



Home Learning Grid
Year 6
 Week Commencing – 30.03.20



	Monday	Tuesday	Wednesday	Thursday	Friday
Spelling/ Fast Maths	Fast Maths Go to kahoot.it and use code 0327562	Spelling Go to kahoot.it and use code 0205720	Fast Maths Go to kahoot.it and use code 0645385	Spelling Go to kahoot.it and use code 0287165	Fast Maths Go to kahoot.it and use code 0824487
Reading	First News See the First News article below and have a go at the questions.	Crater Lake Read pages 1-3 and answer the quick questions at kahoot.it and using code 0900954	Crater Lake Read pages 4-11 and complete the inference task below.	Crater Lake Enjoy reading chapter 2 of Crater Lake. If you must do some work, send me what you think of it so far.	First News See the First News article below and have a go at the crossword.
Writing	Geek, Robot, Overlord (Instructions) Use some of the model texts found here to write your own set of instructions (or instructional leaflet) of how to play this game based on rock, paper, scissors.				100 Word Challenge See below (or on Seesaw activities) for the 100 Word Challenge for this week.
Maths	Ratio Complete the 'Using ratio language' task below. Click here for video tutorials and answers (no cheating).	Ratio Complete the 'Ratio and fractions' task below. Click here for video tutorials and answers (no cheating).	Ratio Complete the 'Introducing the ratio symbol' task below. Click here for video tutorials and answers (no cheating).	Ratio Complete the 'Calculating ratio' task below. Click here for video tutorials and answers (no cheating).	Ratio Complete the 'Using scale factors' task below. Click here for video tutorials and answers (no cheating).
Challenge	Writing Take a look here for some ace sentence stacking lessons for you to do some creative writing.	Maths Use your Mangahigh login here to play some challenging maths games.	Random Fun Go here to try a free online game of Dungeons and Dragons – just like Dustin!	Maths Can you set a new high score on Timetable Rockstars here ?	Computing Why not have a go at turning your Geek, Robot, Overlord instructions into an instructional video?

Reading (Monday)

Look Closer

FirstNews • Issue 718 • 20 – 26 March 2020

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FirstNews • Issue 718 • 20 – 26 March 2020

NEWS STORY

GLOSSARY

ventilators – Machines that help ill people to breathe by pushing air into the lungs

valves – A valve opens and closes in order to control the flow of gas or liquid

3D printing – The process where a 3D printer makes a solid object from a computer model. The object is built up by the printer layer by layer



■ Look at the article 'The fight back'.

1. What is the name of the illness caused by the new coronavirus?
2. If anyone in a household develops a cough or temperature, what needs to happen?
3. Look at the first two paragraphs. What word means 'strongly advised'?
4. What does the journalist describe as "good news"?
5. Find two examples of language that make our efforts to curb the coronavirus seem like a **battle**.

1.
2.

6. If you were talking to your granny, grandad or another elderly person you know, what would you tell them now you have read this article?

■ Look at the article 'Ventilators needed'.

- 7a. What does a ventilator do?
- 7b. There is a lack of ventilators in Italy, a country badly affected by the coronavirus. How are companies helping out?

	How they are helping
Factories	
A 3D printing company	

■ Look at the article 'Songs for soap'.

8. What brilliant idea has William Gibson come up with?
9. Do you think his idea is going to help much in the fight against this virus?

■ Consider all the news articles.

All around the world, people are being asked to make major changes to their lives. How has your life changed so far?

10a. Do you have any worries or questions about the coronavirus that you would like to discuss with the grown-ups in your life? Make a note of them, and then discuss them.

10b. Make a list of interesting, positive and creative things that you can do at home while you are not at school.

PS – First News would like to know what you're up to at home – send your pictures and stories to newsdesk@firstnews.co.uk!

THE FIGHT BACK, VENTILATORS NEEDED, SONGS FOR SOAP

British people face months of living our lives differently in the fightback against COVID-19, the illness caused by the coronavirus.

Prime Minister Boris Johnson has urged people to work from home, not to travel unless they need to and to avoid places like restaurants, cinemas and theatres. As you know, schools are closing too to prevent the virus spreading, but will stay open for children whose parents work in the NHS and other emergency services.

One of the other key parts of the prime minister's battle plan is for older people to shield themselves from others by staying home alone for 12 weeks. This is because the over-70s aren't doing so well with COVID-19, with this age group most at risk of dying from the illness.

The good news is that, even among the elderly, nearly everyone survives unless they have other serious health problems already. The illness is generally mild in younger adults and children, no worse than a cold.

