

Year 5 Home Learning – Week Beginning 22nd June 2020

Hello Year 5,

Here are some learning activities for you to try at home. Remember to send us your photographs for our class padlet. Stay home, stay safe and have fun with your learning!

Mrs Waters, Mrs Ferreira and Mrs Hudson x

Topic

Fairgrounds, in this unit of learning pupils will gain an understanding of the importance of forces and how these affect objects, mechanisms and the world around them, including themselves.

Forces – unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
Some mechanisms, including levers and pulleys, allow a smaller force to have a greater effect.

Key vocabulary - variables, accuracy, precision, causal relationships, gravity, mechanisms, levers, pulleys, transfers, fulcrum, fair test

Weekly task – as before take your time and concentrate on using; your science vocabulary, accuracy, ensure it is a fair test (only change one thing at a time) and present your finding clearly and neatly.

The NHM recovery team have been in contact saying that the meteorite is in a large crater and they need to get it out.

Please can you help them come up with a plan, all they have to aid them are; a wooden plank, a rock, rope, old oil cans and a ground sheet.

Do you remember what levers and pulley systems are?

Watch this video to remind you. <https://www.youtube.com/watch?v=jtk2V0M6k3M>

Levers can help lift a very heavy object using a much smaller force. Make a 'balance' a seesaw, (a type of lever), using weighted Lego figures or something similar.

What happened? Now move one Lego person closer to the middle of the seesaw – what happens?
(That Lego person goes up – the seesaw is unbalanced, as are the forces.)

Try again, but this time move the balancing platform (this is what we call this a fulcrum). How can you explain what you have seen happen? Moving one weight closer to the fulcrum has what effect?

Moving the fulcrum has what effect? What is it that causes the seesaw to go down? (Gravity acting on the Lego™ figure) - It needs an opposite/resistance force (weight of other figure) to balance it or move it upwards.

How using a lever would help the recovery team.
This is shown in science **image 1**.

Lever Investigation

Use **science image 2** to make a table top seesaw. Remember you can use whatever you have at home it's your seesaw.

You will need to identify where the best position is for the fulcrum (the point against which a lever is placed or on which it turns or is supported) in a simple lever. Identify those things that will need to stay constant while you take measurements and make observations for your main variable.

Plan methodically to ensure your testing is fair, logical and the results are not unreliable.

Lever remit:

- The lever needs to enable two 70kg people to lift a 200kg meteorite

Equipment:

- Table top seesaws (already prepped for lesson)
- Movable fulcrum
- Modelling clay

Possible variables to investigate What are you investigating? Can you come up with an enquiry question for your investigation?

Measuring and recording your results

What will you need to measure in order to know where the fulcrum needs to be?

What will you use to measure with?

How will you record your results? Think about what will help you to see the best outcome for the remote team.

Your findings

What have you found out?

Can you make any conclusive observations?

Can you make any recommendations?

Record your recommendations in the form of a diagram, showing where forces are acting and the positioning of the fulcrum

Monday

Maths

1 Complete the division sentences.

Th	H	T	O
		6	0

$60 \div 10 = \square$

Th	H	T	O
	4	9	0

$490 \div 10 = \square$

Th	H	T	O
1	4	9	0

$1,490 \div 10 = \square$

Try:

$1350 \div 10 =$

$2450 \div 10 =$

$5360 \div 10 =$

$4530 \div 10 =$

What do you notice about your answers?

2 Complete the division sentences.

$a) 90 \div 10 = \square$

$e) 32,390 \div 10 = \square$

$b) 750 \div 10 = \square$

$f) 6,200 \div 10 = \square$

$c) 820 \div 10 = \square$

$g) 700 \div 10 = \square$

$d) \square = 1,460 \div 10$

$h) 92,000 \div 10 = \square$

English

Our spellings for the week are:

aggressive
amateur
existence
explanation
recommend
restaurant

Reading Comprehension

Read Chapter 2 of Banana Boy Slides Again and answer these questions in your book. Remember to use full sentences and use evidence from the text.

