PRIMARY 5
WHOLE NUMBERS 1

	Learning Objectives
1.1	Numbers to 1 000 000
1.2	Multiplying by 10, 100, 1000 and their multiples
1.3	Dividing by 10, 100 or 1000 and their multiples
1.4	Short answer questions on whole numbers
1.5	Solving word problems on more/less than

Name: _____

_____ Date: _____

1.1 NUMBERS TO 1 000 000

1.1.1 Example:

1.	Write one million, one hundred and nine thousand and eight in numerals. Ans: _____
2.	Express three million, three hundred and three thousand and thirty-three in numerals. Ans: _____

1.1.1 Practice:

1.	Write five million, four hundred thousand and twenty in numerals. Ans: _____
2.	Express four million, two hundred and five thousand, three hundred and eighteen in numerals. Ans: _____

1.2 MULTIPLYING BY 10, 100, 1000 AND THEIR MULTIPLES

1.2.1 Example:

1.	$215 \times 10 =$ _____	2.	517 x 100 = _____
3.	624 x 1000 = _____	4.	7310 x 1000 = _____

1.2.1 Practice:

1.	$35 \times 10 =$ _____	2.	904 x 10 = _____
3.	111 x 100 = _____	4.	320 x 100 = _____
5.	826 x 1000 = _____	6.	1045 x 1000 = _____

1.2.2 Example:

1.	13×50 $= 13 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____	2.	27×300 $= 27 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____
3.	35×2000 $= 35 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____	4.	72×6000 $= 72 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____

1.2.1 Practice:

1.	47×40 $= 47 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____	2.	15×90 $= 15 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____
3.	24×700 $= 24 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____	4.	88×300 $= 88 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____
5.	11×9000 $= 11 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____	6.	32×5000 $= 32 \times$ _____ $\times$ _____ $=$ _____ $\times$ _____ $=$ _____

1.3 DIVIDING BY 10, 100, 1000 AND THEIR MULTIPLES

1.3.1 Example:

1.	750 ÷ 10 = _____	2.	1800 ÷ 100 = _____
3.	90000 ÷ 1000 = _____	4.	522 000 ÷ 1000 = _____

1.3.1 Practice:

1.	3040 ÷ 10 = _____	2.	29100 ÷ 10 = _____
3.	52700 ÷ 100 = _____	4.	105 000 ÷ 100 = _____
5.	1360 000 ÷ 1000 = _____	6.	1504 000 ÷ 1000 = _____

1.3.2 Example:

1.	220 ÷ 20 = 220 ÷ _____ ÷ _____ = _____ ÷ _____ = _____	2.	1600 ÷ 40 = 1600 ÷ _____ ÷ _____ = _____ ÷ _____ = _____
3.	9000 ÷ 3000 = 9000 ÷ _____ ÷ _____ = _____ ÷ _____ = _____	4.	24 000 ÷ 8000 = 24 000 ÷ _____ ÷ _____ = _____ ÷ _____ = _____

1.3.2 Practice:

1.	350 ÷ 50 = 350 ÷ _____ ÷ _____ = _____ ÷ _____ = _____	2.	2800 ÷ 40 = 2800 ÷ _____ ÷ _____ = _____ ÷ _____ = _____
3.	12600 ÷ 300 = 12600 ÷ _____ ÷ _____ = _____ ÷ _____ = _____	4.	49000 ÷ 70 = 49000 ÷ _____ ÷ _____ = _____ ÷ _____ = _____
5.	15000 ÷ 5000 = 15000 ÷ _____ ÷ _____ = _____ ÷ _____ = _____	6.	3690 000 ÷ 3000 = 3690 000 ÷ _____ ÷ _____ = _____ ÷ _____ = _____

1.4 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

1.4.1 Example:

1.	James bought a laptop. He paid $390 first and a monthly amount of $300 for 12 months. How much did the laptop cost? Ans: $ _____
2.	Jovan used some letters to form a pattern. The first 14 letters are shown below. M , A , V , I , S , M , A , V , I , S , M , A , V , I , … 1st 14th Which letter is in the 82th position? Ans: _____

1.4.1 Practice:

1.	Dilys had 10 800 balloons. She packed 500 balloons into each bag. She used 17 bags altogether. How many balloons were left unpacked? Ans: _____
2.	A box of pens cost $7. There were 20 pens in each box. Miss Tan bought 460 pens. She paid for the pens with 4 pieces of $50-note. How much change did Miss Tan receive? Ans: $ _____
3.	Ivan sat in a cinema. There were 5 rows of seats behind him and 14 rows of seats in front of him. There were 7 seats to his left and 19 seats to his right. How many seats were there in the cinema altogether? Ans: _____

4.	The first 15 numbers of a number pattern are given below. 9 , 5 , 7 , 8 , 9 , 5 , 7 , 8 , 9 , 5 , 7 , 8 , 9 , 5 , 7 , … 1st 15th What is the 117th number? Ans: _____
5.	A repeated pattern is formed using the numbers 1 and 2. The first 12 numbers are shown below. 1 2 1 1 1 2 1 1 1 2 1 1 What is the sum of the first 99 numbers? Ans: _____

1.5 SOLVING WORD PROBLEMS ON MORE/LESS THAN

EXAM TIP: For questions involving more than/less than, draw a comparison model to visualise the changes that occur after the transfer.

EXAM TIP: Total remains the same for internal transfer questions.
Eg: James give 20 marbles to Amy, the total number of marbles for James and Amy remains the same.

1.5.1 Example:

1. Richard had 90 more marbles than Aaron at first. After Aaron gave Richard 14 marbles, Richard had thrice as many marbles as Aaron. How many marbles did Aaron have at first?

