

## **Term 3 week 9 Distance Learning Assignments**

### **Practice and Mastery**

**Monday-**

**WALT to solve word problems**

**We know we have achieved it when we can**

- read the problem and highlight the keywords
- think what operations to use and write the equation
- Solve it and write the correct unit.

Read the questions and solve the following problems. You can draw pictures, tables or make a list to help you solve the problem. Write your answer and show your working in the table provided below.

1	Mike has thirty blue and forty - three red marbles. Keith has thirty - two blue marbles. How many blue marbles do they have in total ?	
2	Tom, Sally, Mary, and Jason each have twenty - four Pokemon cards. How many Pokemon cards do they have in all ?	
3	Tim has saved three thousand eight hundred cents from selling lemonade. How many dollars does Tim have?	
4	Dan had Pokemon cards and thirty - six had spots. He gave forty - two away. He now has fifteen Pokemon cards left. How many Pokemon cards did he start with ?	
5	) Melanie earns \$12.50 an hour cleaning houses, but doesn't work on Saturday or Sunday. If she works from 8:00am to 4:00pm, how much money will she make ?	—
6	) There are 1290 students at a school. If each classroom holds 30 students, how many classrooms are needed at the school?	—
7	) Sandy has 26 green marbles, she gave Jessica 24 of the marbles. How many green marbles does she now have ?	—
8	) There are 23 oak trees currently in the park. Park workers had to cut down 11 oak trees that were damaged. How many oak trees will be in the park when the workers are finished ?	—
9	) Dan has thirty - nine dozen golf balls. How many golf balls does he have ?	—

Ques NO:	Working	Answers
1		
2		

<b>3</b>		
<b>4</b>		
<b>5</b>		
<b>6</b>		
<b>7</b>		
<b>8</b>		
<b>9</b>		

**They are asking you to make a rough estimate. You don't need to find the quotient and remainder. However, you can do the division, using any strategy and then pick the best choice. Write your answers in the table given below.**

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Determine which choice is the best estimate.

1)  $267 \div 32 =$

- A. 2
- B. 9
- C. 8
- D. 7

2)  $36 \div 24 =$

- A. 7
- B. 2
- C. 5
- D. 6

3)  $57 \div 21 =$

- A. 6
- B. 3
- C. 5
- D. 4

4)  $116 \div 58 =$

- A. 2
- B. 5
- C. 7
- D. 9

5)  $357 \div 59 =$

- A. 2
- B. 6
- C. 5
- D. 7

6)  $561 \div 79 =$

- A. 9
- B. 6
- C. 7
- D. 5

7)  $813 \div 88 =$

- A. 9
- B. 7
- C. 8
- D. 5

8)  $98 \div 21 =$

- A. 5
- B. 3
- C. 8
- D. 7

9)  $638 \div 82 =$

- A. 4
- B. 8
- C. 6
- D. 7

10)  $144 \div 71 =$

- A. 7
- B. 8
- C. 2
- D. 9

11)  $152 \div 26 =$

- A. 8
- B. 2
- C. 7
- D. 5

12)  $564 \div 66 =$

- A. 7
- B. 5
- C. 8
- D. 4

13)  $144 \div 24 =$

- A. 8
- B. 4
- C. 3
- D. 7

14)  $364 \div 41 =$

- A. 4
- B. 6
- C. 9
- D. 5

15)  $542 \div 58 =$

- A. 9
- B. 8
- C. 6
- D. 4

1	
2	
3	
4	
5	
6	
7	

<b>8</b>	
<b>9</b>	
<b>10</b>	
<b>11</b>	
<b>12</b>	
<b>13</b>	
<b>14</b>	
<b>15</b>	

## Tuesday

**L.I: Finding the fraction of a quantity.**

**S.C: Find the answer using the methods that have been given to you below.**

### LEARNING THE SKILL

Here's how to do it...

- Divide the quantity by the denominator (the number at the bottom).
- Times the answer by the numerator (the number at the top).

e.g.  $\frac{2}{3}$  of \$60

$$\frac{1}{3} \text{ of } \$60 = \$20 \quad [\$60 \div 3 = \$20]$$

$$\text{So, } \frac{2}{3} \text{ of } \$60 = \$40 \quad [\$20 \times 2 = \$40]$$

### PRACTICING THE SKILL

- Solve the following:
 

a. $\frac{3}{4}$ of \$48: $\frac{1}{4}$ of \$48 =	so $\frac{3}{4}$ of \$48 =
b. $\frac{4}{5}$ of \$60: $\frac{1}{5}$ of \$60 =	so $\frac{4}{5}$ of \$60 =
c. $\frac{7}{10}$ of \$50: $\frac{1}{10}$ of \$50 =	so $\frac{7}{10}$ of \$50 =
d. $\frac{5}{8}$ of \$40: $\frac{1}{8}$ of \$40 =	so $\frac{5}{8}$ of \$40 =
e. $\frac{6}{7}$ of \$63: $\frac{1}{7}$ of \$63 =	so $\frac{6}{7}$ of \$63 =
- Solve the following story problems:

- a. Fiona and Liz each bought 20 lollies from the dairy. On the way home Fiona ate  $\frac{1}{2}$  her lollies and Liz ate  $\frac{4}{5}$  of hers.
  - i. How many did Fiona eat? Answer:
  - ii. How many did Liz eat? Answer:
  - iii. Who had more lollies **left**? Answer:
- b. Peter usually takes 30 minutes to walk to school, but on Friday he hurried and it took him  $\frac{5}{6}$  of the usual time.
  - i. How long did it take Peter to get to school on Friday? Answer:
  - ii. How many minutes quicker was this than usual? Answer:
- c. James pays  $\frac{1}{4}$  of the food bill each week. If the food costs \$48, how much does James pay? Answer:
- d. Hillary weighs 63 kg. Her little sister Pippa weighs  $\frac{2}{3}$  of this. How much does Pippa weigh? Answer:
- e. "I've got  $\frac{3}{4}$  of \$100," bragged Kim.  
 "I've got  $\frac{1}{5}$  of \$400," bragged Tom.
  - i. Who has more? Answer:
  - ii. How much more? Answer:

### **MASTERING THE SKILL**

1. Read the problem and then complete the table.
  - a. 150 students in a school were surveyed to find out their favourite type of chocolate bar. Complete the table by calculating and simplifying the fraction of the total for each chocolate bar.

<b>Chocolate bar flavour</b>	<b>Frequency</b>	<b>Fraction</b>	<b>Simplified fraction</b>
Dairy milk	50	$\frac{50}{150}$	$\frac{1}{3}$
Fruit and nut	30	$\frac{30}{150}$	
Energy	10		
Peppermint	25		
Milky bar	20		
Crunchie	15		

- b. Which simplified fraction in the table is the biggest? Answer:

## **Wednesday**

### **Practice and Mastery**

Learning Intention: To learn ways of tackling Word Problems.

1. Read the question carefully. Every word matters. What answer is being asked for? It may not be what you think.

Example:

- A Mary and Rua together weigh 65kg.
- B Mary, Rua and Joe weigh 95kg.
- C Mary and Joe together weigh 75kg.

Answer needed: What does Rua weigh?

Steps: From A and B we see that Joe weighs 30kg. ( $95-65=30$ )

From C we see that Mary weighs 45kg ( $75-30$ )

From A we find the answer: Rua weighs 20kg ( $65-45=20$ )

DO NOT PUT down Mary 's and Joe's weights in your answer.

2. After you answer, ask yourself: Is this answer sensible? Does it work for all the statements in the problem?

Example:

- A When added together two whole numbers give a total of 10.
- B When multiplied together, the same numbers give a product of 21.

Answer needed: What are the two numbers?

Steps:  $2 + 8 = 10$  This works for A.

Check for B.  $2 \times 8 = 16$  does not equal 21. Fails for B

Try again:  $5+5$  (No, 2 numbers are the same –  $5 \times 5 = 25$ , not 21

Try again:  $3 + 7 = 10$  Works for A

$3 \times 7 = 21$  Works for B.

Then LIST the numbers: 3,7

Do not put the working as the answer – it was not required.

Maths is not Magic. You just need to take one step at a time.

Your turn:

1. Tennis balls are usually sold at 3 for \$5. One week the price is changed to 4 for \$6, will the cost of 12 balls be more or less than the usual cost, and by how much?
2. If a bat and ball cost \$12, and the bat costs \$10 more than the ball, how much does the ball cost? (not \$2)
3. A clock is set correctly at 3pm. It loses 2 minutes every hour. What will the clock read at 10am next morning?

4. A bus begins its daily trip from Greymouth to Christchurch. It starts out empty and picks up 1 passenger at the first stop, 2 at the next stop, 3 at the third stop and so on. The bus can hold 55 passengers. At which stop is the bus full?
5. On a bus trip there are 33 children. There are 7 more girls than boys, How many girls are there?
6. July has 31 days. Suppose July 1 is a Monday. What day of the week is August 18 of the next month?
7. Chris bought a packet of jelly beans and found he could divide the jelly beans in equal shares among 2,3,4, or 5 or with no sweets left over. What is the **least** number of jelly beans the bag contained?
8. A teacher gave out 38 Moro bars to the best three teams in a sports tournament. She gave 7 bars to the Green Streaks and twice as many to the Cool Cats. How many Moro bars did the winning Raiders team get?
9. Hemi was asked to put 6 caramel and 9 peppermint chocolates in each bag for the class fair. He packed 54 caramel chocolates. What was the total number of caramel and peppermint chocolates packed?
10. A mysterious green slime doubles its volume every minute. At 3pm a small amount escaped in the Town Hall. By 4pm the substance has just filled the entire building. What was the time when the Town Hall was one half full?