1. Why is Millie so strong?
2. Find and copy two words that represent a sound.
3. Why is Ben happy when his mum doesn't recognise him?
4. What might make the monster hard to attack?
5. Why did the clown laugh when Ben shot bananas at it?

Which words tell you that Ben is frightened of the new monster?

3 Complete the divisions.

HTh	TTh	Th	H	T	O
			9	0	0

$900 \div 100 = \square$

HTh	TTh	Th	H	T	O
	1	6	0	0	0

$16,000 \div 100 = \square$

HTh	TTh	Th	H	T	O
		9	0	0	0

$9,000 \div 1,000 = \square$

HTh	TTh	Th	H	T	O
7	6	8	0	0	0

$768,000 \div 1,000 = \square$

4 Explain to a partner how to divide a number by 100
Ask them to explain to you how to divide a number by 1,000

Tuesday

1. Alex is thinking of a number. She divides it by 100 The answer has one more in the hundreds column than in the tens column. The total of the digits is 15 What could the number be?

Vocabulary

Find these words in the story. Write them in your book and explain what they mean.

creepy
fastening
horror
panic
slamming
tossed

Now write two new sentences for each word, making sure you use it correctly.

5 Complete the division sentences.

a) $4,500 \div 10 = \square$ c) $\square \div 10 = 76$
 $62,000 \div 10 = \square$ $\square \div 100 = 76$
 $739,300 \div 10 = \square$ $\square \div 1,000 = 76$

b) $4,500 \div 100 = \square$ d) $\square \div 1,000 = 30$
 $62,000 \div 100 = \square$ $\square \div 1,000 = 300$
 $739,300 \div 100 = \square$ $\square \div 1,000 = 3,000$

6 Complete the table.

Number	Number divided by 10	Number divided by 100	Number divided by 1,000
65,000			
	7,200		
		3,500	

7 Write $>$, $<$ or $=$ to make the statements true.

a) $4,900 \div 10$ $4,900 \div 100$
b) $56,000 \div 100$ $65,000 \div 100$
c) $93,000 \div 1,000$ $9,300 \div 100$
d) $5,700 \div 100$ $5,700 \div 1,000$

Grammar

Using prefixes

A prefix is a group of letters we add to the front of a word to change its meaning. Add the correct prefix to the words in the sentences below. You will only need to choose six! Write each sentence out fully in your book.

Prefixes

over+	under+
over+	under+
super+	un+
super+	un+

Sentences

- Ben was _____ happy that Millie had his costume.
- When Ben put on his costume, he got _____ powers.
- Millie was _____ tired when she stopped bouncing.
- Ben was now Banana Boy, the _____ hero.
- The monster had an _____ ground den beneath the town.
- Ben's room was always very _____ tidy.

	<p>9 In 2019, 568,000 houses were built. In 2018, 10 times fewer houses were built. In 2017, 100 times fewer houses were built.</p> <p>a) How many houses were built in 2018?</p> <p style="text-align: right;"><input type="text"/> houses</p> <p>b) How many houses were built in 2017?</p> <p style="text-align: right;"><input type="text"/> houses</p> <p>c) How many houses were built between 2017 and 2019?</p> <p style="text-align: right;"><input type="text"/> houses</p>	
<p>Wednesday</p>	<p>Create a poster/ poem or a set of instructions for how to accurately divide by 10, 100 and 1000 – keep it so you can use it as revision in year 6. Are there any ways to help you remember what to do? Can you use some examples too?</p> <p>If you want an extension task – do the same for multiplying by 10,100 and 1000. are there any trends or patterns you can see?</p> <p>Use this time too to revise your 2-12 x tables. Use TTRS to help. Can you write every times table out correctly? If there are any tables you struggle with really use this time to learn them. Year 6 Maths will really help if you know your tables especially for fractions, word problems, reasoning etc.</p>	<p style="text-align: center;">Prediction</p> <p>What has the monster turned into? You have three options to choose from:</p> <ul style="list-style-type: none"> A. A huge, banana-eating monkey. B. A giant fairy with a sparkly wand C. A pink unicorn. <p>Choose an option and then write the first couple of paragraphs of the next chapter.</p>