Ans: _____

1.5.1 Practice:

1. Zachary had $64 more than his sister, Ashlyn. After Ashlyn gave $20 to Zachary, Zachary had thrice as much money as Ashlyn. How much money did Ashlyn have at first?

Ans: _____

2. Elaine had 58 more cupcakes than Benson at first. After Benson gave 13 cupcakes to Elaine, Elaine had 4 times as many cupcakes as Benson. How many cupcakes did they have altogether?

Ans: _____

1.5.2 Example:

1. 🖩	Michael had 120 more donuts than Jackson. After Michael gave 26 of his donuts to Jackson, Michael had thrice as many donuts as Jackson. How many donuts did Jackson have at first? Ans: _____

1.5.2 Practice:

1. 🖩	Anna had 159 more yellow beads than green beads. She exchanged 15 of her yellow beads for green beads. She then had 4 times as many yellow beads as green beads. How many yellow beads did she have at first? Ans: _____

2. There were 214 more adults than children on a train. After 17 adults alighted the train and 17 children boarded the train at the first train stop, there were 5 times as many adults as children in the train. How many people were there on the train at first?

Ans: _____

1.5.3 Example:

1. 🖩	Amanda had $40 more than Brenda. After Amanda gave $55 to Brenda, Brenda had thrice as much money as Amanda. How much did Brenda have at first? Ans: _____

1.5.3 Practice:

1. 🖩	Thomas had 32 more chocolates than Gordon. After Thomas gave 44 of his chocolates to Gordon, Gordon had 9 times as many chocolates as Thomas. How many chocolates did Thomas have at first? Ans: _____

2.	Justin had 120 more FIFA cards than Peter. After Justin gave Peter 200 of his FIFA cards, Peter had 8 times as many FIFA cards as Justin. How many FIFA cards did they have altogether?
📠	
	Ans: _____

PRIMARY 5
WHOLE NUMBERS 1
(HOMEWORK)

	Learning Objectives
1.1	Numbers to 1 000 000
1.2	Multiplying by 10, 100, 1000 and their multiples
1.3	Dividing by 10, 100 or 1000 and their multiples
1.4	Short answer questions on whole numbers
1.5	Solving word problems on more/less than

Name: _____

_____   Date: _____

1.1 NUMBERS TO 1 000 000

1.	Write six million, forty thousand and seventeen in numerals. Ans: _____

1.2 MULTIPLYING BY 10, 100, 1000 AND THEIR MULTIPLES

1.	Find the value of 350×600. Ans: _____
2.	Find the value of 18×5000. Ans: _____

1.3 DIVIDING BY 10, 100, 1000 AND THEIR MULTIPLES

1.	Find the value of $506\ 000 \div 200$. Ans: _____
2.	Find the value of $350\ 000 \div 5000$. Ans: _____

1.4 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

1. A repeated pattern is formed using the numbers 1 and 3. The first 15 numbers are shown below.

   1 , 3 , 3 , 1 , 1 , 3 , 3 , 1 , 1 , 3 , 3 , 1 , 1 , 3 , 3 , …
   1st   15th

   What is the sum of the first 50 numbers?

   Ans: _____

2. There are 1500 paper clips in a box. How many paper clips will there be in 30 boxes?

   Ans: _____

3. A tank contains 9200 mℓ of water. The water is poured equally into 40 identical glasses. What is the capacity of each glass?

   Ans: _____ mℓ

1.5 SOLVING WORD PROBLEMS ON MORE/LESS THAN

1. Julia had $93 more than Silvia. After Silvia gave $21 to Julia, Julia had 6 times as much money as Silvia. How much money did Julia have at first?

Ans: _____

2. Jasper had $146 more than Chris. After Jasper gave $188 to Chris, Chris had 3 times as much money as Jasper. How much money did Jasper have at first?

Ans: _____

PRIMARY 5

WHOLE NUMBERS 1

	Learning Outcomes
1.1	Multiplying and dividing by 10, 100, 1000 and their multiples
1.2	Order of Operations
1.3	Solving word problems using comparison models (Type 1)
1.4	Solving word problems using comparison models (Type 2)

SUPPLEMENTARY

NAME: **DATE:**

Question 1

Rio paid $27.50 for 3 pencils and 2 books. Each book cost 4 times as much as a pencil. How much did a book cost?

Answer: _____

Question 2

Zubin paid $57.20 for 2 basketballs and 10 tennis balls. Each basketball cost 8 times as much as a tennis ball. How much did the basketball cost?

Answer: _____

Question 3

Ignatius bought 7 more donuts than cookies. Each cookie cost $2 while each donut cost $4.50. If Ignatius paid $187.50 for all the cookies and donuts, how many cookies and donuts did he buy?

Answer: _____

Question 4

Susan saved 32 more $2-notes than $5-notes. If she saved a total of $701, how many $2 and $5 notes did she save altogether?

Answer: _____

PRIMARY 5
WHOLE NUMBERS 2

	Learning Objectives
2.1	Rounding off numbers
2.2	Application on rounding off numbers
2.3	Short answer questions on whole numbers
2.4	Solving word problems involving comparison
2.5	Solving word problems involving supposition

Name: _____

_____ Date: _____

2.1 ROUNDING OFF NUMBERS

2.1.1 Example:

1.	Round off 3529 to the nearest ten. Ans: _____
2.	Round off 3529 to the nearest hundred. Ans: _____
3.	Round off 3529 to the nearest thousand. Ans: _____

2.1.1 Practice:

1.	Round off 3084 to the nearest ten. Ans: _____
2.	Round off 9997 to the nearest hundred. Ans: _____
3.	Round off 346 519 to the nearest thousand. Ans: _____

