



Year 5 Maths Distance Teaching and Learning

Week beginning: 1st June 2020

Lesson 5		
Learning Intention: WALT: apply previously learnt skills in all areas of Maths	Key Vocabulary: add subtract numeral digit value decimal decimal place	What you will need: Paper Pencil Ruler Ipad/Laptop/internet access Year 5 S2 Week 1 video 5
Starter		
<p>Please use Timestable Rockstars and do a Studio game for at least one minute.</p> <p>If a GIG is available then do it. Remember that the GIG is only available once you have completed enough games (or when you first ever log in) and your score and speed has improved enough.</p> <p>Here is the website link. If you are viewing this online you should be able to click on the link or copy and paste to the website.</p> <p>https://play.ttrockstars.com/auth/school/student/84789</p> <p>Your login is the first 3 letters of you first name and the first 3 letters of your surname e.g. Jack Smith would have the login jacsmi</p> <p>The password is Welcome1 -This is case sensitive (you need to use a capital W)</p> <p>You might like to record your scores.</p>		
Main Teaching		
<p>Today's is a revision lesson. We will recap these skills:</p> <ul style="list-style-type: none">• Roman numerals• Adding decimals <p><u>Roman Numerals</u></p> <p>Roman numerals use letters instead of numbers. There are seven letters you need to know:</p> <ul style="list-style-type: none">• I = 1• V = 5• X = 10• L = 50• C = 100• D = 500• M = 1000		



You put the letters together to make numbers. Here are a few simple examples:

1) III = 3

three I's together is three 1's and $1 + 1 + 1$ equals 3

2) XVI = 16

$10 + 5 + 1 = 16$

These examples were simple, but there are a few rules and a few tricky things to know when using Roman numerals:

1. The first rule just says that you add letters, or numbers, if they come after a bigger letter or number. We demonstrated this in example 2 above. The V is less than the X, so we added it to the number. The I was less than the V, so we added it to the number. We'll discuss what happens when a letter of greater value comes after a letter of lesser value in rule 3.
2. The second rule is that you can't put more than three letters together in a row. For example, you can put three I's together, III, to make a 3, but you can't put four I's together, IIII, to make a four. How do you make a 4 then? See rule number three.
3. You can subtract a number by putting a letter of lower value before one of higher value.

This is how we make the numbers four, nine, and ninety:

- IV = $5 - 1 = 4$
- IX = $10 - 1 = 9$
- XC = $100 - 10 = 90$

There are a few restrictions on when you can do this:

- You can only subtract one number. You can't get a 3 by writing IIV.
 - You can only do this with I, X, and C. Not with V, L, or D.
 - The smaller (subtracted) letter must be either 1/5th or 1/10th the larger one. For example, 99 cannot be written IC because I is 1/100th of C.
4. The last rule is that you can put a bar over a number to multiply it by a thousand and make a really big number.

Examples:

The numbers 1 through 10:

I, II, III, IV, V, VI, VII, VIII, IX, X

The tens (10, 20, 30, 40, 50, 60, 70, 80, 90, 100):

X, XX, XXX, XL, L, LX, LXX, LXXX, XC, C

Try logging on to this website (link can be found on the pdf of this lesson) to test your understanding good luck.

https://www.ducksters.com/kidsmath/roman_numerals_questions.php

Adding or subtracting decimals mentally or with column method

When you have to add decimals the easiest thing to remember is that it is much easier to add or subtract them if they have the same number of decimal places.

Decimal place means how many digits after the decimal place.

Examples of numbers with one decimal place are: 4.3 7.9 23.7 764.2

Examples of numbers with two decimal places are: 5.32 3.07 874.32 90.20

Examples of numbers with three decimal places are: 4.342 89.564 432.008

For Example:

$3.2 + 4.67$ the 3.2 only has 1 decimal place and the 4.67 has 2 decimal places.

The easiest thing to do is to make the 3.2 into a number with 2 decimal places. This is done like this $3.2 = 3.20$

So we can change the original calculation to:

$$3.20 + 4.67$$

You can now solve this mentally or with column addition.

$$\begin{array}{r} 3.20 \\ +4.67 \\ \hline 7.87 \end{array}$$

Another example:

$78.432 - 34.2$ You would change the 34.2 into 34.200 so the you would then solve the calculation $78.432 - 34.200$

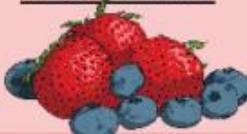
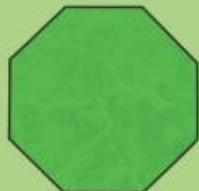
Again you could either solve this mentally or with the column method.

$$\begin{array}{r} 78.432 \\ +34.200 \\ \hline 44.232 \end{array}$$

Independent Tasks
Challenge 1
Please complete all of the place value and + and – questions on each slide (slides are under Challenge X)
Challenge 2
Please complete all of the place value and + and – questions on each slide, x and ÷, and fractions questions on each slide (Slides are under Challenge X)
Challenge 3
Complete all of the questions on every slide including the reasoning and problem solving (Slides are under challenge X)
Challenge X

Which question did you think was the hardest? How did you solve it?
 Could you come up with a similar question to it?

