This instructional material was collaboratively developed and reviewed by educators from public and private schools, colleges, and/or universities. We encourage teachers and other education stakeholders to email their feedback, comments, and recommendations to the Department of Education at action@deped.gov.ph.

Department of Education
Republic of the Philippines
Republic Act 8293, section 176 states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this book are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education
Secretary: Br. Armin A. Luistro FSC
Undersecretary: Dina S. Ocampo, Ph.D.

Department of Education-Instructional Materials Council Secretariat (DepEd-IMCS)
Office Address: 5th Floor Mabini Building, DepEd Complex
Meralco Avenue, Pasig City
Philippines 1600
Telefax: (02) 634-1054 or 634-1072
E-mail Address: imcsetd@yahoo.com
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>Converting Time Measure involving Seconds, Minutes, Hours, and Days</td>
<td>1</td>
</tr>
<tr>
<td>73</td>
<td>Converting Time Measure involving Days, Weeks, Months, and Years</td>
<td>6</td>
</tr>
<tr>
<td>74</td>
<td>Problems involving Conversion of Time Measure</td>
<td>9</td>
</tr>
<tr>
<td>75</td>
<td>Converting Common Units of Linear Measure</td>
<td>13</td>
</tr>
<tr>
<td>76</td>
<td>Converting Common Units of Mass Measure</td>
<td>17</td>
</tr>
<tr>
<td>77</td>
<td>Converting Common Units of Capacity Measure</td>
<td>21</td>
</tr>
<tr>
<td>78</td>
<td>Routine and Non-Routine Problems involving Conversions of Common Units of Measure</td>
<td>25</td>
</tr>
<tr>
<td>79</td>
<td>Measuring Area using Appropriate Units</td>
<td>31</td>
</tr>
<tr>
<td>80</td>
<td>Area of a Rectangle and a Square</td>
<td>34</td>
</tr>
<tr>
<td>81</td>
<td>Routine and Non-Routine Problems involving Area of a Square and a Rectangle</td>
<td>40</td>
</tr>
<tr>
<td>82</td>
<td>Capacity of a Container using Milliliter or Liter</td>
<td>46</td>
</tr>
<tr>
<td>83</td>
<td>Routine and Non-routine Problems involving Capacity Measure</td>
<td>52</td>
</tr>
<tr>
<td>84</td>
<td>Collecting Data on One Variable</td>
<td>58</td>
</tr>
<tr>
<td>85</td>
<td>Organizing and Presenting Data in Tables and Bar Graphs</td>
<td>62</td>
</tr>
<tr>
<td>86</td>
<td>Interpreting Data in a Bar Graph</td>
<td>66</td>
</tr>
<tr>
<td>87</td>
<td>Likelihood of an Event</td>
<td>74</td>
</tr>
</tbody>
</table>
Converting Time Measure involving Seconds, Minutes, Hours, and Days

Here’s a clock.

What time does it tell us?
How many hands does a clock have?
What is equal to one complete round of the minute hand?

Activity 1

A. Convert the following:

1) 600 seconds = _____ minutes
2) 5 minutes = _____ seconds
3) 360 minutes = _____ hours
4) 1,200 seconds = _____ minutes
5) 5 hours = _____ minutes
6) 2 hours = _____ seconds
B. Convert the following:

1) 9 minutes = _____ seconds
2) 240 seconds = _____ minutes
3) 7 days = _____ hours
4) 96 hours = _____ days
5) 4 days = _____ hours
6) 48 hours = _____ days

A. Convert the given measurement to the indicated unit of time.

1) 840 seconds = _____ minutes
2) 960 minutes = _____ hours
3) 19 minutes = _____ seconds
4) 5 hours = _____ minutes
5) 1 260 minutes = _____ hours

B. Answer the following.

1) How many seconds are there in 18 minutes?
2) How many minutes are there in 720 seconds?
3) How many days are there in 72 hours?
4) How many hours are there in 5 days?
5) How many hours are there in 12 days?
C. Answer the following problems.

1) Your classmate walked to school for 900 seconds. How many minutes did it take your classmate to reach the school?

2) During the program, Sandra sang the school hymn in 3 minutes. How many seconds did it take her to sing the school hymn?

Answer the following.

1) On Saturdays, Aaron and Jimmy work at a video store in the mall. Aaron reports to work at 10:00 a.m. Jimmy reports to work at 2:30 p.m.
   a. Who reports to work at a later time?
   b. What is the difference between their time in hours?
   c. in minutes?

2) Ana works for 40 hours a week. If she works for 5 days in a week, how many hours a day does she work?
A. Convert to the indicated unit.

1) 9 hours = ____ minutes
2) 3 days = ____ hours
3) 780 seconds = ____ minutes
4) 540 minutes = ____ hours
5) 264 hours = ____ days
6) 7 days = ____ hours
7) 336 hours = ____ days
8) 960 minutes = ____ hours
9) 1080 seconds = ____ minutes
10) 288 hours = ____ days

B. Find the equivalent time measures from the ones inside the box.

<table>
<thead>
<tr>
<th>960 hours</th>
<th>1560 seconds</th>
<th>2 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2100 seconds</td>
<td>480 seconds</td>
<td>240 minutes</td>
</tr>
</tbody>
</table>

1) 8 minutes
2) 48 hours
3) 40 days
4) 35 minutes
5) 4 hours
Convert to the indicated unit.

1) 420 seconds = _____ minutes
2) 660 minutes = _____ hours
3) 1200 seconds = _____ minutes
4) 60 minutes = _____ seconds
5) 240 hours = _____ days
6) 11 minutes = _____ seconds
7) 420 seconds = _____ minutes
8) 17 days = _____ hours
9) 216 hours = _____ days
10) 480 minutes = _____ hours
Converting Time Measure involving Days, Weeks, Months, and Years

Here’s a calendar.

What month is it?
How many days are there?

Activity 1

Convert to the indicated units. Show your solution on your paper.

