"Oak National Academy is a new collection of high-quality lessons and online resources. Backed by the Government, it has been created in response to the coronavirus lockdown.

Their online classroom offers free access to great teachers, delivering video lessons, quizzes and worksheets. Available for both primary and secondary levels, it covers a range of subjects. All of the lessons are ordered so your child can learn along a clear plan. They'll provide new lessons and resources each week.

Oak National Academy will fit alongside other resources such as BBC Bitesize to offer a structure for the day for children until schools fully reopen.

Oak National Academy was built at speed; at present their resources are for pupils who usually access their schools' curriculum in mainstream education, from reception through to year 10, without significant support or adaptation. They're currently working on providing support for teachers working with pupils with additional needs, and teachers based in specialist settings. Next week they hope to launch materials for pupils not able to access all aspects of their current offer." Information taken from the Oak National Academy website (https://www.thenational.academy/information-for-parents-pupils/)

The Oak National Academy lessons can be accessed here: https://www.thenational.academy/online-classroom

As you are aware, at Victoria Dock Primary School we provide a home learning pack every week which is created by our class teachers. Although we have these plans already in place, we understand that some families may prefer to work from the materials made available through the Oak National Academy. This is absolutely fine, and we are thrilled to see so many children learning at home and taking the opportunity to also do all kinds of things at home which are not usually taught in the classroom.

Feel free to continue to use our home learning grids (like the one below) or the lessons provided by the Oak National Academy. Either way, we would love you to keep in touch and show us the wonderful things you are doing at home, using Seesaw, Classdojo or Twitter.

Stay safe and we look forward to returning to school to see everyone's smiling faces.

Home Learning Grid
Year 6
Week Commencing – 01.06.20
Work to be completed in home learning books

|	Monday	Tuesday	Wednesday	Thursday	Friday
Spelling/ Fast Maths	**Fast Maths** https://forms.gle/oUrNwXiAUoLuuhgT6	**Fast Maths** https://forms.gle/ZS2DgBNGBA3Jv1qB9	**Fast Maths** https://forms.gle/A3A5tJsJ5YGpQPDM9	**Fast Maths** https://forms.gle/wgmyy5X5WeTiJmMJ9	**Times Tables Rock Stars** Can you set a new high score on Timetable Rockstars here ?
Reading	**First News** See the First News article below and have a go at the questions.	**Crater Lake** Read chapter 16 and complete the vocabulary crossword below.	**Crater Lake** Read chapter 17 and complete the author's intent task below.	**Crater Lake** Enjoy reading to the end of chapter 18. That's it – enjoy reading.	**First News** See the First News article below and have a go at the puzzle.
Writing	**My Favourite Sentence Stacking Sessions** For quite a while now, I've been recommending the sentence stacking sessions Jane Considine does every week day morning. I've been trying my best to keep up with them myself and there are some fab ones. Take a look at my favourite four below and have a go at writing a chunk, or choose your own of course. Partly Cloudy Piper Bao Alma				**100 Word Challenge** See below for the 100 Word Challenge for this week.
Maths	**FDP** Complete the 'Fractions to percentages' task below. Click here for video tutorials.	**FDP** Complete the 'Equivalent FDP' task below. Click here for video tutorials.	**FDP** Complete the 'Order FDP' task below. Click here for video tutorials.	**FDP** Complete the 'Percentage of an amount' task below. Click here for video tutorials.	**Friday Challenge** Go here and look for the Friday challenge to really test your understanding of this week's maths.
Challenge	**Writing** Take a look here for some ace sentence stacking lessons for you to do some creative writing.	**Art** Join in Rob Biddulph's live art workshop and competition at 10AM here.	**Times Tables Rock Stars** Can you set a new high score on Timetable Rockstars here ?	**Marble Run** Take a look at this idea to make a marble run at home, below.	**Mangahigh** Can you get some new gold medals on Mangahigh here?

