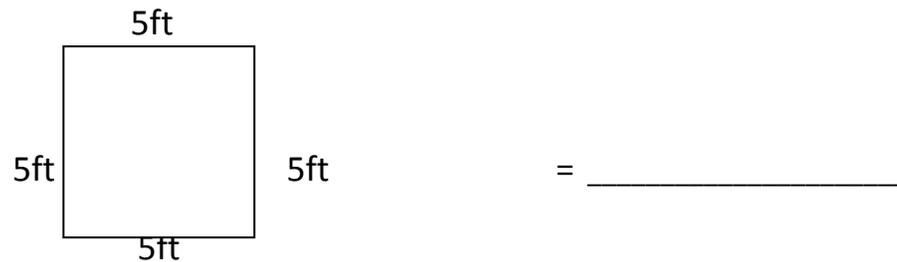
Lesson 86: More addition and Subtraction Practice – Perimeters

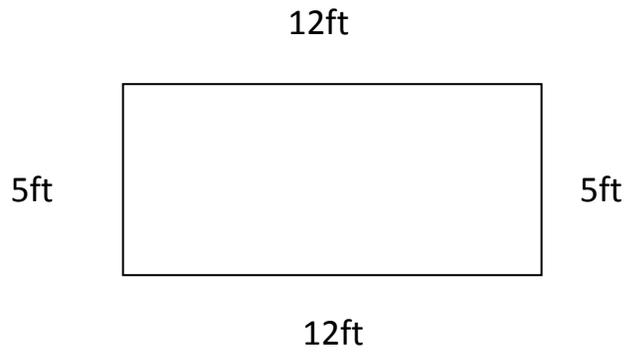
Learning Points:

- Perimeter is the distance around an object.
Example: To find the distance around a square, you add the numbers of the four sides as shown below.

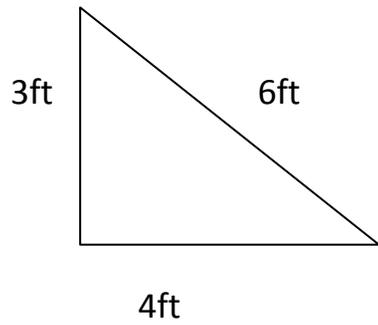


Directions: Add the numbers to find the perimeter of each object:

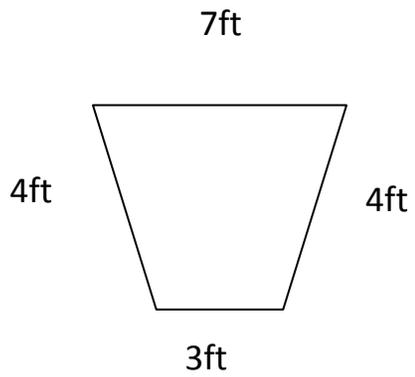




= _____



= _____



= _____

Module D

Lesson 87: Multiplication Practice and 2-Digit x 1-Digit Multiplications with No Carry-over

Learning points:

- Multiplication is 'repeated' number.

Example: $2 \times 6 = 12$ or $6 + 6 = 12$ or $2 + 2 + 2 + 2 + 2 + 2 = 12$.

In here, 6 is repeated 2 times or 2 is repeated 6 times.

- When multiplying by 10, a 0 is added to that number.

Example: $2 \times 10 =$ write 2 and add 0 as 20. **The answer is 20.**



Directions: Multiply to get the answer of each problem below:

$\begin{array}{r} 10 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 21 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 31 \\ \times 2 \\ \hline \end{array}$
$\begin{array}{r} 21 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 24 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 32 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 33 \\ \times 3 \\ \hline \end{array}$

Module D

Lesson 88: Multiplying 2-Digit by 1-Digit Numbers with No Carry-over

Learning Points:

- To use multiplication to solve a story problem, look out for “repeated numbers’ in the story.

Example: Judy sells 3 oranges every day. If she sold for 5 days. How many oranges did she sell?

3 oranges x 5 days = 15; or $3+3+3+3+3 = 15$.

She sold 15 oranges in 5 days.