1) 6 weeks = ____ days
2) 42 days = ____ weeks
3) 600 days = ____ months
4) 6 months = ____ days
5) 3 years (with no leap year) = ____ days
6) 4015 days = ____ years
7) 4 weeks and 48 hours = ____ days
8) 27 days and 24 hours = ____ weeks
9) 3 months and 2 weeks = ____ days
10) 5 years, 2 months and 3 weeks (with 2 leap years) = ____ days
Answer the following. Show your solution in your notebook.

1. The Santos family went on a vacation for 42 days. How many weeks were they on a holiday?
2. Carlo has been staying in Cebu for 120 days. How many months has Carlo been staying in Cebu?
3. Nina’s father is 45 years old. About, how many days has he lived?
4. John read a book for 1 week, 2 days and 5 hours. How many hours did he read the book?
5. Mang Lino and his friend painted the house for 268 hours. How many weeks, days, and hours did they work?

Convert to the indicated units.

1) 8 weeks = _____ days
2) 3 months = _____ days
3) 180 days = _____ months
4) 244 days = _____ weeks and _____ days
5) 2 months and 20 weeks = _____ days
Convert to the indicated units. Write your answer on your answer sheets.

1) 28 days = _____ weeks
2) 330 days = _____ months
3) 8 weeks = _____ days
4) 14 months = _____ days
5) 49 days = _____ weeks
6) 4 years = _____ days
7) 365 days = _____ year
8) 6 months = _____ days
9) 5 years and 7 months (with 2 leap years)
   = _____ days
10) 4 weeks and 90 days = _____ months
Last Saturday, Nina helped her mother wash their clothes. They started washing at 7:30 A.M. and finished at 10:30 A.M. How many hours did they wash the clothes? How many minutes?
A. Solve the problems and show your solutions in your answer sheet.

1. Mr. Guevara wrote his lesson plan for 120 minutes. How many hours did he write his lesson plan?
2. Malou joined a track and field contest last Friday. She finished in 360 seconds. How many minutes did it take her to run the race?
3. Mr. Cruz worked abroad for 3 years. How many months did he work abroad? How many weeks? How many days?
4. Roy practiced swimming for two hours everyday for 20 days. How many days and hours did he practice swimming?

Activity 2

Read, analyze and solve.

1. Merian walks to school for 10 minutes. How long does she walk in seconds?
2. The De Jesus family stayed in their province for 5 weeks. How many months and weeks did they stay there?
3. Nathan ran a 10-kilometer marathon in 5 hours. How many minutes did he run?
4. Jonathan has been painting for 4 years and 3 months. About how many weeks has he been painting? How many days?
5. Ayieh started to study her lesson at 7:45 P.M. and finished it at 8:50 P.M. About how many hours did she study her lessons? How many minutes?

Solve the following problems.

1) John is 9 years old. How old is he in months? in weeks?
2) The ship has been travelling for 60 hours. How many days has it been travelling?
3) Tita Yoly and her children watch local news on television. They watch from 6:30 P.M. to 7:45 P.M. For how many hours do they watch TV? How many minutes?
4) A program lasted for 1 hour and 30 minutes. How long is the program in seconds?
Read carefully and solve the following problems.

1) Marvi and Leo have to wait 3 more months before vacation time. About how many more weeks do they have to wait?
2) Vic sleeps for 7 hours while Vince sleeps for 9 hours. Who sleeps more and by how many minutes?
3) The ship travelled around the world in eighty days. About how many weeks did it travel?
4) Malou baked a cake for 30 minutes while Lena did it for 40 minutes. How many minutes more did Lena spend in baking than Malou? How many seconds?

Solve the following problems.

1) Trisha cleaned her room in 20 minutes. How long did she clean her room in seconds?
2) There are five more weeks before the start of the school year. How many days should Elmer wait for school opening?
3) Julie has been living in her grandparents’ place for 7 years now. How many months has she been living in her grandparents place? About how many weeks?
Converting Common Units of Linear Measure

Mark and Rizza measured the length of the teacher’s table. Mark found it to be 1 meter long, while Rizza claimed that it is 100 cm long. Whose measurement is correct? Why?
Activity 1

Convert the following to the indicated unit of measure.

1) 5 meters = _________ centimeters
2) 300 centimeters = ________ meters
3) \(\frac{1}{2}\) of a meter = _________ centimeters
4) \(\frac{1}{4}\) of a meter = ________ centimeters

Activity 2

A. Write >, < = inside \[\square\] to make the statement true.

1) 7m \[\square\] 300 cm + 400 cm
2) 600 cm - 200 cm \[\square\] 10 m
3) 5 m + 6 m \[\square\] 20,000 cm
4) 1100 cm - 900 cm \[\square\] 2m

B. Solve the following problems.
   1. The fence surrounding our school is 5 meters high. How high is the fence in centimeters?
   2. Our school gate is 3 meters wide. How wide is it in centimeters?
3. Martin has a 2-meter long wire. Will he be able to cut 5 small pieces of wire 25 centimeters long from it? Why?

Answer this set of questions.

1. Choose the correct answer: \(1 \text{ m} + 2 \text{ m} \) is (less than, greater than, equal to) 30 cm
2. How many meters is 23,000 centimeters?
3. The flag pole is 600 centimeters tall. How tall is the flag pole in meters?
4. Roxy walks 8,000 cm while Suzanne walks 90 m in going to school. Who walks farther in going to school? By how far?
5. Refer to the picture below.

\[
\begin{array}{c}
\text{Market} \\
\text{plaza} \\
\text{Ana's house} \\
\end{array}
\]

- School

a. Which is farther from Ana’s house in the picture – the school or the market?
b. What is the difference between their distances in centimeters?
Measure the length of the following objects found in your home. Record the length in meters and in centimeters. Put your answer in your notebook.

<table>
<thead>
<tr>
<th>Object</th>
<th>Measure in meter</th>
<th>Measure in centimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) height of the door</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) length of the living room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) width of the dining table</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Which is heavier, a kilo of guavas or 1000 grams of eggplant? Why?

Activity 1

Converting Common Units of Mass Measure

Fill in the blank to make 1 kilogram or 1000 grams.