2.2 APPLICATION ON ROUNDING OFF NUMBERS

2.2.1 Example:

1.	The length of the football field when rounded off to the nearest tens is 120 m. (a) What could be the minimum length of the football hill? (b) What could be the maximum length of the football hill? Ans: (a) _____ m (b) _____ m
2.	The mass of an elephant when rounded off to the nearest hundreds is 4500 kg. (a) What could be the minimum mass of the elephant? (b) What could be the maximum mass of the elephant? Ans: (a) _____ kg (b) _____ kg
3.	The number of visitors to Singapore Zoo in a particular week when rounded off to the nearest thousand is 35 000. (a) What could be the minimum number of visitors for that week? (b) What could be the maximum number of visitors for that week? Ans: (a) _____ (b) _____

2.2.1 Practice:

1.	The mass of a basketball when rounded off to the nearest tens is 590 g. (a) What is the smallest possible mass of the basketball? (b) What is the greatest possible mass of the basketball? Ans: (a) _____ g (b) _____ g
2.	The cost of an air ticket from Singapore to London when rounded off to the nearest hundreds is $1400. (a) What is the smallest possible cost of the air ticket? (b) What is the greatest possible cost of the air ticket? Ans: (a) $ _____ (b) $ _____
3.	The number of spectators at the National Day parade when rounded off to the nearest thousand is 27 000. (a) What is the smallest possible number of spectators at the parade? (b) What is the greatest possible number of spectators at the parade? Ans: (a) _____ (b) _____

2.3 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

☺👍	***EXAM TIP:*** **Number of objects is always ONE more than the number of intervals.** **Eg: 5 trees → 4 intervals between the trees**

2.3.1 Example:

1.	Martin planted 10 seedlings in a row on one side of the road at equal distances apart as shown below. The distance between the 1st seedling and the 10th seedling is 72 m. What is the distance between the 3rd seedling and the 7th seedling? Ans: _____ m
2.	The total mass of a packet of rice and a tin of biscuits is 500 g. The total mass of a tin of biscuits and a packet of sugar is 240 g. If the packet of rice is three times as heavy as the packet of sugar, what is the mass of a tin of biscuits? Ans: _____ g

2.3.1 Practice:

1.	During a PE lesson, 20 students stood in a straight line at an equal distance apart from one another. The distance between the 1st and 4th student was 6 m. What was the distance between the 7th and 15th student? Ans: _____ m
2.	10 chairs were placed at equal distances apart in a row. The distance between the 1st and 3rd chair was 6 m. What was the distance between the 1st and the last chair? Ans: _____ m
3.	Emmanuel and Kenny have 156 stickers altogether. Emmanuel and Leonard have 99 stickers in total. Kenny has 4 times as many stickers as Leonard. How many stickers does Emmanuel have? Ans: _____

4. A plastic container with 20 marbles in it has a mass of 910 g. The same plastic container with 12 marbles in it has a mass of 670 g. Given that the mass of each marble is the same, find the mass of the empty plastic container.

Ans: _____ g

5. Alice and Charlotte had a total of $280. Sofia and Charlotte had a total of $160. Alice had thrice as much money as Sofia. How much money did the three girls have altogether?

Ans: $ _____

2.4 SOLVING WORD PROBLEMS ON COMPARISON

2.4.1 Example:

1.	Sandy paid $196 for 2 identical bags and 3 identical dresses. Each bag costs $13 more than a dress. How much does a bag cost?
	Ans: _____

2.4.1 Practice:

1.	Timothy paid $117 for 4 footballs and 3 basketballs. Each basketball costs thrice as much as each football. How much did a basketball cost?
	Ans: _____

2.4.2 Example:

1. 🖩	Erica has $20 more than Grace. Jocelyn has thrice as much money as Erica. They have a total of $385. How much money does Jocelyn have? Ans: _____

2.4.2 Practice:

1. 🖩	A bag cost $12 more than a file. The bag cost twice as much as a calculator. Vera paid $144 for 1 bag, 3 files and 2 calculators. How much did the bag cost? Ans: _____

2.4.3 Example:

1.	Josephine spent $36 more than Marcus. Adeline spent $12 more than the total spent by Josephine and Marcus. If Adeline spent $50 more than Josephine, how much did Adeline spend?
	Ans: _____

2.4.3 Practice:

1.	Nelson has 40 more seashells than Sarah. Alicia has 125 more seashells than the total number of seashells Nelson and Sarah have altogether. If Alicia has 235 more seashells than Nelson, how many seashells does Alicia have?
	Ans: _____

2.5 SOLVING WORD PROBLEMS ON SUPPOSITION

EXAM TIP: **When items have different values but no relationship is given, we do supposition method.**

EXAM TIP: **For supposition method, we do the following steps**
1) assume, 2) find total difference, 3) find each difference, 4) divide

2.5.1 Example:

1. At a carpark, there were 20 motorcycles and cars altogether. Jayden counted a total of 62 wheels.

(a) How many cars were there at the carpark?

(b) How many motorcycles were there at the carpark?

Ans: (a) _____

(b) _____

2.3.1 Practice:

1. 🖩	There was a total of 32 wooden planks at a construction site. The planks were either 3 m or 5 m long. If the total length of the wooden planks is 124 m, how many 5 m wooden planks are there? Ans: _____

2. 🖩	The Singapore zoo sold a total of 174 adult and child tickets on a Wednesday. $4052 was collected on that day. How many children visited the zoo on Wednesday?

Prices	Weekdays	Weekends
Adult	$28	$36
Child	$18	$24

Ans: _____

2.3.2 Example:

1. 🖩 Melvin sat for a test with 50 questions. He got 4 marks awarded for every correct answer and 1 mark deducted for every wrong answer. Melvin scored 150 marks for the test.

(a) How many questions did Melvin answer wrongly?

(b) How many questions did Melvin answer correctly?