Reading (Monday)

WORLD NEWS
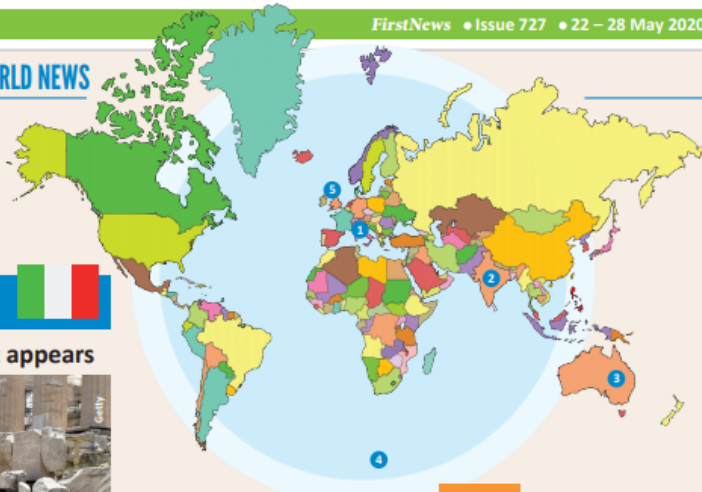
ITALY

Pantheon pit appears

A sinkhole has opened up outside the Pantheon in Rome, revealing ancient Roman paving stones buried under the city. The sinkhole is almost 1m across and 2.5m deep. Fortunately, lockdown restrictions meant that the usually crowded area outside the Pantheon was empty, so no-one was injured. The paving stones found in the sinkhole are estimated to be from 27-25 BC – around the same time the Pantheon was built.

INDIA

Kerala's 'coronavirus slayer'

Kerala's health minister, KK Shailaja, has earned a number of new nicknames, including 'Rock star health minister' and 'coronavirus slayer', for her success in stopping the spread of COVID-19 in the state. Kerala is home to 35 million people, yet has seen just 524 cases of COVID-19 and four deaths. Three days after reading about the new virus in China, Shailaja held a meeting to decide Kerala's strategy for stopping the disease. The first case arrived on 27 January from Wuhan. All passengers had their temperature tested, and everyone had to quarantine themselves. Since then, Kerala has been tracking and tracing all spread of the disease.

AUSTRALIA

Night at the museum

A man from Sydney is due in court after breaking into the Australian Museum to snap selfies with the dinosaur exhibits. The man, who reportedly spent 40 minutes in the museum, was seen on CCTV taking pictures with his head in the mouth of a T-rex skull. He also stole a cowboy hat from the locker of one of the museum's staff members. Police put out a warning to the trespasser on TV news, warning him: "It's not going to be a movie producer knocking on your door. It's going to be NSW Police knocking on your door." The man turned himself in that afternoon.

ANTARCTICA

Snow goes green

In the slightly warmer parts of ice-covered Antarctica, algae can bloom in the snow, turning it bright green. This algae absorbs greenhouse gases from the atmosphere. Researchers from the University of Cambridge have spent two summers creating a map of all the places that this algae appears – and have found that, as the world gets warmer, the green snow is spreading, and could turn the coast of the continent green one day. "This is important in our understanding of land-based life on Antarctica," said Dr Matt Davey, who led the study.

SCOTLAND

Ancient settlement unearthed

A massive ancient settlement has been discovered by archaeologists on a hill near Rhynie in Aberdeenshire. Researchers from the University of Aberdeenshire believe the settlement was home to roughly 4,000 people living in around 800 huts, making it one of Britain's largest ancient settlements. The archaeologists also found evidence of one larger hut within the settlement, suggesting that an important figure lived in the community.

GLOSSARY

Aberdeenshire – A county in Scotland
algae – A type of plant
exhibits – Displays
Kerala – A state in the southwest of India
NSW – New South Wales, a state in the southeast of Australia
Pantheon – An ancient Roman temple in Italy
settlement – A place where people lived or settled in a community
sinkhole – When the ground collapses, leaving a hole
slayer – Killer
trespass – To go on someone else's land or property without permission

WORLD NEWS

● **Look at the news from Italy.**

1a. Match the word to the correct definition.

sinkhole	An ancient Roman temple in Italy
Pantheon	When the ground collapses, leaving a hole

1b. What did the sinkhole reveal?
1c. Explain why it was fortunate that the sinkhole appeared during lockdown.