Thursday

3 Complete the multiplication sentences.

Show all the steps in your thinking.

a) $7 \times 500 =$

b) $6,000 \times 8 =$

c) $300 \times 90 =$

d) $500 \times 300 =$

4 Complete the calculations.

a) $300 \times$ $= 9,000$

d) $\times 90 = 27,000$

b) $6,000 \times$ $= 18,000$

e) $500 \times 60 =$

c) $700 \times$ $= 28,000$

f) $8,000 \times$ $= 720,000$

5

$42 \times 3 = 126$

Use this fact to solve the calculations.

a) $42 \times 30 =$

c) $300 \times 42 =$

b) $420 \times 3 =$

d) $42 \times 3,000 =$

Practise your spellings for the week

Spelling:

Continue to play games on Spelling Frame.
You could focus on these Y5/6 statutory spelling words this week:

aggressive
amateur
existence
explanation
recommend
restaurant

Reading

Show an enjoyment for reading by reading a book of your choice. Aim to read for at least 10 minutes per day.
You could always use your Reading Record to record what you have read.

Friday

6 Here are two methods to solve 16×50

Method 1	Method 2
$16 \times 10 \times 5$	$16 \times 5 \times 10$
$= 160 \times 5$	$= 80 \times 10$
$= 800$	$= 800$

- a) What is the same about the methods?
What is different?
- b) What other method could you use to multiply by 50?
Show your method.

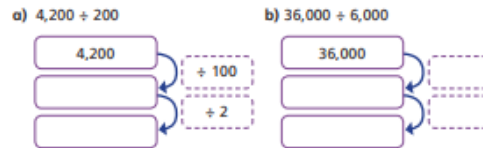
c) Share your method with a partner.

7 Jack and Mo are calculating $3,500 \div 70$

Jack's workings	Mo's workin
$3,500 \div 10 = 350$	$3,500 \div 10 =$
$350 \times 7 = 2,450$	$350 \div 7 = 50$

- a) Whose workings are correct? _____
- b) What mistake has the other person made?

8 Complete the division diagrams.



Complete the division sentences.

- c) $3,200 \div 80 = \square$ d) $72,000 \div 9,000 = \square$
- $3,200 \div 800 = \square$ $72,000 \div 900 = \square$
- $72,000 \div 90 = \square$

9 Match the calculations to the answers.

One has been done for you.

8×40	3,200
$3,200 \div 80$	320
4×800	40
$32,000 \div 40$	800

10 The answer is 400

What could the question be?

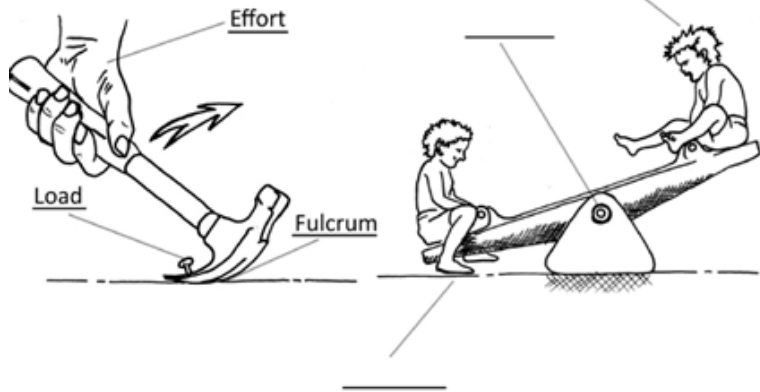
Write 4 division and 4 multiplication questions.

Ask a partner to check your questions.