## Thursday- Ricardo

### STAR WARS THE BATTLE OF ENDOR



*Superstardestroyer (Executor)*

*Imperial Star destroyer*

The Battle of Endor was the last battle in The Return of the Jedi in STAR WARS.

The Rebel Fleet sent an attack in order to destroy the second Death Star and kill the evil emperor Palpatine.

There was a large variety of capital ships and fighters for the Rebels as well as for the Empire.

The Imperial Side fought with:

2 Superstardestroyers, 20 Imperial Destroyers, 10 Victory Destroyers, 12 Dreadnaughts, 24 Carrac Cruisers, 8 Tectors, and 24 other capital ships.

The Alliance side had:

21 Mon Calamari, 14 Dreadnaughts, 7 Corellian Corvettes, 14 Corellian Gunships, 14 Nebulous Frigates and 28 other capital ships.



Several Mon Calamari designs

Corellian Corvette

1. Make a table with the following columns:

Name all the Capital Ships for the Empire

The number of units

Find the fraction of each class ship to the total of all the Empire ships.

As an example, the first one is done for you.

Name of Ships	Number of Ships	Fraction
Superstardestroyer	2	$2/100=1/50$
Imperial Destroyer		


Name all the Capital Ships for the Alliance

The number of units

Find the fraction of each class ship to the total of all the Alliance ships.

As an example, the first one is done for you.

Name of Ship	Number of Ships	Fraction
Mon Calamari	21	$21/98 = \mathbf{3/14}$
Dreadnaught		



Rebel Briefing before the Battle of Endor

If you are playing Minecraft and the sea is 30 meters deep, and you want to make a column up to the surface:

How many blocks do you need if the column is 1mx1m? .....

And if you want to make a bridge, 5 meters above the water, how many blocks do you need per column if it is  $1\text{m} \times 1\text{m}$ ? .....

If it is  $2\text{m} \times 2\text{m}$ , how many blocks do you need?.....

If you have never played Minecraft, 1 block is  $1\text{m} \times 1\text{m} \times 1\text{m}$ .

Write down a problem for Minecraft that can be used to understand Integers (positive and negative numbers) that we can use for students next term or next year.

A class with 24 students buys pizza for a shared lunch. They buy 6 pizzas, each pizza is cut into 8 pieces. How many pieces do each student get if it is shared equally?

A diver found a treasure 20 meters deep in a river, he has to tie the treasure with a rope and pull it from the boat. The boat deck is 2 meters above the water. How long should be the rope? Why?

The minimum wage is \$15 per hour.

How much would you earn if you work for

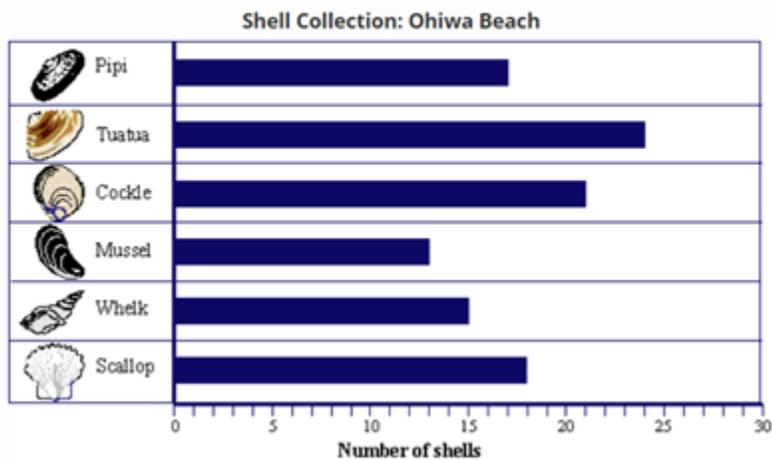
- a. 4 hours.
- b. 8 hours
- c. 40 hours (a week full time)

## Friday – Azi

We are learning to read and understand information displayed in a graph.