● **Look at the news from Scotland.**

2. Find the facts.

Location of settlement:	
Approximate number of huts in the settlement:	
Number of people who could have lived in the settlement:	

3. What have archaeologists found evidence of and what do they think this tells us about the community that lived there?

● **Consider both news stories.**

4. Which of these two historical sites would you most like to visit? Explain your reasons.

● **Look at the news from Antarctica.**

5. What is happening to make the snow turn green? (Top tip: look at the glossary to find out what algae is.)

6. Researchers have found more algae is growing each year in Antarctica. Do you think this is a positive or a negative finding? Explain why.

● **Look at the news from India.**

7a. What does the word 'slayer' mean?
7b. Why are people calling the health minister in Kerala the "coronavirus slayer"?

8. What steps did the health minister take to stop the spread of COVID-19 in Kerala? Find two.

● **Look at the news from Australia.**

9. The night-time trespasser handed himself in to police the next afternoon. Imagine you are this man. Give an explanation of your behaviour to the police.

● **Consider all the news stories.**

10. Who would you most like to interview?

☐ KK Shailaja, Kerala's health minister
☐ The scientist in charge of the research from Antarctica
☐ The archaeologists who discovered the ancient settlement in Scotland
☐ The man from Australia who broke into the museum

Think of three questions you would like to ask to find out more about their story.

Crater Lake - Chapter 16

Find these single words from the text which fit the following clues.
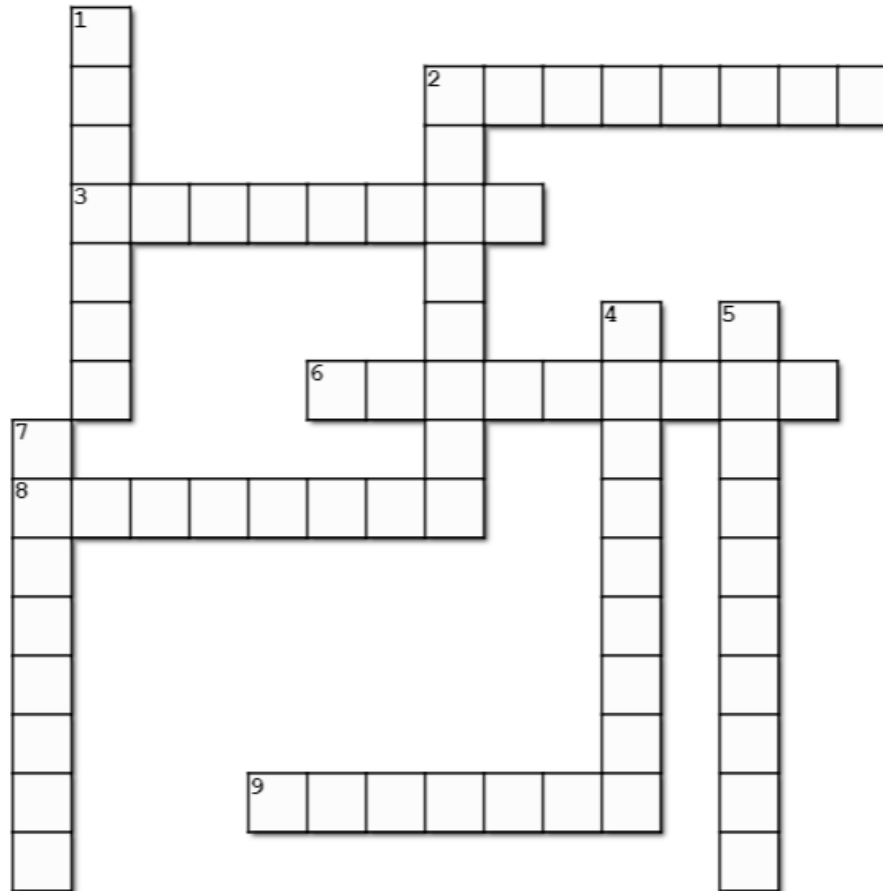
Across

2. Lance's heart pounds in his chest.
3. How tired Mak seems when he falls asleep on the CPAP.
6. How everyone else has been turned into a wasp-thing.
8. An area where there are no trees.
9. Meaning the aliens mean harm and are aggressive.