Ans: (a) _____

(b) _____

2.3.2 Practice:

|	
1. 🖩	Benson played in a game show. He had to answer a total of 40 questions. For every question he answered correctly, he was paid $6. However, he gets $2 deducted for every question answered wrongly. At the end of the game he collected $176. How many questions did he answer wrongly? Ans: _____

2. 🖩	A delivery company delivered a total of 35 parcels. For every parcel sent successfully, they were paid $5. However, for every parcel not delivered successfully, $3 was deducted. The company collected $71 altogether. How many parcels were delivered successfully? Ans: _____
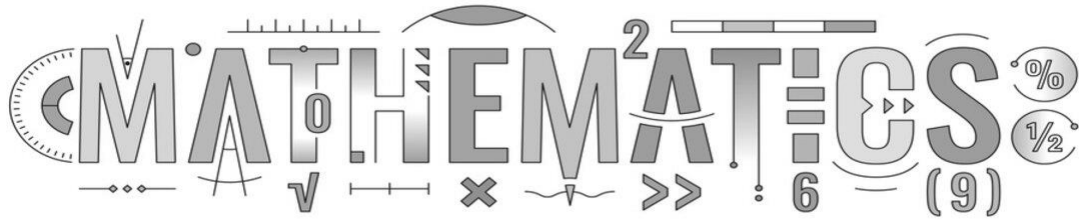
PRIMARY 5
WHOLE NUMBERS 2
(HOMEWORK)

	Learning Objectives
2.1	Rounding off numbers
2.2	Application on rounding off numbers
2.3	Short answer questions on whole numbers
2.4	Solving word problems involving comparison
2.5	Solving word problems involving supposition

Name: _____

_____ Date: _____

2.1 ROUNDING OFF NUMBERS

1.	There were 208 720 spectators at a football match. Round this number to the nearest thousand. Ans: _____
2.	Genevieve bought a handbag for $1935. Round this number to the nearest hundred. Ans: _____

2.2 APPLICATION ON ROUNDING OFF NUMBERS

|	
1.	A number where rounded to the nearest hundred is 9700. (a) What is the smallest possible value of the number? (b) What is the biggest possible value of the number? Ans: (a) _____ (b) _____
2.	A number becomes 60 000 when rounded off to the nearest thousand. (a) What is the smallest possible value of the number? (b) What is the biggest possible value of the number? Ans: (a) _____ (b) _____

2.3 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

1. The mass of a bottle filled with 10 identical erasers is 1200 g. The mass of the same bottle when filled with 6 such erasers is 1040 g. What is the mass of the bottle?

Ans: _____ g

2. Some identical balloons were hung on a rod 100 cm long. The first and the last balloon were 8 cm away from each end of the rod. The rest of the balloons were hung at equal distance of 7 cm apart. How many balloons were hung on the rod altogether?

Ans: _____
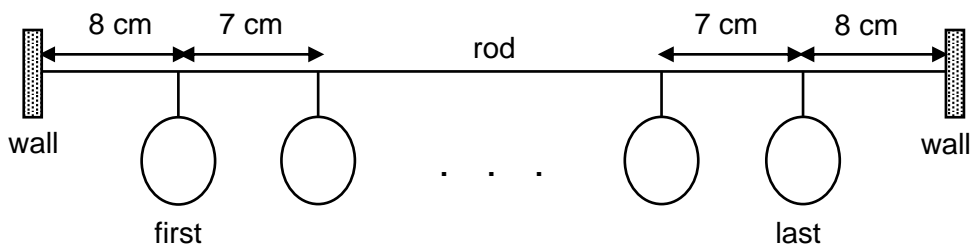
2.4 SOLVING WORD PROBLEMS ON COMPARISON

1. Asher bought 3 hard disks and a tablet for $1540. A tablet costs $840 more than a hard disk. Find the cost of a tablet.

Ans: _____

2. A bag costs $10 more than a cap and twice as much as the cost of a T-shirt. The total cost of the bag, cap and T-shirt is $120. How much more does the cap cost than the T-shirt?

Ans: _____

2.5 SOLVING WORD PROBLEMS ON SUPPOSITION

1. There are 106 chickens and cows in a farm. There were 366 legs altogether. How many cows are there in the farm?

Ans: _____

2. At a funfair, Adam threw 20 darts. For every shot that hits the target, Adam earns 50 points and for every shot he misses, he loses 15 points. He earned 610 points in total. How many darts hits the target?

Ans: _____

PRIMARY 5

WHOLE NUMBERS 2

	Learning Outcomes
2.1	Solving word problems using comparison models (Type 3)
2.2	Solving word problems using gap concept (Type 1)
2.3	Solving word problems using gap concept (Type 2)
2.4	Solving word problems using supposition (Type 1)
2.5	Solving word problems using supposition (Type 2)

SUPPLEMENTARY

Question 1

Jason had thrice as many marbles as Bernard. Adrian had 32 more marbles than Jason. Zul had 24 more marbles than the total marbles Jason, Bernard and Adrian had. Zul had 148 more marbles than Adrian. How many marbles did Zul have?

Answer: _____

Question 2

Mrs Ng wants to pack some money into envelopes. If she packs $5 into each envelope, she would have $52 left. If she packs $8 into each envelope, she would be short of $44. How much money does she have?

Answer: _____

Question 3

A fruit sellers wants to pack some oranges into boxes. If he packs 12 oranges into each box, he would have 108 oranges left unpacked. If he packs 15 oranges into each box, he would have 27 oranges left unpacked. How many oranges does he have?

Answer: _____

Question 4

Yvonne bought a bag using only $5-notes and $10-notes. She used a total of 28 notes to pay for the bag that cost $195. What is the total value of all the $5-notes she used?

Answer: _____

Question 5

A delivery company got paid $12 for every package sent successfully. However, the company had to pay a fine of $6 for every package that was damaged. The company delivered a total of 126 packages and collected $846. How many parcels were damaged?