1) 125 g + 250 g + 250 g + ______ g = 1 000 g (1 kg)
2) 50 g + 30 g + 240 g + 70 g + 150 g + ______ = 1 000 g 1 kg
3) 68 g + 246 g + 232 g + 134 g + ______ = 1 000 g (1 kg)
4) 60 g + 80 g + 360 g + ______ = 1 000 g (1 kg)
5) 31 g + 328 g + ______ + 159 g = 1 000 g (1 kg)
Activity 2

How much do they weigh?
Draw where the arrow on the scale must go. Then write its equivalent mass in grams.

1) 5 kg = ___
2) 3 kg = ___
3) 4 kg = ___

Activity 3

Convert to the indicated unit of measure. Show the process.
A. From kilogram to gram:
   1) 44 kilograms = ______ grams
   2) 23 kilograms = ______ grams
   3) 85 kilograms = ______ grams

B. From gram to kilogram:
   1) 24 000 grams = ______ kilograms
   2) 54 000 grams = ______ kilograms
   3) 8 000 grams = ______ kilograms
A. Convert to the indicated unit of measure. Show the process.

1) 19 000 grams = ______ kilograms
2) 32 000 grams = ______ kilograms
3) 28 kilograms = ______ grams

B. Answer the following in your notebook. Show all your solutions.

1) Aling Tinay is weighing a bag of sugar. Its mass is 2 150 grams, what would it be when rounded off in the nearest kilograms?
2) She decided that it was not enough, and she added another 950 grams, about how many kilograms would it be now?
3) Now she takes 600 grams off the weighing scale, what would be the resulting weight in kilograms?
4) How much more sugar would she need to have a 10-kg bag of sugar?
Answer the following.

1) 3 000 g = _________ kg
2) 11 kilograms = ________ grams
3) How many grams are there in 100 kg?
4) I weigh 33 kilograms. How many more grams would I need to make it 35 kilograms?
5) There are 500 grams of chicken, 1 250 grams of beef and 750 grams of fish inside the refrigerator. How many kilograms of meat and fish are there?

---

Answer the following problems. Show your solutions and answers in your notebook.

1. Mother bought \( \frac{3}{4} \) kg of onion. How many grams of onion did she buy?
2. Nora needs 2 kg of malagkit in making puto bumbong. The store sells malagkit in 250-gram packages. How many packages of malagkit should she buy? If 250 g of malagkit costs PhP 22.00 how much is the total cost of 2 kg?
3. The limit of the baggage that Elsa can bring in the airplane is 10 kilograms. Her baggage weighs 11 500 grams. How much is the excess baggage?
We usually drink about 8 glasses of water on ordinary days. But we tend to drink more glasses of water during summer to avoid dehydration. How many liters of water do you drink everyday? How much is that in millimeters?

Activity 1

A. Convert the following in milliliters.

1) 3 L
2) 12 L
3) 2 L + \(\frac{1}{2}\) L
4) 5 L
5) 8 L
B. Do the indicated operation. Convert the result in liters.

1) 10 000 mL – 7 000 mL
2) 2 000 mL + 9 000 mL
3) 6 000 mL – 5 000 mL
4) 7 000 mL + 3 000 mL
5) 5 000 mL + 8 000 mL

Solve the problems and show your solutions and answers.

1) It takes 4 liters of water to fill a container. How many milliliters of water does it hold?
2) Which holds more, container A or container B? By how much?

3) A family consumes 15 L of water in a day. How many liters do they consume in a week? What is the total amount in milliliters? If a liter costs PhP5.00, how much do they consume in a week?

4) It takes 2 000 milliliters of juice to fill mother’s pitcher. How many liters does the pitcher hold?
Activity 3

Answer the following.

1) Decide on which you will buy to save money. How much will be saved? Is it important to save money? Why?

   PhP150.00
   [Image of a 1-liter milk carton]

   3 for PhP240.00
   [Image of three 500-mL milk bottles]

2) Mother asks you to buy 3 liters of milk in a grocery store. Only milk in bottles of 500 mL is available in the grocery. What will you do? How many bottles will you buy?

3) If a bottle costs PhP80.00, how much will be the cost of 6 bottles? How much change will you receive if you pay the cashier with a 500-peso bill?
Do the following.

1) How many 200 mL water is equivalent to 8L of water?
2) Mother told you to buy 3 liters of mango juice.
   In the grocery store you saw mango juice in cans of different capacity and price as shown below. Which will you buy and how many? Explain.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Liter</td>
<td>PhP88.00</td>
</tr>
<tr>
<td>750 mL</td>
<td>PhP70.00</td>
</tr>
<tr>
<td>250 mL</td>
<td>PhP25.00</td>
</tr>
</tbody>
</table>
Routine and Non-Routine Problems involving Conversions of Common Units of Measure

A laboratory room is 18 ½ meters long. How many centimeters is that?
Read, analyze then solve.

1. The perimeter of a house lot is 68 meters. How many centimeters is that?
2. What is the height of the school gate in meters if it is 1500 centimeters?
3. Marites bought ½ kilo of beef and ½ kilo of pork. How many grams of meat did Marites buy in all?
4. Aling Perla bought 7 ¼ kg of buko to make a buko pie. How many grams of buko did she buy?
5. Laura can consume 2 ½ liters of water, 500 mL of lemon juice and 250 mL of malunggay juice in one day. How many milliliters of liquid drinks can she consume in one day?
Answer the following problems.

1. Carlo plays basketball in the school team. He is 1 ¾ meters tall. How tall is Carlo in centimeters?
2. The height of a tree is 1 500 cm. How many meters is that?
3. Liza needs 600 cm of lace as her edging for her table cloth. How many meters of lace must she buy?
4. How many centimeters of ribbon are there in a 12-m ribbon roll?
5. An adult person weighs about 57 kg, how much is that in grams?
6. A kitten weighs about 500 g, how much is that in kilograms?
7. A computer monitor weighs 5 kg, how much is that in grams?
8. Rommel bought 30 000 grams of potatoes. How many kilograms of potatoes did he buy?
9. Ellen bought 2 ½ kg of watermelons and 1 ½ kg of bananas. How many grams of fruit did she buy in all?
10. Rogel drinks 2 ½ L of water in a day. How many milliliters of water does he drink in a day?
11. A bathtub holds 75 000 mL of water. How many liters of water does the bathtub hold?
1. The distance from our home to the barangay hall is 450 meters. From the barangay hall to school is 350 meters. If we pass through the barangay hall then go straight to school, how far do we travel?