Down

1. Lance searches his bag thoroughly.
2. How the gang are walking for a long time through the woods.
4. Giving themselves up to save others.
5. Describing how awful and unimaginable it was to lock Trent in the toilets.
7. Trent does this when he starts feeling like he will be found out.

Reading (Wednesday)

Following on from yesterday's vocabulary session, let's have a look at some key phrases used by the author to enhance meaning in chapter 17. For each of these phrases, find it in the text and explain what effect the author is trying to have on the reader. Think about what it means and why bother writing it like this.

e.g. "I might pass out." = This shows how tired Lance must be. Jennifer Killick used "pass out" to show how extreme Lance's tiredness must be. It feels like a life and death situation, which I kind of suppose it is.

like last week's P.E kit
only less stealthy and with more under-breath swears
I hold my breath
My heart is pounding and my mouth dry.

Reading (Friday)

Here is a Front Page news story from *First News*. Can you match the keywords below the story to their meanings? When you have identified each word, can you put them back into their correct place in the story, so it makes sense?

CORONAVIRUS NEWS

COVID-K9

CAN dogs sniff out coronavirus?

Maybe! Trials are taking place to see if specially-trained 'COVID dogs' can tell whether people have the coronavirus, even before they show any _ _ _ _ _ _ _'.

The dogs can already _ _ _ _ _ _ certain cancers, so the Government is spending half a million pounds to see if they can help spot people with COVID-19, too.

World-leading _ _ _ _ _ _ _ _ _ at the London School of _ _ _ _ _ _ & _ _ _ _ _ _ Medicine are working with the charity Medical Detection Dogs and Durham University for the _ _ _ _ _. Medical Detection Dogs has already successfully trained dogs to detect the _ _ _ _ _ of many different _ _ _ _ _ _ _ _

in humans, such as cancer, malaria and Parkinson's disease. The clever canines can detect the odour of disease at the same dilution of one teaspoon of sugar in two Olympic-sized swimming pools of water.

This new trial will look at whether the dogs, a mixture of Labradors and cocker spaniels, can be trained to detect coronavirus in people, too. If they can do it, each dog could screen up to 250 people an hour.

Dr Claire Guest, co-founder of Medical Detection Dogs, said: "We are incredibly proud that a dog's nose could once again save many lives."

Keyword	Meaning
	Maintaining and preventing disease, especially through cleanliness (noun 7)
	A test or experiment (noun 5)
	Scientists carrying out trials and experiments in order to make discoveries (plural noun 11)
	Find; identify (verb 6)
	Relating to parts of the world that are extremely hot and humid, in which interesting plants and flowers grow (adjective 8)
	Smell; scent (noun 5)
	Illnesses; ill health (plural noun 8)
	Signs of sickness (plural noun 8)

- diseases
- detect
- symptoms
- odour
- hygiene
- tropical
- researchers
- trial

Writing (Friday)

Welcome to another 100 Word Challenge from home. (I know I said that the last one was final but it turns out, I was wrong.) You can write whatever you want, inspired by the picture below. You must write no more than 100 words so treat every word like it is gold. Upload whatever writing you do, either a photo or submitted as a Seesaw note, and a winner will be chosen at the end of the school day on Friday. You could write a description, a story, a newspaper article (or part of) or anything you would like at all. Have fun.