Answer: _____

PRIMARY 5
WHOLE NUMBERS 3

	Learning Objectives
3.1	Factors and multiples
3.2	Comparing and ordering numbers
3.3	Short answer questions on whole numbers
3.4	Solving word problems involving grouping

Name: _____

_____   Date: _____

3.1 FACTORS AND MULTIPLES

EXAM TIP: **Must know the difference between factors and multiples.**
            Factors of 6: 1, 2, 3, 6
            Multiples of 6: 6, 12, 18, 24…

3.1.1 Example:

1.	List all the common multiples of 4 and 6 which are smaller than 30. Ans: _____
2.	What is the sum of the common factors of 48 and 54? Ans: _____

3.1.1 Practice:

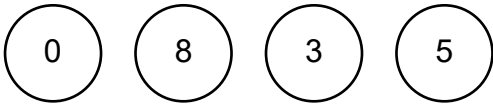|	
1.	List all the factors of 16. Ans: _____
2.	What is the first common multiple of 6 and 8? Ans: _____

| 3.	John picked a number between 20 and 30. That number can be divided by both 3 and 4 without any remainder. What is the number?
	Ans: _____
4.	A small bell rings once every 6 minutes and a large bell rings once every 8 minutes. If they rang together at 12 p.m., at what time will the two bells next ring together again? Leave your answer in the 12-hour clock.
	Ans: _____
5.	Liam had 54 candies and 42 lollipops. He packed them into goodies bags with no remainder. Each goodie bag had candies and lollipops. He packed the same number of candies into each goodies bag. The number of lollipops in each goodie bag was the same too. What was the greatest possible number of goodie bags he can pack?
	Ans: _____

3.2 COMPARING AND ORDERING NUMBERS

3.2.1 Example:

1.	Use all the digits 4, 1, 5, 9 to form (a) the smallest multiple of 5 (b) the number closest to 5000 Ans: (a) _____ (b) _____
2.	Form the smallest 5-digit odd number using all the digits below. 3 1 8 0 4 Ans: _____
3.	Use the numbers below to form 4-digit numbers that are divisible by 10. For each 4-digit number, use the digits only once. How many 4-digit numbers can be formed? 0 8 3 5 Ans: _____

3.2.1 Practice:

1.	Form the largest 5-digit even number using all the digits below.

7   4   1   6   2

Ans: _____
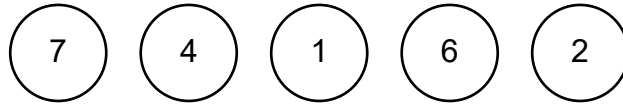
2.	Use all the digits 6, 2, 5, 9 to form

(a) the smallest multiple of 7

(b) the number closest to 9000

Ans: (a) _____

(b) _____

3.	Philip was given four number cards as shown below.

1   8   5   6

(a) He used all the number cards to form the number closest to 6000. What was the number that was formed?

(b) He used all the number cards to form the biggest multiple of 5. What was the number that was formed?

Ans: (a) _____

(b) _____

3.3 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

3.3.1 Example:

1.	Reina earned $5 for every box of tarts she sold. She earned a bonus of $10 for every 12 boxes of tarts sold. Given that Reina earned a total of $165, how many boxes of tarts did Reina sell? Ans: _____
2.	There are 9 classes out on a learning journey. There are 24 pupils in each class. One teacher is required to be in charge of a maximum of 20 pupils. What is the least number of teachers needed for this learning journey? Ans: _____
3.	At a sale, Joy bought 48 packs of seaweed snacks. What was the minimum amount of money Joy paid? **SALE** Buy 4 packs and get 1 pack FREE U.P. $3 per pack Ans: $ _____

3.3.1 Practice:

1. Selina was paid $8 for every wallet she sold. For every 5 wallets sold, she was given a bonus of $10. How many wallets did she sell if she received $750?

   Ans: _____

2. In a supermarket, a box of biscuits cost $7. For every 10 boxes of biscuits purchased, one box of biscuit was given free.

   (a) Jonas needed 20 boxes of biscuits. What would be the least amount of money needed for 20 boxes of biscuits?

   (b) Grace had $400, What would be the greatest number of boxes of biscuits that she could get with $400?

   Ans: (a) $ _____

   (b) _____

3.	Mr Chan is at a bookshop. He wants to buy erasers that cost $2 each. For every 3 erasers bought, he gets 1 eraser free. Mr Chan would like to buy 30 erasers, what is the minimum amount of money Mr Chan have to pay? Ans: $ _____
4.	Diana can pack at most 5 cupcakes into a box. She needs to pack all 136 cupcakes in such boxes. What is the least number of boxes that she will need to pack all the cupcakes? Ans: _____
5.	XYZ Primary School plans to have an excursion for 8 Primary 5 classes with 36 students in each class. One teacher is to look after not more than 20 students. What is the least number of teachers needed for the excursion? Ans: _____

3.4 SOLVING WORD PROBLEMS ON GROUPING

EXAM TIP: **When items have different values and the relationship is given, we do grouping method.**
Eg: no. of boys is equal to the no. of girls/ there are 5 more boys than girls/ the no. of boys is thrice of the girls.

3.4.1 Example:

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1. An equal number of boys and girls took part in a recycling activity. They collected a total of 120 kg of clothes. Each boy collected 6 kg of clothes and each girl collected 4 kg of clothes. How many boys took part in the recycling activity?

Ans: _____

3.4.1 Practice:

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1. Marcus bought an equal number of belts and shirts for $464. A belt costs $12 and a shirt costs $17. How many belts and shirts did he buy altogether?