Directions: Carefully read and write the answer for each story problem:

1. Moses Forkpa has a chicken farm. He collects 22 eggs each day. In 3 days, how many eggs will he collect?

2. Odaka spends 1 hour to read 32 pages of the Sonny story. If he spends 2 hours, how many pages will he read in total?

3. Fiah sells 13 bottles of drinks from his shop every day for 3 days. How many bottles did he sell altogether?

Module D

Lesson 89: 2-Digit by 1-Digit Multiplication Problems with Carry-over

Learning Points

Multiplication with carry-over.

- Make sure to line up the number properly.
- Multiply the ones first.
- If the answer is 10 or more than 10, write the one underneath the ones column and carry the 10s to the tens column.

Example:

Step 1:
$$\begin{array}{r} 15 \\ \times 5 \\ \hline 5 \end{array}$$
 $5 \times 5 = 25$. Write the 5 underneath the ones and carry the 2 to the tens column.

Step 2:
$$\begin{array}{r} 2+15 \\ \times 5 \\ \hline 7 \end{array}$$
 $5 \times 1 + 2 = 7$. Write 7 underneath the tens column.

Step 3:
$$\begin{array}{r} 15 \\ \times 5 \\ \hline 75 \end{array}$$
 The answer is 75.



Directions: Multiply and write the answer of the following problems:

$$\begin{array}{r} 43 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 74 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 88 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ \times 7 \\ \hline \end{array}$$

Module D

Lesson 90: Games to Practice Long Multiplication

Learning Points:

- In multiplying numbers, the order of which number comes first does not matter.

Example: $12 \times 2 = 24$; $2 \times 12 = 24$.

Multiplication Game



Direction: The table on the next page provides some numbers. Opposite numbers are multiplied to give an answer. Circle any 2 opposite numbers that when multiplied give the following answer:

Note: The first one is done for you.

Example: 24

$24 = 2 \times 12$. 2 and 12 are opposite each other.

1	2	3	4	5
2	4	6	8	10
3	12	9	12	15
4	8	12	16	20
5	10	15	20	25
6	12	18	24	30



Do the same for the following numbers:

72

120

40

144

Module D

Lesson 91: Fraction Review

Learning Points:

- Fraction simply means “part of a whole”.

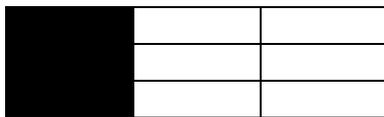
Example: There are 5 people in Mary’s family. Therefore Mary is $\frac{1}{5}$ of the family.



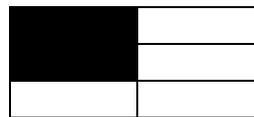
$\frac{1}{5}$



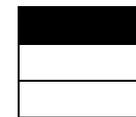
Directions: Write the shaded part(s) of the shapes below into fractional numbers:



= _____



= _____



= _____



Directions: Carefully read and write the answers into fractions:

In Boniken alternative basic education class, the learners are 30. The men are 10. What fractional part do the men form?

In the study class, there are 3 lines. The women occupied 2 lines. What is the population of the women?

Module D

Lesson 92: Measuring Feet and Inches with Fractions

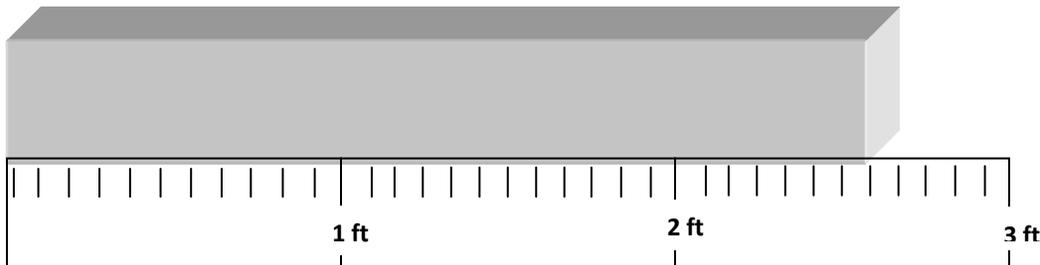
Learning Points:

- Feet and inches are used to measure distance.
- Inches are the smaller unit used to measure distance.
- 12 inches equal 1 foot.