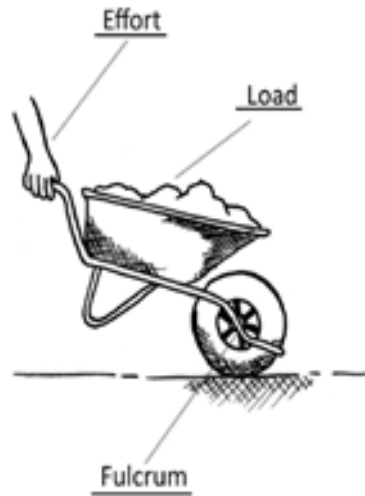
Haiku

A haiku poem has three lines. The first line has five syllables, the second line has seven syllables and the third line has five syllables. A syllable is a part of a word that has a single sound. For example, the word banana has three syllables (ba/na/na). Now try to write your own haiku, describing the action in this chapter.

Types of lever

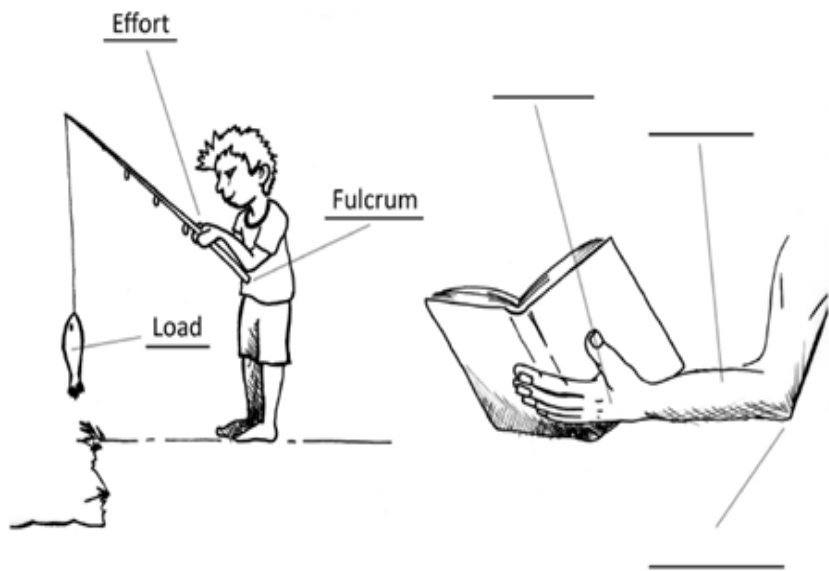


Other examples are: pliers, crowbar, scissors, rowing a boat



Other examples are: nut crackers, nail clippers

Science
Images I



Other examples are: sugar tongs, pair of tweezers

Table top seesaws

Making a table top seesaw is quick and easy. Below is one simple suggestion, but you may wish to use a different fulcrum (e.g. a cotton reel). **If you are using heavier loads, ensure you use more solid materials.**

You will need

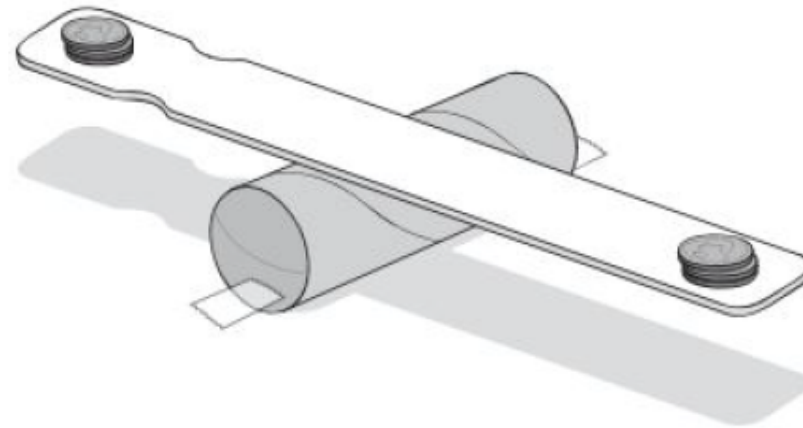
Wood (equal size, cut to be the platforms)
Tape
Toilet-roll tube

Build your seesaw

Tape the toilet-roll tube to the table as shown.