Ans: _____

3.4.2 Example:

1. 🖩	Melanie bought 7 more story books than comic books. Each story book cost $5 while each comic book cost $3. Melanie paid $155 for all the comic books and story books. (a) How many comic books did she buy? (b) How many story books did she buy? Ans: (a) _____ (b) _____

3.4.2 Practice:

1. Yvonne bought 4 more pens than rulers for $118. Each ruler cost $2 and each pen cost $5.

    (a) How many pens did Yvonne buy?

    (b) How many items did Yvonne buy altogether?

    Ans: (a) _____

    (b) _____

3.4.3 Example:

1. 🖩 There were thrice as many cars as motorcycles parked in a car park. There were 140 wheels altogether.

(a) How many motorcycles were there in the car park?

(b) How many cars were there in the car park?

Ans: (a) _____

(b) _____

3.4.3 Practice:

1. Farmer Aloysius had 4 times as many ducks as cows in his farm. He counted a total of 240 legs altogether.

    (a) How many cows did he have in his farm?

    (b) How many animals did he have in his farm altogether?

    Ans: (a) _____

    (b) _____

3.4.4 Example:

1. 🖩 There were thrice as many chickens as sheep in a farm. There was a total of 20 more chicken legs than sheep legs.

(a) How many chickens are there in the farm?

(b) How many sheep are there in the farm?
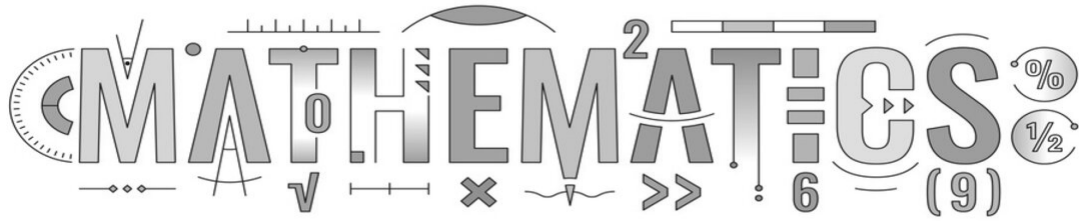
Ans: (a) _____

(b) _____

3.4.4 Practice:

1. 🖩 Valerie packed four times as many candies as lollipops into some party bags. Each candy cost $2 while each lollipop cost $3. She spent $65 more on candies than lollipops.

(a) How many candies did Valerie buy?

(b) How much money did she spend on the candies and lollipops altogether?

Ans: (a) _____

(b) _____

PRIMARY 5
WHOLE NUMBERS 3
(HOMEWORK)

	Learning Objectives
3.1	Factors and multiples
3.2	Comparing and ordering numbers
3.3	Short answer questions on whole numbers
3.4	Solving word problems involving grouping

Name: _____ :

_____ Date: _____

3.1 FACTORS AND MULTIPLES

1.	Write down the common factors of 18 and 24. Ans: _____
2.	What is the sum of the first two common multiples of 6 and 9? Ans: _____

3.2 COMPARING AND ORDERING NUMBERS

1.	Arrange the digits 5, 1, 3, 8, 4 to form the greatest 5-digit even number. Ans: _____
2.	Use all the digits 4, 0, 8, 5 to form (a) the largest multiple of 5 (b) the number closest to 5000 Ans: (a) _____ (b) _____

3.3 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

1. At Bakery Bravo, cakes are on sale as shown below.

   1 box of cake: $ 8

   3 boxes of cake: $ 22

   Jason wants to buy 8 boxes of cakes. What is the least amount of money he has to pay?

   Ans: $ _____

2. Reina was paid $3 for every bottle she sold. For every 12 bottles sold, she was given a bonus of $4. How many bottles did she sell if she received $329?

   Ans: _____

3.4 SOLVING WORD PROBLEMS ON GROUPING

1. 🖩 There were 12 more girls than boys at a class party. Each girl was given 3 balloons and each boy was given 4 balloons. A total of 211 balloons was given to the children. How many girls were there at the outing?

Ans: _____

2. 🖩 At a carnival, every girl received 5 sweets and every boy received 3 sweets. There were thrice as many boys as girls at the carnival. If a total of 2660 sweets were given out at the carnival, how many boys were there?

Ans: _____

PRIMARY 5

WHOLE NUMBERS 3

	Learning Outcomes
	Learning Outcomes
3.1	Solving word problems using grouping (Type 1)
3.2	Solving word problems using grouping (Type 2)
3.3	Solving word problems using Models (More/Less than) Type 1
3.4	Solving word problems using Models (More/Less than) Type 2
3.5	Solving word problems using Models (More/Less than) Type 3

SUPPLEMENTARY

Question 1

Jayden bought four times as many oranges as apples. Each apple cost $1.45 while each orange cost $1.75. He paid $76.05 for all the fruits. How much more did he spend on oranges than apples?

Answer: _____

Question 2

Yash saved thrice as many $2-notes as $10-notes. The value of all the $10-notes was $88 more than the value of all the $2-notes. How much did Yash save?

Answer: _____

Question 3

Nazirul had 52 more coins than Joshua. Joshua gave 28 of his coins to Nazirul. Nazirul then had ten times as many coins as Joshua. How many coins did the boys have?

Answer: _____

Question 4

Robert had 28 more pens than Andy. Robert gave 9 of his pens to Andy. Robert then had twice as many pens as Andy. How many pens did both of them have?

Answer: _____

Question 5

Samantha had 42 more hair bands than Hui Yi. Samantha then gave 65 of her hair bands to Hui Yi. Hui then had twelve times as many hair bands as Samantha. How many hair bands did Hui Yi have in the end?