Maths (Monday)

Fractions to percentages

1
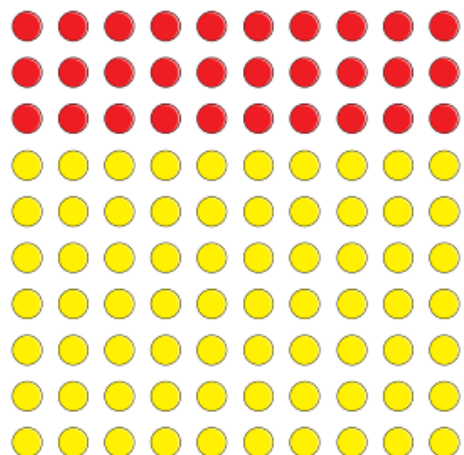
a) What fraction of the array of counters is red?

b) What fraction of the array of counters is yellow?

c) What percentage of the array of counters is red? [ ] %
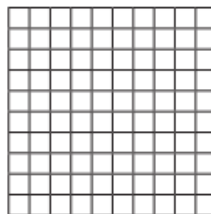
d) What percentage of the array of counters is yellow? [ ] %
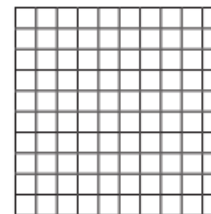
e) What do you notice about the two percentages?

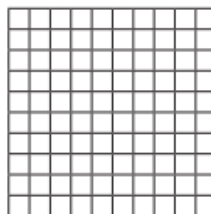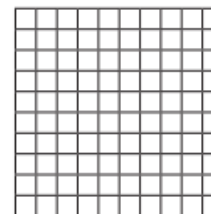**2** a) Shade the hundred squares to represent the fractions.

$\frac{40}{100}$

$\frac{65}{100}$

$\frac{1}{2}$

$\frac{7}{10}$

b) Write the fractions as percentages.

$\frac{40}{100} = $ [ ] % $\frac{65}{100} = $ [ ] %

$\frac{1}{2} = $ [ ] % $\frac{7}{10} = $ [ ] %

c) Compare your shaded grids with a partner's.

What is the same and what is different?

3 Fill in the missing numbers.

a) $\frac{9}{10} = \frac{\boxed{}}{100} = \boxed{}$ %

b) $\frac{9}{20} = \frac{\boxed{}}{100} = \boxed{}$ %

c) $\frac{9}{50} = \frac{\boxed{}}{100} = \boxed{}$ %

d) $\frac{9}{25} = \frac{\boxed{}}{100} = \boxed{}$ %

4

"$\frac{1}{10}$ is 10%, so $\frac{1}{20}$ must be 20%."

Explain the mistake that Ron has made.

What is the correct answer?

$\frac{1}{20} = \boxed{}$ %

5 Convert the fractions to percentages.

a) $\frac{1}{4} = \boxed{}$

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

$\frac{3}{4} = \boxed{}$

b) $\frac{1}{5} = \boxed{}$

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

$\frac{4}{5} = \boxed{}$

c) $\frac{16}{20} = \boxed{}$

d) $\frac{45}{50} = \boxed{}$

$\frac{8}{20} = \boxed{}$

$\frac{4}{20} = \boxed{}$

$\frac{9}{10} = \boxed{}$

$\frac{18}{20} = \boxed{}$
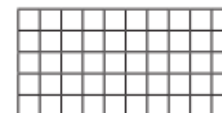
e) What do you notice?

6 a) Shade the grid in the given proportions.

- $\frac{3}{5}$ green
- 14% red
- $\frac{4}{20}$ blue
- the rest yellow

b) What percentage of the grid is yellow?

$\boxed{}$ %

7 a) Use each digit card once to make the statements correct.

| 1 | 2 | 3 | 4 | 5 |

$\frac{\boxed{}}{\boxed{}} > \boxed{}0\%$

$75\% = \frac{\boxed{}}{4}$

$\frac{3}{\boxed{}} < 65\%$

b) Are there any other solutions?