This is your **fulcrum**, the point where your platform rests.

Balance your seesaw platform on top.



You can use different materials for the platform or for the fulcrum, but you should ensure that these match across all of your seesaws to ensure fairness. Cotton reels, steel tubes, and off-cut planks could all be used to replace these materials to produce a more solid lever.

Science image

LEVER INVESTIGATION	Enquiry question/s:							
Variables we kept the same:					Variable changed:			
Distance of fulcrum from load:								
Can the load be lifted?								
Does load x distance of load to fulcrum = effort x distance of effort to fulcrum								
Overall recommendations								
Scientific rationale								
Possible improvements to our investigation								
What else could we have investigated?								

Science image 3

Maths Answers:

Monday and Tuesday

1 Complete the division sentences.

a)

Th	H	T	O
		6	0

 $60 \div 10 =$

b)

Th	H	T	O
	4	9	0

 $490 \div 10 =$

c)

Th	H	T	O
1	4	9	0

 $1,490 \div 10 =$

d) What happens to the digits when you divide a number by 10?

They move one place to the right.

2 Complete the division sentences.

a) $90 \div 10 =$

e) $32,390 \div 10 =$

b) $750 \div 10 =$

f) $6,200 \div 10 =$

c) $820 \div 10 =$

g) $700 \div 10 =$

d) $= 1,460 \div 10$

h) $92,000 \div 10 =$

HTh	TTh	Th	H	T	O
			9	0	0

 $900 \div 100 =$

b)

HTh	TTh	Th	H	T	O
	1	6	0	0	0

 $16,000 \div 100 =$

c)

HTh	TTh	Th	H	T	O
		9	0	0	0

 $9,000 \div 1,000 =$

d)

HTh	TTh	Th	H	T	O
7	6	8	0	0	0

 $768,000 \div 1,000 =$

4 Explain to a partner how to divide a number by 100
Ask them to explain to you how to divide a number by 1,000

5 Complete the division sentences.

a) $4,500 \div 10 =$

c) $\div 10 = 76$

$62,000 \div 10 =$

$\div 100 = 76$

$739,300 \div 10 =$

$\div 1,000 = 76$

b) $4,500 \div 100 =$

d) $\div 1,000 = 30$

$62,000 \div 100 =$

$\div 1,000 = 300$

$739,300 \div 100 =$

$\div 1,000 = 3,000$

6 Complete the table.

Number	Number divided by 10	Number divided by 100	Number divided by 1,000
65,000	6,500	650	65
72,000	7,200	720	72
350,000	35,000	3,500	350

7 Write $>$, $<$ or $=$ to make the statements true.

a) $4,900 \div 10$ $>$ $4,900 \div 100$

b) $56,000 \div 100$ $<$ $65,000 \div 100$

c) $93,000 \div 1,000$ $=$ $9,300 \div 100$

d) $5,700 \div 100$ $>$ $5,700 \div 1,000$

8 Complete the sentences.

a) Dividing a number by 10 and then by 10 again is the same as

dividing by 100

b) Dividing a number by 1,000 is the same as dividing by 10

and then by 100

9 In 2019, 568,000 houses were built.

In 2018, 10 times fewer houses were built.

In 2017, 100 times fewer houses were built.

a) How many houses were built in 2018?

56,800 houses

b) How many houses were built in 2017?

5,680 houses

c) How many houses were built between 2017 and 2019?

630,480 houses

10 Alex is thinking of a number.

She divides it by 100

The answer has one more in the hundreds column than in the tens column.

The total of the digits is 15

What could the number be?