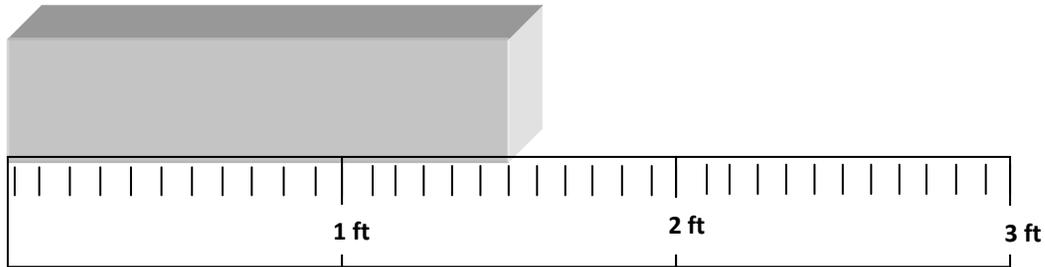


Directions: Write in fractions the measurement of each object below:

The block is what fraction of a yard? _____



The block is what fraction of a yard? _____



Module D

Lesson 94: Introduction to Percent

Learning Points:

- Percent means 100. This means in fraction 1 whole or all.
- The symbol for percent is %.

Example 1:



The rectangle above is shaded 100%. This means that the whole rectangle is shaded.

Example 2:

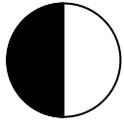


- Half of the rectangle is shaded. This means 50% of the rectangle is shaded. In fractions, this is written as $\frac{1}{2}$. In other words, you divided the 100 into two equal parts as 50, 50.



Directions: Write the percent of the shaded area of each object below:

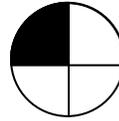
Note: The first one is done for you.



50 % shaded



_____ % shaded



_____ % shaded



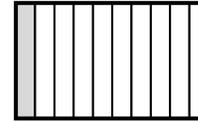
_____ % shaded



_____ % shaded



_____ % shaded



_____ % shaded



_____ % shaded

Module D

Lesson 95: Showing Information with Percents

Learning Points:

- Percent is one of the clear ways to show information about group, event, work, etc.

Example: The alternative basic education class in Konia has 20 learners. 10 learners left for the first study class. What percent of learners left for the first study class?



10 people leave for study class. That is $\frac{1}{2}$ of the people, or half, or 50%



Directions: Match the percents in column A with the number of the words that describe the amount in column B:

Column A	Column B
_____ 100%	1. More than half, or mostly
_____ 10 %	2. All
_____ 75%	3. Less than half
_____ 50%	4. Half
_____ 25%	5. Much less than half



Directions: Draw any object and shade according to the percent listed below:

1. 10 %

2. 75 %

3. 25 %

4. 50 %

5. 100 %

Module D

Lesson 96: Project 1: Class Survey and Making Bar Graphs

Learning Points:

- A survey is one way to look for and put important information together.
- The information you collect and put together can be used for many different things.
- The information you collect is called “data.”
- Information is grouped together according to their meaning.
- These groups of information is called tally of answers.

Example: In Village A, the question was asked: Which one of the schools offers the best education?

To find the school that is offering the best education, colors such as blue, red, yellow were used. Blue stood for school with inspiring teachers and learners; yellow stood for semi inspiring teachers and learners; and red for inactive and non inspiring teachers and learners.

School	Tally of answers		
	Blue color	Yellow color	Red color
Johnny Walker Public School	II/II = 5	III = 3	II = 2
Moses Miller Public School	IIII = 4	II/II = 5	I = 1

According to the survey, Johnny Walker provides the best education, while Moses AP is the second highest.