Earlier this week, Mr Johnson said anyone who lives with someone who has a cough or a temperature should stay at home for 14 days. This is to stop their illness spreading, in case it's caused by the coronavirus.

The virus was first found in China on 31 December. Since then it has spread around the world. Now, countries across the globe are at war with it.



VENTILATORS NEEDED

In countries affected by the coronavirus, factories have been helping out.

Coronavirus can lead to breathing troubles for some, so they may need ventilators to help them breathe. Lots of factories are now trying to use their machines to make ventilators instead of their usual products.

In Italy, a hospital that ran out of ventilator valves was contacted by a 3D printing company, who designed and printed 100 in 24 hours for them.



BRACKLEY, UK

● Songs for soap

A teenager has created a website that matches song lyrics to a 13-step hand-washing routine. Seventeen-year-old William Gibson wanted more options than just singing Happy Birthday twice. His website, Wash Your Lyrics, allows you to pick a song and download the musical poster. Over 175,000 posters were downloaded in the first three days. Queen's Bohemian Rhapsody is the most popular song so far.

Hand-washing technique with soap and water



Reading (Wednesday)

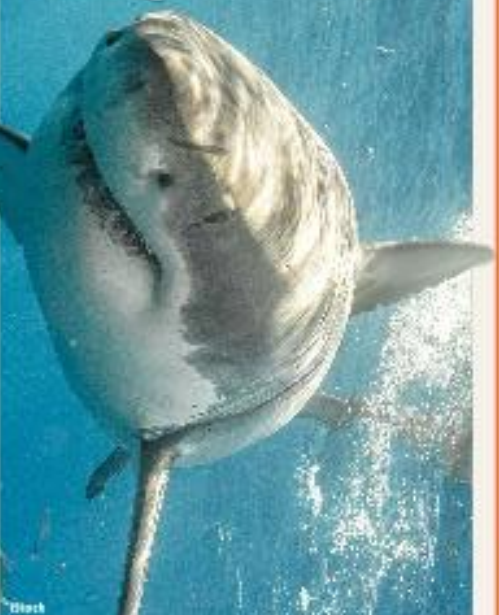
What do we think of the characters so far in Crater Lake? Each child in the group seems to be very different and have their own potential strengths and weaknesses. How do you feel they would look if this were made into a series like Stranger Things? What about Miss Hoche? Your challenge is to draw some (or all) of the characters so far and label their characteristics, using evidence from the text to show where you got the details from. Have fun with it and don't forget to upload to Seesaw for everyone to see.

This story is from page 14 of *First News*. Read the story, and then try the puzzle. To help you, we have underlined the answers to the crossword puzzle clues in the story – but you will need to match the correct word with each clue!

BIG NEWS



SPOTTING SHARKS FROM THE SKY



BEACHES in parts of Australia will be **patrolled** by **drones** to keep swimmers safe from shark attacks after a successful **trial** in New South Wales.

Shark attacks off New South Wales beaches fell to just four last year, half the number of previous years, and much lower than 2015 when 14 people were attacked. The trial was the largest drone operation conducted in Australia, with more than 8,000 flights by drones along 1,300 miles of beach.

The drones spotted sharks swimming close to shore and triggered an early warning alarm to allow swimmers time to get safely out of the water, keeping both swimmers and sharks out of danger. State authorities have announced that drone flights will become a permanent part of its plans to survey sharks. Other measures include **tagging** large sharks, which will trigger an alert if they swim too close to beaches.

Some of the largest species of shark in the world can be found in Australian waters and, so far, 500 large sharks have been tagged.

In other shark news, a team of marine scientists have found two new species of **sixgill sawsharks** in the Western Indian Ocean. The **sixgill sawsharks** were discovered during an investigation into fisheries. The species are **rarely** seen and experts say it shows how much there is still to discover about our oceans.