Answer: _____

PRIMARY 5
WHOLE NUMBERS 4

	Learning Objectives
4.1	Order of Operations
4.2	Short answer questions on whole numbers
4.3	Solving word problems involving gap concept

Name: _____

Class: _____   Date: _____

4.1 ORDER OF OPERATIONS

EXAM TIP: **Follow the following sequence for order of operations**
1) brackets
2) multiply/divide from left to right
3) add/subtract from left to right

4.1.1 Example:

1.	Find the value of $12 + 9 \times 3 - 8$. Ans: _____
2.	Find the value of $76 - 10 + 28 \div 4$. Ans: _____
3.	Find the value of $3 \times (17 - 12) + 8$. Ans: _____

4.	Find the value of $81 + 12 \div 3 \times (20 - 6)$.
	Ans: _____
5.	Find the value of $8 \times (10 - 7) - (9 + 3)$.
	Ans: _____
6.	Find the value of $17 + (12 - 10 \div 2) \times 4$.
	Ans: _____

4.1.1 Practice:

1.	Find the value of 38 – 4 × 5 + 11. Ans: _____
2.	Find the value of 90 + 12 × 8 ÷ 4. Ans: _____
3.	Find the value of 100 – 24 ÷ 2 × 3. Ans: _____
4.	Find the value of 24 – (4 + 12) ÷ 8. Ans: _____

5.	Find the value of 30 + (18 – 3) ÷ 5 × 2.
	Ans: _____
6.	Find the value of 58 – 5 × (2 + 4) ÷ 3
	Ans: _____
7.	Find the value of 50 – (8 – 2 × 3) + 6 × 7.
	Ans: _____
8.	Find the value of (27 + 3 × 6) – (20 ÷ 2 – 5).
	Ans: _____

4.2 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

4.2.1 Example:

1. Dave had 3 times as many marbles as Elijah. After Dave gave away 166 marbles and Elijah bought 108 marbles, both of them had the same number of marbles. How many marbles did Elijah have in the end?

   Ans: _____

2. Claire and Tina had the same number of muffins at first. Claire sold 97 muffins and Tina sold 161 muffins. The number of muffins Claire had left was 3 times that of what Tina had left. How many muffins did each of them have at first?

   Ans: _____

3. Ken had $15 more than Lisa at first. After Ken gave some of his money to Lisa, he had $21 less than Lisa. How much money did Ken give to Lisa?

   Ans: $ _____

4.2.1 Practice:

1.	At first, Renee had 30 fewer stickers than Andy. After Andy gave Renee some stickers, Renee had 62 more stickers than Andy. How many stickers did Andy give to Renee? Ans: _____
2.	Alvis had four times as many stickers as Benjamin at first. After Alvis used 46 stickers and Benjamin bought 8 stickers, both of them had the same number of stickers. How many stickers did Alvis have at first? Ans: _____
3.	Ryan and Owen had the same number of cards. Ryan gave 111 cards to his friends and Owen gave 45 cards to his cousins. At the end, Owen had 4 times as many cards left as Ryan. How many cards did each of them have at first? Ans: _____

4.3 SOLVING WORD PROBLEMS ON GAP CONCEPT

4.3.1 Example:

1. 📇	Gillian has a sum of money. If she buys 5 dresses, she will have $56 left. If she buys 9 dresses, she will need $180 more. How much money does Gillian have? Ans: _____

4.3.1 Practice:

1. 📇	Alexis wanted to buy 15 water bottles but she found out that she was short of $92. She bought 8 water bottles instead and had $6 left. How much money did Alexis have? Ans: _____

4.3.2 Example:

1. 🖩 Zen spent $255 on a bag and a belt. She wanted to buy another similar bag with the remaining money but was short of $30. In the end, she bought another similar belt and had $15 left in the end.

(a) How much more did the bag cost than the belt?

(b) How much money did Zen have at first?

Ans: (a) _____

(b) _____

4.3.2 Practice:

1. Belle had some money. After spending $44 on 3 files and 5 pencils, she would be short of $3 if she were to buy another pencil. However, if she were to buy 1 more file, she would have $1 left.

   (a) What is the difference in cost between a file and a pencil?

   (b) How much money did Belle have at first?

   Ans: (a) _____

   (b) _____

4.3.3 Example:

1. 🖩 Aunt May wanted to give some children a red packet each for Chinese New Year. If she gives each child $13, she will be short of $24. If she gives each child $8, she will have $6 left.

(a) How many children were there?

(b) How much money does Aunt May have?

Ans: (a) _____

(b) _____

4.3.3 Practice:

1. 🖩 During a lesson, Mr Lim distributes some candies to his students. If he gives them 12 candies each, he would be short of 27 candies. If he gives each of them 9 candies, he would have 15 candies left.

(a) How many students are there in Mr Lim's class?

(b) How many candies does Mr Lim have altogether?

Ans: (a) _____

(b) _____

4.3.4 Example:

1. Ashton has some apples to give his friends. If he gives 4 apples to each friend, he would have 12 apples left. If he gives 6 apples to each friend, he would have 2 apples left.

   (a) How many friends does Ashton have?

   (b) How many apples does Ashton have?

   Ans: (a) _____

   (b) _____

4.3.4 Practice:
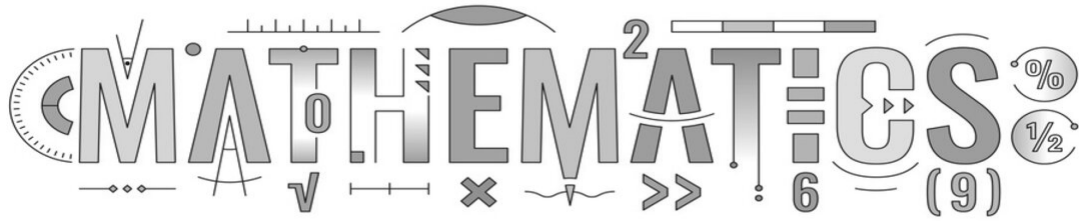
1. 🖩	Max wants to give his grandchildren some money. If he gives each grandchild $5, he would have $34 left. If he gives each grandchild $8, he would have $10 left. (a) How many grandchildren does Max have? (b) How much money does Max have? Ans: (a) _____ (b) _____