2. Mang Ador bought 80 kilos of sweet potatoes at 25 pesos per kilo. If he sold the potatoes at 32 pesos per kilo, how much did he gain?

3. If a kilo of fish is enough for 5 persons, how many grams of fish are needed for 20 visitors? At PhP130 a kilo, how much will be spent on fish?

4. A car travelled 3500 meters in the morning and 4500 meters in the afternoon. What was the total distance travelled in kilometers?

5. Mang Jose buys 15,000 mL of gasoline a day for his school bus. How many liters of gasoline does he need in one day? If a liter of gasoline costs PhP 56.00, how much does he spend on gasoline each day?
1. I am baking a cake and I put \( \frac{1}{4} \) kg of flour in a bowl and \( \frac{1}{2} \) kg of sugar in another bowl. How many grams do the dry ingredients weigh altogether?

2. A baby is born 1 ½ kg. He gains 100 g every week for 5 weeks. What is the weight of the baby in 5 weeks?

3. You have collected some rain water in a bucket. The bucket holds 6 500 mL of water. I used 3 250 mL for watering the plants. How much liters of water is left?

4. I bought 850 mL of jam. I consumed 325 mL, how much is left?

5. Nica jogs 4 500 meters each day. How many kilometers does she jog each day?
Read and analyze then solve.

1. My mom sent 2 packages of Philippine products to my uncle in Australia. One package weighed 1 kg and 450 g and the other weighed 1 kg and 275 g. How much did the 2 packages weigh in grams?

2. I was sent two presents for my birthday. One present weighed 5 kg and 175 g and the other weighed 3 kg and 350 g. What was the difference of the weights of the two presents in grams?

3. I consumed 25 liters of water taking a bath and 65 liters of water watering the plants. How many milliliters of water would be left if my water tank initially contained 250 L of water?

4. I drink 1 265 ml of my 2 liters calamansi juice. How much is left in milliliters?

5. Look at the illustration. How many more centimeters does Ronnie have to walk in going to school?
Measuring Area using Appropriate Units

Diana and Jean bought notebooks at the mall. They also bought plastic cover for their notebooks. What is the area of the top of the notebook to be covered? What is the appropriate unit of area measure to be used? Why?
Choose the most appropriate unit of measure, square centimeter (sq cm) or square meter (sq m) to get the area of the following:

1. room
2. garden
3. pad paper
4. floor tile
5. Manila paper
6. stage floor
7. book cover
8. cartolina
9. top of the teacher’s table

Give the appropriate unit of measure for the following:

1. Brian wanted to measure the area of their dining table, what appropriate unit will he use?
2. To measure the area of the plaza, what appropriate unit of measure should Maria use?
3. The appropriate unit of measure to get the area of a rectangular lake is ________.
4. The appropriate unit of measure to get the area of a handkerchief is ________.
Activity 3

Measure the area using the appropriate unit of measure.

1. garden plot at the back of your school
2. bathroom floor
3. living room
4. long envelope
5. Christmas card
What is the shape of Figure A? What is its area?
What is the shape of Figure B? What is its area?
What is the shape of Figure C? What is its area?
What is the shape of Figure D? What is its area?
A. Find the area of each rectangle/square.

1) $7 \text{ m} \times 2 \text{ m} = 14 \text{ sq. m}$
2) $6 \text{ m} \times 6 \text{ m} = 36 \text{ sq. m}$
3) $20 \text{ cm} \times 80 \text{ cm} = 1600 \text{ sq. cm}$
4) $50 \text{ cm} \times 50 \text{ cm} = 2500 \text{ sq. cm}$
5) $8 \text{ m} \times 3 \text{ m} = 24 \text{ sq. m}$

B. Complete the chart.

<table>
<thead>
<tr>
<th>Figure</th>
<th>length</th>
<th>width</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Rectangle A</td>
<td>6 m</td>
<td></td>
<td>18 sq. m</td>
</tr>
<tr>
<td>2) Rectangle B</td>
<td></td>
<td></td>
<td>30 sq. cm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Figure</th>
<th>side</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>3) Square A</td>
<td>16 cm</td>
<td></td>
</tr>
<tr>
<td>4) Square B</td>
<td></td>
<td>49 sq. m</td>
</tr>
</tbody>
</table>
1) What is the area of the figure?

2) The area of a rectangle is 180 sq cm. If the length is 15 centimeters, what is its width?

3) Which has a greater area, a rectangle whose length is 24 m and width 6 m or a square whose side is 12 m? Why?

4) The length of the bathroom is 8 m and the width is 4 m. What is the area of the bathroom that is covered by black tiles?
Shade the rectangle/square with the given area on the square grid. A □ is 1 square centimeter. Use crayons in shading.

1) 25 sq. cm  
2) 30 sq. cm  
3) 15 sq. cm  
4) 16 sq. cm  
5) 10 sq. cm
Answer the following. Solve and show your solution.

1) Find the area of a rectangle having these dimensions:
   Length = 12 cm, Width = 7 cm

2) The area of the room is 108 sq. meters. If the length is 12 meters, what is its width?

3) Find the area of the illustration below.

4) What is the area of the unshaded region?
Study the floor plan below. Find the floor area of the following:

1) Kitchen
2) Dining Room
3) Ana’s Bedroom
4) Master’s Bedroom
5) Toilet
6) Living Room
A room measures 8 meters long and 7 meters wide. What is the area of the room?

1) Mommy Cathy bought a square cardboard for the project of her daughter Rose. If the cardboard measures 50 centimeters on each side, what is the area of the cardboard?

2) A table runner measures 48 cm on all sides. What area of the table does it cover?