A

<p>Place Value Reveal answer</p> <p>What is this number? CLXXIV</p> 	<p>Fractions Reveal answer</p> <p>What number is hidden in these equivalent fractions?</p> $\frac{3}{\text{?}} = \frac{9}{15}$ 
<p>+ and - Reveal answer</p> $\begin{array}{r} 18926 \\ + 60275 \\ \hline \end{array}$ 	<p>Problem Solving Reveal answer</p> <p>A shape has 2 more sides than a hexagon. What is it called?</p> 
<p>× and ÷ Reveal answer</p> <p>Use a written method to solve this calculation:</p> $2005 \div 5 =$ 	<p>Reasoning</p> <p style="text-align: center;">If I count on from 15 in steps of 8 I will say the number 528.</p>  <p>Is Saniya correct? Explain your reasoning.</p>

B

Place Value

Reveal answer

Round 12 674 to the nearest ten.



+ and -

Reveal answer

$$26\,940 + 600 =$$

Reveal answer

$$10\,000 - 2800 =$$

× and ÷

Reveal answer

Use a written method to solve this calculation:

$$3563 \times 5 =$$

Fractions

Reveal answer

Convert this mixed number into an improper fraction:

$$5\frac{1}{2} =$$

Problem Solving

Reveal answer

Complete this calculation:

$$3.8 + 0.27 =$$

$$- 1.3$$

Reasoning

An angle measuring 205° is a reflex angle.



Is Jamil correct? Explain your reasoning.

C

Place Value

Reveal answer

Count forwards in steps of 100 from 3862. What are the first three numbers?



+ and -

Reveal answer

$$\begin{array}{r} 65996 \\ - 28899 \\ \hline \end{array}$$

× and ÷

Reveal answer

Use a written method to solve this calculation:

$$6461 \div 7 =$$

Fractions

Reveal answer

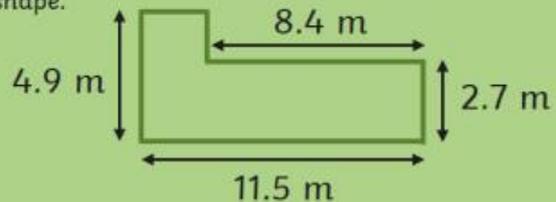
Use the **greater than** or **less than** symbols to compare these fractions:

$$\frac{3}{8} \quad \text{beach ball} \quad \frac{1}{2}$$

Problem Solving

Reveal answer

Calculate the perimeter of this compound shape.



Reasoning



40 minutes ago the time was 13:45



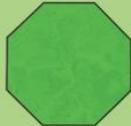
Is Saniya correct? Explain your reasoning.

Which type of question were you finding the trickiest? Can you do some research on line to help you improve on it? Perhaps tell an adult and see if they can help you better understand it.

Mark Scheme – Lesson 1

Independent Tasks	
	Challenge 1
	See below Challenge X
	Challenge 2
	See below Challenge X
	Challenge 3
	See below Challenge X
	Challenge X
	See below Challenge X

A

<p>Place Value</p> <p>What is this number? CLXXIV</p>  <div style="border: 1px solid black; padding: 5px; display: inline-block;">174</div>	<p>Fractions</p> <p>What number is hidden in these equivalent fractions?</p> $\frac{3}{5} = \frac{9}{15}$
<p>+ and -</p> $\begin{array}{r} 18926 \\ + 60275 \\ \hline 79201 \\ 111 \end{array}$	<p>Problem Solving</p> <p>A shape has 2 more sides than a hexagon. What is it called?</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;">An octagon</div> 
<p>× and ÷</p> <p>Use a written method to solve this calculation:</p> $2005 \div 5 = 401$	<p>Reasoning</p> <p>If I count on from 15 in steps of 8 I will say the number 528.</p>  <p>Is Saniya correct? Explain your reasoning.</p>

She is not correct. If you start on an odd number, which 15 is, and keep adding on an even number, which 8 is, the numbers you will get will always be odd numbers. 528 is an even number so we know she is wrong.

B

Place Value
Round 12 674 to the nearest ten.

12 670

+ and -

$$26\ 940 + 600 = 27\ 540$$

$$10\ 000 - 2800 = 7200$$

× and ÷
Use a written method to solve this calculation:

$$3563 \times 5 = 17\ 815$$

Fractions
Convert this mixed number into an improper fraction:

$$5\frac{1}{2} = \frac{11}{2}$$

Problem Solving
Complete this calculation:

$$3.8 + 0.27 = 5.37 - 1.3$$

Reasoning

An angle measuring 205° is a reflex angle.

Is Jamil correct?
Explain your reasoning.

He is correct because a reflex angle is an angle that measures between 180 and 360 degrees.

Place Value
Count forwards in steps of 100 from 3862. What are the first three numbers?

3962

4062

4162

+ and -

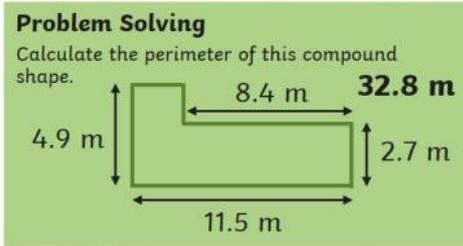
$$\begin{array}{r} 65996 \\ - 28899 \\ \hline 37097 \end{array}$$

× and ÷
Use a written method to solve this calculation:

$$6461 \div 7 = 923$$

Fractions
Use the **greater than** or **less than** symbols to compare these fractions:

$$\frac{3}{8} < \frac{1}{2}$$



Reasoning

40 minutes ago the time was 13:45

Is Saniya correct?
Explain your reasoning.

She might be right but she might be wrong. It depends on whether the clock is showing the afternoon time or the morning time. If it is showing the morning time then the time would be 01:45 and she would be wrong, but if the clock is showing the afternoon time then 40 minutes ago it would be 13:45 and she would be correct.

Review

Which type of question were you finding the trickiest? Can you do some research on line to help you improve on it?

Personal answers. Perhaps tell an adult in your house.