### Activity 1: Seashells

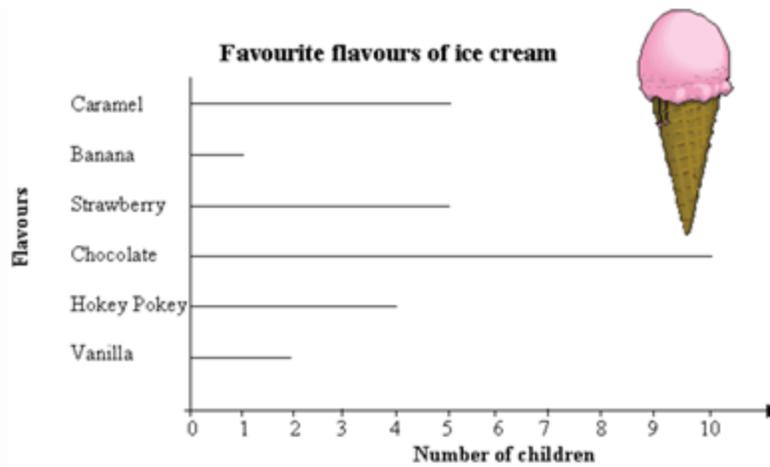
This task is about reading information from a bar graph.



Tanya collected different kinds of shells during a walk along Ohiwa Beach. Above is a bar graph of what she collected.

- Which was the most common shell Tanya found?
- Which shell did she collect the fewest of?
- Tanya found **about** the same number of which two shells?
- How many more scallops than whelks did she collect? Bottom of Form

### Activity 2: Favourite ice cream flavours



- Which flavour of ice cream was the **most** popular?
- Which flavour of ice cream was the **least** popular?
- How many children liked strawberry ice creams the best?
- How many **more** children liked chocolate ice cream than banana ice cream?

**Activity 3:** Finding about sports on TV

This task is about planning a statistical investigation.

Charlotte said, "I think Year 5 students at our school like watching cricket more than they like watching netball, rugby, or soccer." She decided to carry out an investigation to find this out.

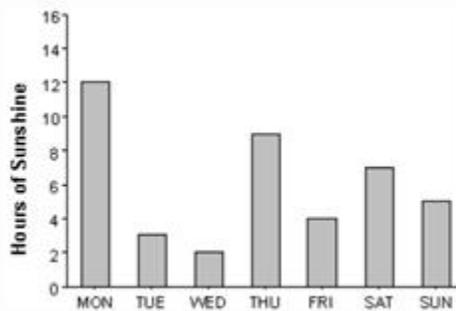


- What question will Charlotte need to ask people at the beginning of the investigation?

- b. Who will Charlotte need to ask?
- c. Charlotte wants to show the class her results. What type of graph could she use to present her data?
- d. Draw a table below that Charlotte could use to record her results

**Activity 4:** Hours of sunshine

Hours of Sunshine: Levin, 24 November-30 November



The graph shows the number of hours of sunshine for one week in Levin.

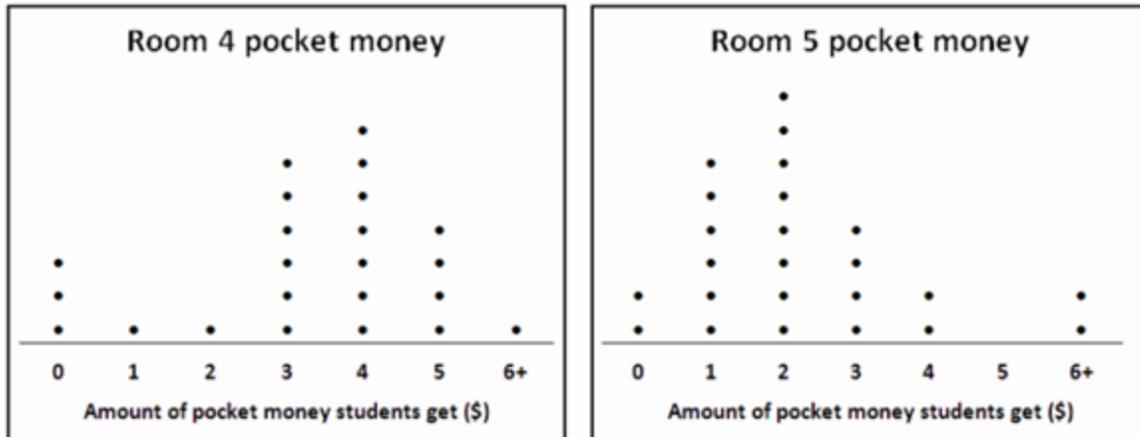
- a. Which day had the greatest number of hours of sunshine?
  - b. How many hours of sunshine were there on Friday?
  - c. How many hours of sunshine were there in total over the weekend? Highlight your answer
- 5
  - 6
  - 7
  - 10
  - 12

**Activity 5:** Pocket Money

This task is about comparing two dot plots.

Two school classes graphed how much pocket money each student got.

They compared their graphs.



- a. In which class do students usually get more pocket money? **Highlight your answer**
- Room 4
  - Room 5
  - You cannot tell which class has students who usually get more pocket money.
  - Students in Room 4 get about the same amount of money as students in Room 5
- b. Use the two graphs to explain why you chose your answer.