3) Find the area of the shaded portion:

   a. 8 m  
      11 m  
      22 m  

   b. 76 cm  
      76 cm
4) The area of a room is 108 sq. meters. If the width is 9 meters, what is the length?
5) What is the side of a square lot with an area of 400 sq. m?

Solve the following questions. Draw a figure to help you.

1) What is the width of an auditorium whose area is 1 120 sq. meters and length of 35 meters?
2) My uncle has 36 sq. m square vegetable garden. What is the side of the garden?
3) The area of a rectangular lot is 576 sq. m. If the width is 18 meters, what is the length?
4) What is the area of a sheet of paper with dimensions 10 cm by 5 cm?
5) The area of a square room is 9 sq. m. What is the side of the room?
Square and Rectangle Mania

Find the missing length, width and side to solve for the area of a square and a rectangle.

1) Area of figure 1 = _________
2) Area of figure 2 = _________
3) Area of figure 3 = _________
4) Area of figure 4 = _________
5) Which has the greater area if two figures will be combined?
   _________________
6) figures will be combined?
   __________________

7) What is the total area of the figure? ________________

8) If the area of figures 2, 3, and 4 are combined, is it equal to the area of figure 1? Why?
   ________________________________
Create your own word problem using the given figure. Use words like plot, farm, garden, floor, lawn, lot, plaza, park and others in creating your word problems.

Example 1:

A rectangular lot is 6 meters long and 3 meters wide. What is the area?

Example 2:

A square lawn is 5 meters each on all sides. What is the area?

1) A square lawn is 4 meters each on all sides. What is the area?

2) A rectangular lot is 8 meters long and 4 meters wide. What is the area?
Read, analyze then solve.

1) What is the area of the auditorium whose length is 45 meters and whose width is 35 meters?

2) The guest room in Mr. Gozo’s house is square-shaped. One side is 8 meters long. Find the area of the room.

3) The playing field is 75 meters long and 34 meters wide. What is its area?

4) If the area of a handkerchief is 225 sq. cm, what is the length of the side?
Read, analyze then solve.

1) Mrs. Angeles, a subdivision owner in Cebu, donated a lot for a chapel measuring 24 meters by 30 meters. What is the area of the site for the chapel?

2) Ken made a banner for the school program. The banner is 32 cm long and 25 cm wide. What is the area of the banner?

3) The area of Mr. Devanadera’s lot is 180 square meters. Mr. Gesmundo’s lot is twice as big as Mr. Devanadera. What is the area of Mr. Gesmundo’s lot?

4) What is the area of a handkerchief which has 48 cm on all sides? What will happen to the area if you double the side?

5) Mr. Santiago has a square vegetable garden with each side measuring 8 meters. If you add 4 more meters to any two opposite sides, what will be the new area of the garden?
Lesson 82

Capacity of a Container using Milliliter or Liter

How many liters of water does a pail hold?

How many milliliters of water does a glass hold?

Activity 1

Which estimate is better for the capacity of each?

1) Spoonful of medicine – 50 mL or 5L
2) Glass of buko juice – 2L or 200 mL
3) Bottle of cough syrup – 1L or 200 mL
4) A pail of water – 500 mL or 5L
5) Large can of pineapple juice – 150 mL or 1L
6) A drop of medicine – 5 mL or 5L
7) Bottle of calamansi juice – 500 mL or 2L
8) Pot of soup – 5L or 50 mL
9) Large container of milk – 4 L or 10 mL
10) A bottle of liquid detergent – 3L or 50 mL
Below are containers with their corresponding capacity. Determine which container will be able to hold the given amount of liquid.

1) 2L water and 1.5L mango juice
2) 250 mL melon juice, 250 mL water
3) 12 L water
4) 850 mL pineapple juice and 850 mL orange juice
5) 100 mL grapefruit juice, 250 mL water and 50 mL honey syrup.
Give the total weight. Express your answer in mL.

1) 250 mL soy sauce and 275 mL vinegar
   __________
2) 400 mL honey and 650 mL orange juice
   __________
3) 350 mL mango juice and 1 L of water
   __________
4) 350 mL beef broth and 500 mL water
   __________
5) 500 mL water and 250 mL mango juice
   __________
6) 750 mL chicken broth and 500 mL water
   __________
7) 200 mL fish sauce and 850 mL water
   __________
8) 1.5 L milk tea and 150 mL honey syrup
   __________
9) ½ L water and ½ L coconut milk
   __________
10) 850 mL of water and 350 mL pineapple juice
    __________
Choose milliliters or liters to complete the sentence.

1) Kristine uses 500 __________ of water in preparing pineapple juice.
2) The squeaky door needs about 2 __________ of oil.
3) The can holds about 750 __________ of mango juice.
4) The swimming pool holds about 90 __________ of water.
5) Henry put 10 __________ of water in his aquarium.
6) There are about 100 000 __________ of water in the pond.
7) Gerlie takes 50 __________ of cough syrup.
8) Everyday Vicky’s daughter takes 250 _________ glass of milk.
9) Ellen uses about 100 __________ of glue in her project.
10) Remy uses 25 __________ of shampoo.
A. Milliliter or Liter: Which unit is appropriate to use to measure the capacity of the following items?

1) Glue in a bottle
2) Water in a bathtub
3) Orange juice in a punch bowl
4) Shampoo in a small bottle
5) Buko juice in a tetra pack
6) Water in a well
7) Cup of red tea
8) Soup in a bowl
9) Gasoline in a drum
10) A tablespoon of honey

B. Convert to L or ml.

1) 2 000 mL = ____ L
2) 5 L = ____ mL
3) 43 000 mL = ____ L
4) 3 ½ L = ____ mL
5) 8 750 mL = ____ L
Activity 6

A. Choose the appropriate measurement.
   1) A can can hold about (4 mL, 4 L) of paint.
   2) Drinking glass holds about (250 mL, 250 L) of milk.
   3) A pail holds about (10 mL, 10 L) of water.
   4) Pitcher holds about (200 mL, 2 L) of juice.
   5) Cup holds about (200 mL, 2 L) of coffee.