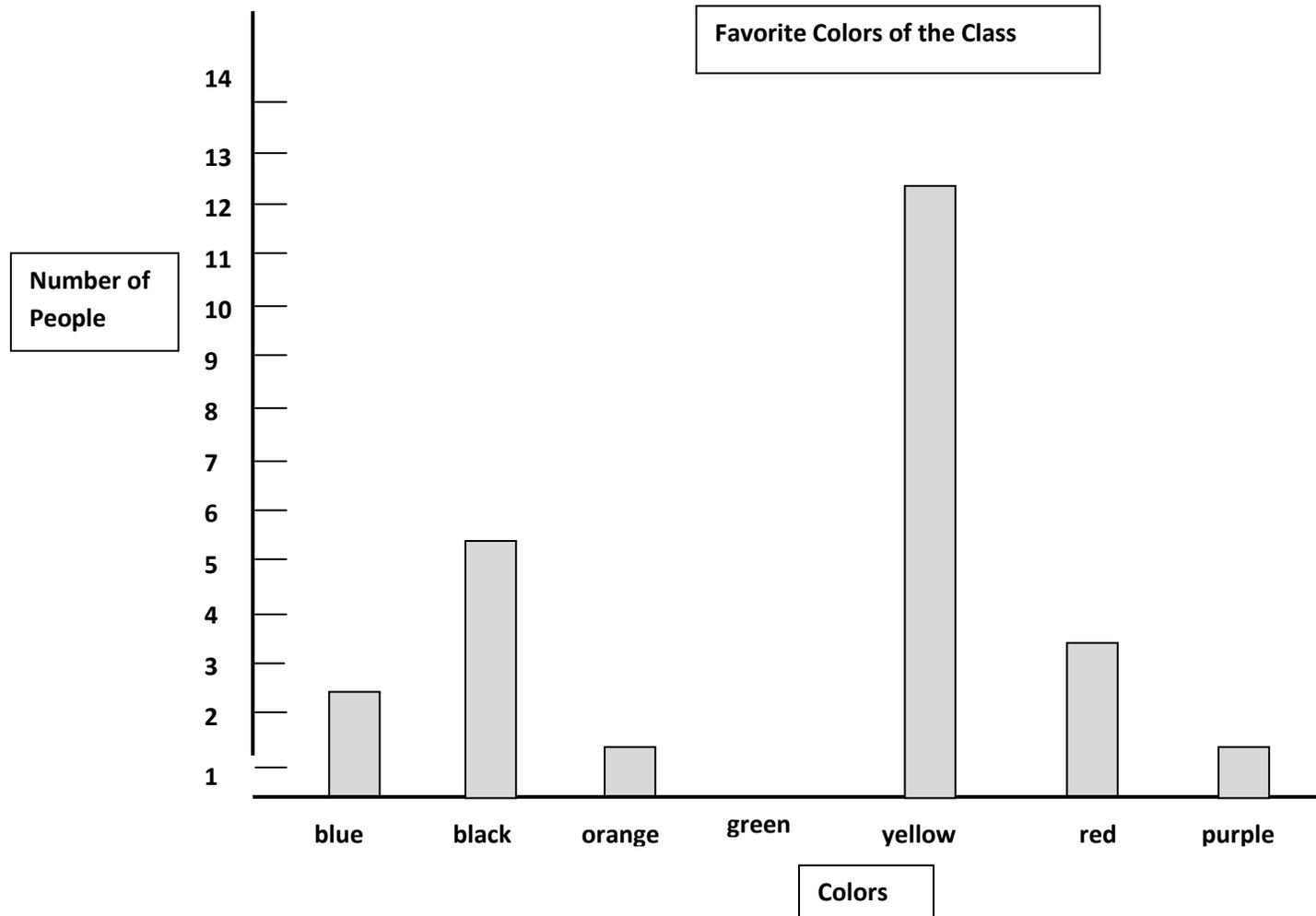
Directions: Write the number for each tally of answers:

Note: The first one is done for you.

Colors	Taly of answers	Final/Totals in numbers
Blue		2
Black	/	
Orange		
Green		
Yellow	/ /	
Red		
Purple		



Directions: Carefully read the bar graph, and write the number of people that chose each color below:





Directions: Write the numbers in the table below:

Color	Number of people that favor each color
Blue	
Black	
Orange	
Green	
Yellow	
Red	
Purple	

Which color is favored by the class?

Write the answer: The color favored by the class is _____.

Module D

Lesson 103: Introduction to Nutrition

Learning Points:

- Some food could be placed under more than one group.

Example: Fried eggs can provide protein and fats.



Directions: Mark X to show which group(s) each food belong: Note: The first one is done for you.

	Carbohydrate	Protein	Vitamins	Fats	Not helpful (sugar, alcohol)
Rice					
Bananas					
Beer					
Fish					
Fried eggs		√		√	
Boiled greens					
Donuts					

End – of – Module D