Maths (Tuesday)

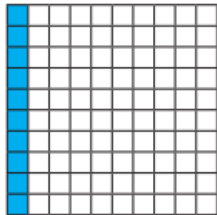## Equivalent FDP

1 What fraction, decimal and percentage of each grid is shaded blue?
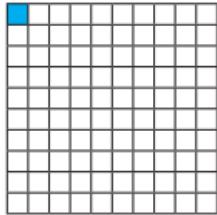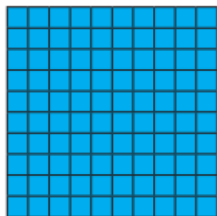
fraction =

decimal =

percentage =

fraction =

decimal =

percentage =

fraction =

decimal =

percentage =

2 Match the equivalent fractions, decimals and percentages.

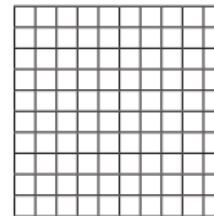| $\frac{15}{100}$ | 0.05 | 5% |
$\frac{1}{20}$	0.5	15%
$\frac{1}{5}$	0.2	50%
$\frac{1}{2}$	0.15	20%

3 a) Shade the grid in the given proportions.

- $\frac{3}{10}$ green
- 0.03 red
- 13% blue
- 0.3 yellow

b) What proportion of the grid is unshaded?

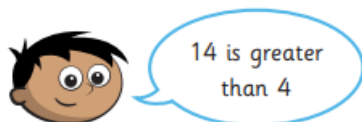Write your answer as a fraction, decimal and percentage.

fraction =   decimal =   percentage =

4 Complete the table.

Fraction	Decimal	Percentage
	0.21	
		12%
$\frac{2}{10}$		
	0.4	
	0.44	
		4%
$\frac{3}{4}$		
	0.99	

5 Amir was asked to complete the statement using <, > or =.

14% > 0.4

14 is greater than 4

What mistake has Amir made?

_____

_____

6 Match the decimal cards to the people.

My decimal is $\frac{4}{10}$ less than 100%.

My decimal cannot be simplified when it is written as a fraction.

My decimal is 10% less than $\frac{3}{4}$

My decimal is greater than 60%.

0.65

0.57

0.61

0.6

7 Use the digit cards to write a decimal greater than $\frac{1}{5}$ but less than 40%.

You may not use a card more than once in each number.

0	1	2	3	4	5

☐ . ☐ ☐

How many other answers can you find?
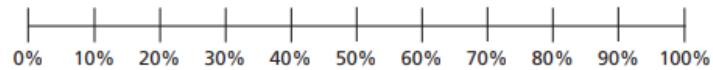
Maths (Wednesday)

Order FDP

1 Write <, > or = to complete the statements.

a) 64% ◯ 0.46

d) 0.8 ◯ 80%

b) 0.96 ◯ $\frac{97}{100}$

e) 67% ◯ $\frac{7}{10}$

c) $\frac{3}{5}$ ◯ 35%

f) $\frac{7}{20}$ ◯ 0.3

2 Draw arrows to estimate the positions of the fractions, decimals and percentages on the number line.

a) 9% $\frac{9}{10}$ 0.99   19%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

b) $\frac{2}{5}$ 0.52   45%   0.2

0    $\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ 1

3 Write the fractions, decimals and percentages in ascending order.

a) $\frac{7}{10}$ $\frac{13}{100}$ 21%   0.9

_____

b) 0.6   61% $\frac{37}{50}$ 0.66

_____

c) 47%   0.89 $\frac{63}{100}$ 12%

_____

d) Which part was easiest to order: a), b) or c)? _____

Why?

_____

_____

e) Which set was most difficult to order: a), b) or c)? _____

Why?

_____

_____

f) Compare answers with a partner.

What is the same and what is different?

4 These fractions, decimals and percentages are in descending order.

99% $\dfrac{89}{100}$ 0.7   [⬚]   0.5   49%

Tick the fractions, decimals and percentages that could fill the gap.