B. Give 3 examples for each case.
   1) Name containers that holds about 1 liter.
   2) Name containers that hold more than 1 L.
   3) Name containers that hold more than 1 mL.
Routine and Non-routine Problems involving Capacity Measure

Look at the following containers.

Which container holds more liquid, C or D? Why?
Which holds lesser amount of liquid, A or B? Why?
Read and solve. Show your solutions on your answer sheet.

1) Mark drinks 4 000 milliliters of water in one day. How many liters does he drink?
2) A bottle of orange juice is labelled 2 L. How many ml is this?
3) Rolly brought 10 liters of water. How many ml is that?
4) A water container holds 6 000 ml. How many liters is this?
5) Roda buys juice in 1 L bottles. There are 6 bottles in one box. How many milliliters of bottles of juice are there in one box?

Study the table below and answer the following questions.

<table>
<thead>
<tr>
<th>Container</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>water jug</td>
<td>5 000 ml</td>
</tr>
<tr>
<td>pitcher</td>
<td>2 L</td>
</tr>
<tr>
<td>glass</td>
<td>250 ml</td>
</tr>
<tr>
<td>large plastic bottle</td>
<td>750 ml</td>
</tr>
<tr>
<td>bucket</td>
<td>7 L</td>
</tr>
</tbody>
</table>

1) What is the capacity of:
   a. water jug in liters? b. pitcher in milliliters? c. bucket in milliliters?
Activity 3

Read each problem then solve.

Carlo, Nilo, Luis and Jeric were in-charge of the refreshment booth during the School Foundation Day. Each of them brought different kinds of juice to sell: orange, mango, pineapple and buko, each in a 20-L container. They also used three kinds of cups: regular cup = 150 ml; medium cup = 200 ml and large cup = 350 ml.

1) Carlo, who was selling orange juice, sold four large cups and 20 medium cups. How much orange juice was left in the container?

2) Nilo, who was selling mango juice, sold 10 medium cups and 10 large cups. How much mango juice was left in the container?
3) Luis, who was selling pineapple juice, sold 8 large, 15 medium and 10 regular cups. How much pineapple juice was left in the container?

4) Jeric, who was selling buko juice, sold 20 regular cups, 15 medium cups and 10 large cups. How much buko juice was left in the container?

5) How much juice did they sell altogether? How much was left?

Make 3 word problems using the capacity unit of measures inside the box.

| 1 L of water | 500 mL of iced tea | 350 mL of calamansi juice |
| 750 mL of oil | 2 L of gasoline | 1 L of bleach |
| 250 mL liquid wax | 500 mL soy sauce | 500 mL vinegar |
| 500 mL fish sauce | 250 mL honey syrup | 450 mL chocolate syrup |
| 5 L of diesel | 750 mL of soap detergent | 500 mL orange juice |
| 500 mL cough syrup | 500 mL mango juice | 500 mL Buko juice |

Example:

Lito used 500 mL of soy sauce and 500 mL of vinegar in cooking pork and chicken adobo. How much condiment did he use?

1) ______________________________________________________
   ______________________________________________________

2) ______________________________________________________
   ______________________________________________________

3) ______________________________________________________
   ______________________________________________________

55
Read carefully and solve the problems.

1) A bus’ gas tank holds 35 L of gasoline. On Tuesday 8 L were used. How much gasoline was left in the tank?

2) Teacher Karen went hiking with her 12 pupils. Each of them carried 500 mL water bottle. How many liters of water did they bring in all?

3) A water dispenser holds about 5 L of water. How much water does it hold in milliliters?

4) Yesterday it was raining hard. Jenny and Jane put basins outside to collect rainwater. When the rain stopped Jenny’s basin was filled with 4 L of rainwater while Jane’s basin had 3 000 mL. How many liters of rainwater were they able to collect?

5) A caterer put 15 small vases on the table. Each vase holds 200 mL of water. How much water is needed for all the vases?
Solve the following problems. You may draw a picture to help you solve them.

1) In a seminar, one hundred fifty participants consumed 20 liters of drinking water every meal. How many milliliters of drinking water did they consume?

2) Jonas bought twelve 250 mL cans of orange juice. How many liters is that?

3) Ethel mixed 750 mL of water and 125 mL of concentrated juice in a pitcher. How many milliliters of juice does the pitcher hold?

4) A water company delivers 650 liters of water to an evacuation camp every week. How many milliliters of water does it deliver weekly?

5) Teacher Liza went hiking with 10 pupils. Each of them carried an 850 mL of mineral water bottle. How many liters of water did they bring in all?
Collecting Data on One Variable

Study the table below.

Scores in Achievement Test in Mathematics

<table>
<thead>
<tr>
<th>Score</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is the highest score? the lowest score? Which score occurs most frequently? How many pupils took the test?
Complete the table. Write your answer on your paper.

Enrolment of Grade III pupils in Tapaz Central School

<table>
<thead>
<tr>
<th>Section</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sampaguita</td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>Tulip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthurium</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>Rosal</td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>Camia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gumamela</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Pupils</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Activity 2

Identify and count the animals that you can see in the picture. Organize your data in a table.
Complete the table based on the data given below. Write your answer in your paper.

**Favorite Color of Grade 3 – Ilang-ilang**

<table>
<thead>
<tr>
<th></th>
<th>Blue</th>
<th>White</th>
<th>White</th>
<th>Red</th>
<th>Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Pink</td>
<td>Blue</td>
<td>Yellow</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>Red</td>
<td>Pink</td>
<td>Red</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Pink</td>
<td>Yellow</td>
<td>Blue</td>
<td>Pink</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td>Pink</td>
<td>Red</td>
<td>Blue</td>
<td>Blue</td>
<td></td>
</tr>
<tr>
<td>Yellow</td>
<td>Pink</td>
<td>Blue</td>
<td>Blue</td>
<td>Red</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Color</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pink</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write two questions using the data/information from your table.
What kind of sports do you like best?

Look at the table.