E.g. 87,000

Multiples of 10, 100 and 1,000

- 1 Mo is multiplying numbers by 20

To multiply by 20, I multiply first by 2 and then by 10



- a) Use Mo's method to complete the multiplication sentences.

$$7 \times 20 = 140$$

$$12 \times 20 = 240$$

$$20 \times 134 = 2680$$

- b) Would you get the same answer if you multiplied by 10 first and then by 2? Yes

Write an example.

$$7 \times 2 \times 10 = 14 \times 10 = 140$$

$$7 \times 10 \times 2 = 70 \times 2 = 140$$

- 2 Complete the sentences.

- a) To multiply by 50, you multiply by 5 first and then by

- b) To multiply by 200, you multiply by first and then by

- c) To multiply by 7,000 you multiply by first and then by

- 3 Complete the multiplication sentences. Show all the steps in your thinking.

a) $7 \times 500 = 3,500$

b) $6,000 \times 8 = 48,000$

c) $300 \times 90 = 27,000$

d) $500 \times 300 = 150,000$

- 4 Complete the calculations.

a) $300 \times 30 = 9,000$

d) $300 \times 90 = 27,000$

b) $6,000 \times 3 = 18,000$

e) $500 \times 60 = 30,000$

c) $700 \times 40 = 28,000$

f) $8,000 \times 90 = 720,000$

- 5

$$42 \times 3 = 126$$

Use this fact to solve the calculations.

a) $42 \times 30 = 1,260$

c) $300 \times 42 = 12,600$

b) $420 \times 3 = 1,260$

d) $42 \times 3,000 = 126,000$

- 6 Here are two methods to solve 16×50

Method 1

$$\begin{aligned} 16 \times 10 \times 5 \\ = 160 \times 5 \\ = 800 \end{aligned}$$

Method 2

$$\begin{aligned} 16 \times 5 \times 10 \\ = 80 \times 10 \\ = 800 \end{aligned}$$

- a) What is the same about the methods?
What is different?

- b) What other method could you use to multiply by 50?
Show your method.

e.g. $16 \times 100 \div 2 = 1,600 \div 2 = 800$

- c) Share your method with a partner.

- 7 Jack and Mo are calculating $3,500 \div 70$

Jack's workings

$$\begin{aligned} 3,500 \div 10 = 350 \\ 350 \times 7 = 2,450 \end{aligned}$$

Mo's workings

$$\begin{aligned} 3,500 \div 10 = 350 \\ 350 \div 7 = 50 \end{aligned}$$

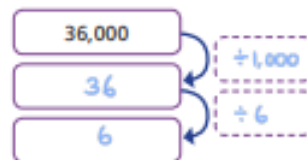
- a) Whose workings are correct? Mo
b) What mistake has the other person made?

- 8 Complete the division diagrams.

a) $4,200 \div 200$



b) $36,000 \div 6,000$



Complete the division sentences.

c) $3,200 \div 80 =$

d) $72,000 \div 9,000 =$

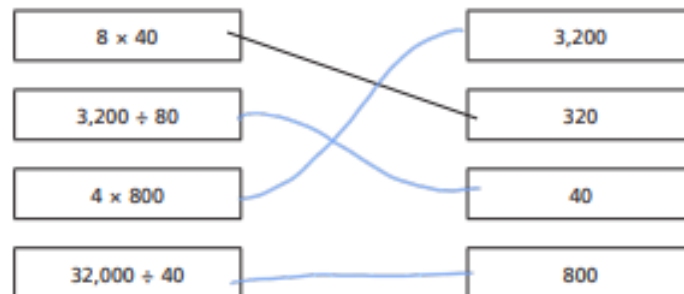
$3,200 \div 800 =$

$72,000 \div 900 =$

$72,000 \div 90 =$

- 9 Match the calculations to the answers.

One has been done for you.



- 10 The answer is 400

What could the question be?

Write 4 division and 4 multiplication questions.

Ask a partner to check your questions.