[0.78]   [51%]   [$\dfrac{3}{5}$]   [0.6]   [$\dfrac{4}{10}$]

5 Tommy scored $\dfrac{40}{50}$ on a Maths test.

Aisha got 78% of the test correct.

Aisha thinks she has done better because 78 is greater than 40

Do you agree with Aisha? _____

Explain your answer.

_____

_____

6 Huan, Nijah and Scott each started with a 1-litre bottle of juice.

Huan drank 0.55 litres.

Nijah drank 59% of her juice.

Scott has $\dfrac{4}{10}$ of his juice left.

1 litre   1 litre   1 litre

Who drank the most? Show your working.

_____ drank the most.

Who drank the least? Show your working.

_____ drank the least.

7 **a)** Use the digit cards to make the statement correct.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

$0.3 < \dfrac{\boxed{}}{10} < 80\%$

How many different solutions can you find?

_____

b) Use the digit cards to write a percentage greater than $\dfrac{2}{5}$ but less than 75%.

| 0 | 2 | 3 | 4 | 6 | 7 |

$\dfrac{2}{5} < \boxed{} < 0.75$

How many different percentages can you find?

_____

Compare answers with a partner.

Maths (Thursday)

Percentage of an amount (2)

1 **a)** Use the bar model to find 10% of 500

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

500
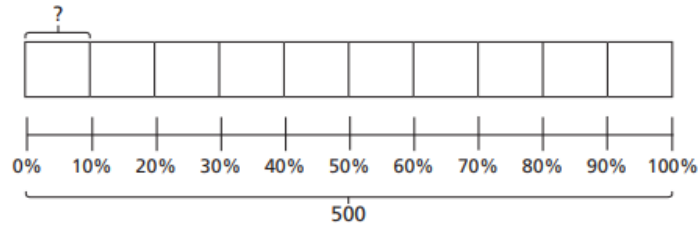
10% of 500 =

b) Use your answer to part a) to help you complete the calculations.

20% of 500 =

70% of 500 =

90% of 500 =

60% of 500 =

30% of 500 =

100% of 500 =

2

To find 5% you can find 10% and then halve it.

Use Dora's method to complete the calculations.

a) 5% of 40 =

d) 5% of 2,000 =

b) 5% of 400 =

e) 5% of 6,000 =

c) 5% of 4,000 =

What do you notice about your answers?

3 Some children are asked to find 75% of 340

I will find 25% and multiply it by 3

a) Use Dexter's method to find 75% of 340

I will find 10% and multiply it by 7, then find 5% and add them together.

b) Use Alex's method to find 75% of 340

I will find 25% and 50% and add them together.

c) Use Amir's method to find 75% of 340

d) Are there any other methods you could use?

4 Talk to a partner about different methods for finding these percentages.

| 20% | 90% | 60% | 15% | 55% | 40% |

Use your preferred method to calculate the percentages.

a) 20% of 1,000 =   d) 15% of 1,000 =

20% of 550 =   15% of 300 =

20% of 40 =   15% of 30 =

b) 90% of 1,000 =   e) 55% of 1,000 =

90% of 4,230 =   55% of 4,400 =

90% of 90 =   55% of 8 =

c) 60% of 1,000 =   f) 40% of 1,000 =

60% of 400 =   40% of 400 =

60% of 98 =   40% of 98 =

5 Ron is calculating these percentages.

10% of 20   20% of 10

20% is double 10%, and 10 is half of 20, so I know these will both have the same answer.

How does Ron know this?

6 a) Complete the calculations.

20% of 40 =   25% of 60 =

40% of 20 =   60% of 25 =

b) What do you notice about the answers?

_____

_____

c) Does this always happen? Investigate with other examples.

d) Talk about your findings with a partner.

DIY Marble Run

I've seen a few of these around online recently and would love to see if you manage to make one. The idea is to provide a little maze/racecourse for a marble (or any other ball I suppose) to work its way through, usually propelled by gravity and turning the maze platform. Take a look at some of these versions below.