<table>
<thead>
<tr>
<th>Sports</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>15</td>
</tr>
<tr>
<td>Badminton</td>
<td>10</td>
</tr>
<tr>
<td>Volleyball</td>
<td>6</td>
</tr>
<tr>
<td>Baseball</td>
<td>5</td>
</tr>
<tr>
<td>Table tennis</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
</tr>
</tbody>
</table>

Which sport is the most preferred by the pupils?
Which is the least preferred by the pupils?
Construct a horizontal and a vertical bar graph using the following data. Create three questions using the information on the graph.

San Rafael School Library
Books Borrowed on Tuesday

<table>
<thead>
<tr>
<th>Type of Books</th>
<th>Number of Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartoons</td>
<td>15</td>
</tr>
<tr>
<td>Sports</td>
<td>12</td>
</tr>
<tr>
<td>Science</td>
<td>8</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Fantasy</td>
<td>8</td>
</tr>
</tbody>
</table>
Use your provincial map to complete the table below. Construct a horizontal or vertical bar graph on your paper using the data.

Municipalities by Congressional District

<table>
<thead>
<tr>
<th>Congressional District</th>
<th>Number of Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 1</td>
<td></td>
</tr>
<tr>
<td>District 2</td>
<td></td>
</tr>
<tr>
<td>District 3</td>
<td></td>
</tr>
<tr>
<td>District 4</td>
<td></td>
</tr>
</tbody>
</table>

Activity 2

Use the information below to organize the data in a table and bar graph. Then write three questions that can be answered using the graph you made.

The Grade 3 pupils are grouped into 3. Each group is composed of 7 members. The members were tasked to collect empty plastic bottles for their fund raising project. Here is the list of bottles collected by each group for 5 days.

Number of Bottles Collected

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Group 2</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>
Mr. Reyes, a toy shop owner sold the following toys one Saturday. Make a table and a horizontal bar graph on the data given.

<table>
<thead>
<tr>
<th>Toy</th>
<th>Number of Toys Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td><img src="image1" alt="Top Toys Sold" /></td>
</tr>
<tr>
<td>Ball</td>
<td><img src="image2" alt="Ball Toys Sold" /></td>
</tr>
<tr>
<td>Car</td>
<td><img src="image3" alt="Car Toys Sold" /></td>
</tr>
<tr>
<td>Yoyo</td>
<td><img src="image4" alt="Yoyo Toys Sold" /></td>
</tr>
<tr>
<td>Marble</td>
<td><img src="image5" alt="Marble Toys Sold" /></td>
</tr>
</tbody>
</table>
Study the bar graph.

Which way of coming to school is used by most pupils?
What about the least means of coming to school?
Why do you think most pupils walk in coming to school?
Activity 1

Use this bar graph to answer the questions. Write number sentences to solve problems.

**Our Pets**

- Cats
- Birds
- Rabbits
- Dogs
- Fish

1) Which pet was the least common?
2) Which pet was the most common?
3) How many like dogs as their pet?
4) How many like fish?
5) How many more cats are there than birds?
6) Which pet is more popular, a dog or cat?
7) How many pets are there altogether?
8) Why are there only even numbers on the vertical axis?
9) Why do you think Filipinos like to have a dog at home?
10) If there will be additional persons to be interviewed about their favorite pets, who will you choose? Explain your answer.
Use this graph to answer the questions. Write your answer on your answer sheet.

1) What does this graph show?
2) What is the least favorite subject?
3) How many pupils chose English as their favorite?
4) What is the favorite subject of Grade 3 pupils?
5) How many pupils chose Araling Panlipunan as their favorite?
6) How many more pupils chose Mathematics than English?
7) Which subject was more popular, Filipino or English? Why?
8) How many more students chose Mathematics than Araling Panlipunan?
9) About how many pupils are in Grade 3?
10) Why do you think Araling Panlipunan is the least liked subject?
Use this bar graph to answer the questions below.

1) How many people said chocolate is their favorite flavor?
2) Which flavor is liked exactly by 25 people?
3) Which flavor is liked by most people?
4) How many people said cheese is their favorite flavor?
5) Which flavor is the least liked by people?
6) What is the difference in the number of people who like chocolate and the number of people who like cheese?
7) Do more people like mango than ube?
8) How many more people like mango than nuts?
9) If you combined the number of people who like cheese and the number of people who like chocolate, how many people are they?
10) Which flavor is liked exactly by 35 people?
Maan interviewed her classmate Ana as to how she uses her 10 hours.

Study her friend’s data using the bar graph below. Write 5 sentences about her graph.

Example:
1) Ana spends 1 hour watching TV.
A pizza chain decided to know how many pizzas are sold in 6 days. They presented their results in the bar graph below. Write ‘Yes’ if you could answer the questions using ONLY the information in the bar graph and “No” if not. Explain your answer.

1) Which type of pizza was sold the most?
2) Which day recorded 80 pizzas sold?
3) How much money did they make as total sale in 6 days?
4) How much less was sold on Monday than on Thursday?
5) How many pizzas were sold for the entire month?
6) Which type of pizza was sold the least?
7) What time of day when most pizzas were sold?
8) How much did each pizza cost?
9) How many pizzas were sold on Sunday?
10) How many more did they sell this Monday than they sold last Monday?
11) How many pizzas did they sell on Wednesday and Thursday combined?
12) How many pizzas were sold on Friday?
13) How many more was sold on Tuesday than on Saturday?
14) How many pizzas were sold on Tuesday?
15) Which employee sold the most pizzas?
16) If the owner included Sunday, do you think more boxes of pizza will be sold compared to the sales on Saturday? If yes, how many boxes of pizza will be sold?

A toy shop owner was holding a survey to see which cartoon character is most popular. They displayed their results in the bar graph below. Use the graph to answer the questions.