PRIMARY 5
WHOLE NUMBERS 4
(HOMEWORK)

		Learning Objectives
	4.1	Order of Operations
	4.2	Short answer questions on whole numbers
	4.3	Solving word problems involving gap concept

Name: _____

Class: _____ Date: _____

4.1 ORDER OF OPERATIONS

1. Find the value of 76 – 4 + 52 ÷ 4.

   Ans: _____

2. Find the value of 36 – (6 + 18) ÷ 4 + 2.

   Ans: _____

3. Find the value of 6 + 15 ÷ (3 – 2 × 0).

   Ans: _____

4.2 SHORT ANSWER QUESTIONS ON WHOLE NUMBERS

1.	Jimmy and Kenneth had an equal number of sweets. After Jimmy gave away 19 sweets and Kenneth gave away 61 sweets, Jimmy had thrice as many sweets as Kenneth left. How many sweets did each of them have at first? Ans: _____
2.	Daryl had 24 stamps more than George at first. After Daryl gave some of his stamps to George, he had 38 less stamps than George. How many stamps did Daryl give to George? Ans: _____
3.	Peter had 4 times as much money as Darius. After Peter spent $23 on transport and Darius received $13 from his parents, both of them had the same amount of money. How much money did Darius have at first? Ans: $ _____

4.3 SOLVING WORD PROBLEMS ON GAP CONCEPT

| 1. | Emma had some money. She wanted to buy two types of bottles, large and small, for the orange juice she made. She paid $69 for 3 large bottles and 5 small bottles. With the remaining money, she could not buy another large bottle as she was short of $2. She then bought another small bottle and had $5 left. |
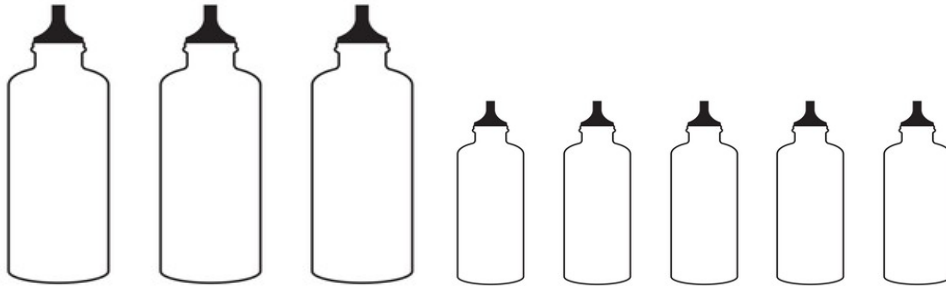
(a) How much more did each large bottle cost than each small bottle?

(b) How much money did Emma have at first?

Ans: (a) _____

(b) _____

| 2. 🖩 | Ali owns a few nasi lemak stalls. If he places 5 helpers in each stall, he will have 3 extra helpers who are out of work. If he places 7 helpers in each stall, he will need another 25 helpers.

(a) How many nasi lemak stalls does he own?
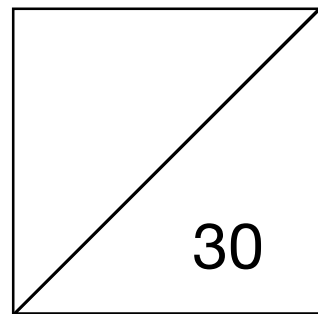
(b) How many helpers does he have?

Ans: (a) _____

(b) _____ |

PRIMARY 5

WHOLE NUMBERS

TOPICAL TEST

30

NAME:

DATE:

1.   48 x 300 = _____

Answer: _____ (1m)

2.   12 x (6 – 4) + 32 ÷ (2 + 6) = _____

Answer: _____ (1m)

3.   Yong Jun paid $81 for 2 cards and 3 stickers. Each card cost 3 times as much as a sticker. How much did a card cost?

Answer: $_____ (1m)

4.   Natalie bought 10 more chocolate muffins than vanilla muffins for $75. Each vanilla muffin cost $3 and each chocolate muffin cost $4. How many chocolates muffins did Natalie buy?

Answer: _____ (2m)

5. Chloe decided to give some lollipops to her friends. If she gives each of her friends 5 lollipops, she will have 24 lolipops left. If she gives each of her friends 8 lollipops, she will be short of 6 lollipops. How many lollipops does she have?

Answer: _____ (2m)

6. There were 24 children at a party. Each boy was given 5 balloons and each girl was given 3 balloons. A total of 102 balloons were given out. What is the difference between number of boys and girls at the party?

Answer: _____ (2m)

7. There were 4 times as many cars as motorcycles parked in a car park. There were 108 wheels altogether. How many cars are there?

Answer: _____ (3m)

8. Jessica had only $5 and $2 notes in her piggy bank. She counted that she had six times as many $2-notes as $5-notes. The total value of $5-notes was $203 less than the total value of her $2-notes. How much money did Jessica have in her piggy bank?

Answer: $_____ (4m)

9. Jennifer had $60 more than Kesslyn. Kesslyn then gave $24 to Jennifer. Jennifer then had five times as much money as Kesslyn. How much did Jennifer have at first?

Answer: $_____ (4m)

10. There were 204 more adults than children on a train. At the first train stop, 24 adult alighted the train and 24 children boarded the train. There were then 4 times as many adults as children in the train. How many people were there on the train at first?

Answer: _____ (5m)

11. Rio had 64 more chocolates than Edwin. Rio then gave 96 of his chocolates to Edwin. Edwin then had nine times as many chocolates as Rio. How many chocolates did they have altogether?

Answer: _____ (5m)