<table>
<thead>
<tr>
<th>Character Name</th>
<th>Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panday</td>
<td></td>
</tr>
<tr>
<td>Darna</td>
<td></td>
</tr>
<tr>
<td>Cristala</td>
<td></td>
</tr>
<tr>
<td>Juan de la Cruz</td>
<td></td>
</tr>
<tr>
<td>Pedro Penduko</td>
<td></td>
</tr>
</tbody>
</table>

1) If you combine the number of people who liked Darna and the number of people who liked Pedro Penduko how many people would you have?
2) Which character is the least liked?
3) How many people said Pedro Penduko is their favorite character?
4) How many people said Darna is their favorite character?
5) Which character is the favorite of 45 people?
6) Did more people like Pedro Penduko? or Juan de la Cruz?
7) What is the difference in the number of people who liked Panday and those who liked Darna?
8) Which character did exactly 35 people say was their favorite?
9) Which character is most liked by the people?
10) How many more people liked Darna than Kristala?
Study the box with 6 marbles inside it.

What object will I pick from the box?
Will I be sure that every time I pick an object it will be a marble? Why?
What are the chances of each event occurring for you today? Please place a check mark under the correct category for each event.

What are the Chances?

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Impossible</th>
<th>Unlikely</th>
<th>Equally Likely</th>
<th>Most Likely</th>
<th>Certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The sun rising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Riding a bike</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Climbing Mt. Pinatubo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Losing a tooth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Eating ice cream</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Reading a book</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Playing a game</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Seeing a rainbow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Going to school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Calling a friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) Flying to the moon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Playing in the rain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) Seeing a clown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) Drinking milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) Saying “I love you” to your mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16) Behaving well in the classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Write **impossible, unlikely, equally likely, most likely** or **sure**.

1) How likely is it that the spinner will land on “R”?

2) If you select a marble without looking, how likely is that you will pick a blue one?

3) How likely is it that the spinner will land on a “G”?

4) If you select a marble without looking, how likely is that you will pick a red one?

5) How likely is it that the spinner will land on a “Y”?
6) If you select a marble without looking, how likely is that you will pick a red one?

7) How likely is it that the spinner will land on “R”?

8) If you select a marble without looking, how likely is that you will pick a blue one?

9) How likely is it that the spinner will land on a “Y”?

10) If you select a marble without looking, how likely is that you will pick a violet one?
Study a segment of the number line. The number line tells us that an event is likely to happen or not through representation of numbers from 0 to 1. Are the events below impossible, unlikely, equally likely, most likely or sure to happen?

1) Ms. Banasihan said the chances of having homework tonight is $\frac{3}{4}$.

2) Anna said the likelihood of her mother’s having a baby boy was $\frac{1}{2}$.

3) Since Karen has been grounded this week, she said the chance of her watching TV tonight was $\frac{1}{4}$.

4) The likelihood of your mathematics book talking to you today is 0.

5) The chance that all pupils will join the fieldtrip is 1.

6) My friend told me that the chances he will be included in the honor roll is 50/50.

7) The likelihood of seeing a flying elephant is zero.

8) My dad always brings home a pasalubong, this afternoon the chances of bringing ice cream is $\frac{3}{4}$.

9) The likelihood of winning a gold medal in the competition is less than $\frac{1}{2}$ but not equal to zero.

10) The chances of riding a bus today is greater than $\frac{1}{2}$ but not equal to 1.
A. Describe the event as **impossible, unlikely, equally likely, most likely and sure** to happen.

1) If my mom will give birth, it is a girl.
   Chances: _________________________________________________
   Why: _________________________________________________
2) We will have rain next month.
   Chances: _________________________________________________
   Why: _________________________________________________
3) The stars will be seen at the sky tonight.
   Chances: _________________________________________________
   Why: _________________________________________________
4) The cats and dogs will talk.
   Chances: _________________________________________________
   Why: _________________________________________________
5) I will not watch TV the whole year.
   Chances: _________________________________________________
   Why: _________________________________________________
6) I will see a falling star tonight.
   Chances: _________________________________________________
   Why: _________________________________________________
7) The fish will jump out of the lake and walk.
   Chances: _________________________________________________
   Why: _________________________________________________
8) Santa Claus will visit our house on Christmas Eve.
   Chances: _________________________________________________
9) There will be fireworks on New Year’s Eve.
Chances: _________________________________________________
Why: _________________________________________________

10) I will see a rainbow today.
Chances: _________________________________________________
Why: _________________________________________________

B. Henry has some boxes containing red and black counters. He is going to take a counter from each box without looking. Match boxes using the letters A – F to the statements given below. Explain your answer.

1) It is **impossible** that Henry will get black counters from box _____ because ________________________________ .
2) It is **unlikely** that Henry will get black counters from box _____ because ________________________________ .
3) It is **equally likely** that Henry will get a black and or red counters from box ____ because ______________________________________________________.

4) It is **most likely** that Henry will get black counters from box ____ because ______________________________________________________.

5) It is **sure** that Henry will get black counters from box ____ because ______________________________________________________.

**Activity 5**

Use the following words to describe how likely it is the spinner to land on the given number(s): sure, most likely, equally likely, unlikely and impossible.

1) Even numbers _____________
2) Odd numbers _____________
3) Factors of 8 _____________
4) Multiple of 2 _____________
5) Number 10 _____________
6) Multiple of 3 _____________
7) Factors of 6 _____________
8) Zero _____________
9) Multiple of 4 _____________
10) Factors of 24 _____________
A. Is it sure, most likely, equally likely, unlikely or impossible that:

1) Our principal will visit our class today. __________
2) You will have milk for lunch today. __________
3) You will fall down and cut open your knees. __________
4) You will complete this lesson. __________
5) Henry will be picking a rambutan from a basket containing a bunch of lanzones. __________

B. Use the following words to describe how likely it is the spinner to land on the given shape(s): sure, most likely, equally likely, unlikely and impossible.

1) Polygon: __________
2) Square: __________
3) Circle: __________
4) Triangle: __________
5) Rectangle: __________
What are the chances of each event occurring for you today or happening to you today? Place a check mark under the correct category for each event.

<table>
<thead>
<tr>
<th>Event</th>
<th>Impossible</th>
<th>Unlikely</th>
<th>Equally Likely</th>
<th>Most Likely</th>
<th>Certain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Meeting a TV personality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Going to school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Attending flag ceremony</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Playing a computer game</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Drinking milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Reading a book</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Flying to the moon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Sleeping under a tree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Washing clothes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Eating candy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>