Han Zhixin

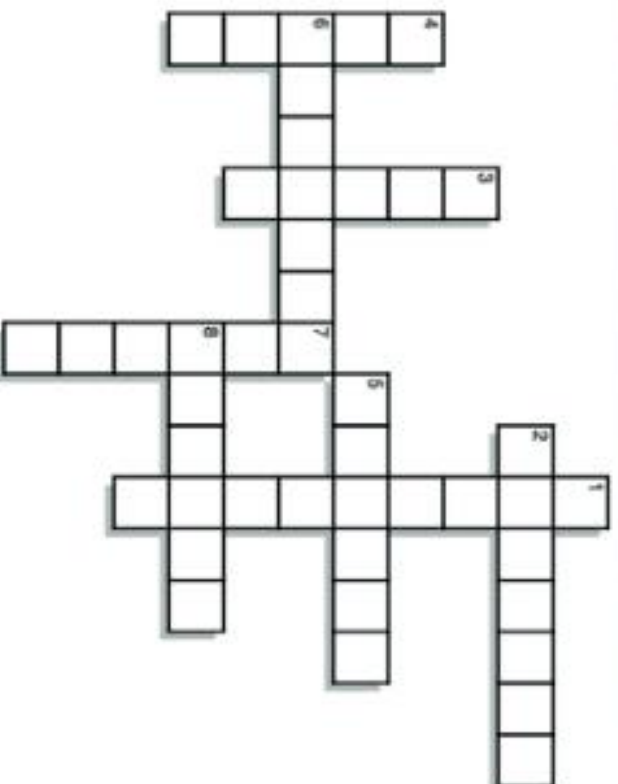
One of the two new shark species

ACROSS

- Putting an electronic tag on, for example an animal, to find out more about its movements (verb 7)
- Flying robots that can be controlled remotely (plural noun 6)
- Violent and aggressive acts (plural noun 7)
- Infrequently (adverb 6)

DOWN

- Kept watch over an area (verb 9)
- A test of something (noun 5)
- Alert; warning (noun 5)
- Study; observe (verb 6)



Writing (Friday)

Welcome to our first 100 Word Challenge - a writing competition. 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.



Using ratio language

1 Complete the sentences.



For every 3 sheep there are cows.

For every 2 cows there is sheep.

2 Circle groups to match the statements.

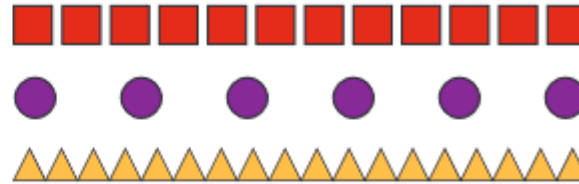
a) For every 1 football there are 3 tennis balls.



b) For every 2 cars there are 5 bicycles.



3 Here are some shapes.



Complete the sentences.

For every 6 squares there are circles.

For every 6 squares there are triangles.

For every 1 square there is a circle.

4 a) Make a tower of cubes that has 3 green cubes for every 1 red cube.

b) Compare your tower to a partner's tower.

What is the same and what is different about your tower?

5 For every 2 pencils there are 3 rulers.

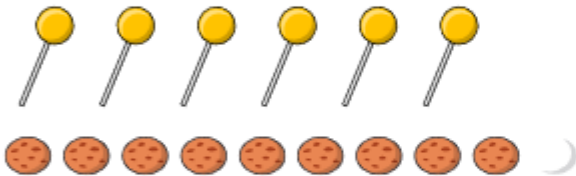
Draw a picture to show this.



6 Write three different 'For every ...' sentences for the cubes.



7 Teddy has 6 lollipops and 9 cookies.



Annie

For every 3 lollipops
there are 2 cookies.

I don't agree.



Teddy

- a) What mistake has Annie made?
- b) Write a sentence to match the picture.

8 Filip has some fish.

For every 3 red fish he has 1 goldfish.
Tommy counts at least 20 fish in the tank.
Draw the fish in the tank.



9 In Class 6, for every 2 girls there is 1 boy.

There are 12 girls in the class.
How many boys are in the class?
You can draw the children to help you.

Ratio and fractions

1 Here are some counters.

Complete the sentences to describe the counters.

a) There are counters altogether.

b) There are white counters.

c) There are black counters.

d) 3 out of the 8 counters are _____

e) out of the 8 counters are white.



2 Here are some animals.



Complete the sentences.

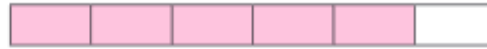
For every cows there are sheep.

The ratio of cows to sheep is to

of the animals are cows.

of the animals are sheep.

3 Part of the bar has been shaded.



a) What fraction of the bar is shaded?

b) What fraction of the bar is not shaded?

c) Write the ratio of shaded to non-shaded parts. to

d) Write the ratio of non-shaded to shaded parts. to

4 Here are some shapes.



a) What fraction of the shapes are circles?

b) What fraction of the shapes are stars?

c) What is the ratio of stars to circles? to

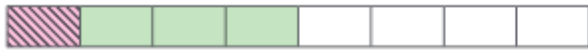
d) What is the ratio of circles to stars? to

Can you find a different answer to each of these questions?

Compare with a partner.



- 5 The bar model shows the ratio 1 to 3 to 4



Talk to a partner about how it shows this.

a) What fraction of the bar is striped?

b) What fraction of the bar is fully shaded?

c) What fraction of the bar is blank?

6



Jack

The fraction of brown cubes is $\frac{2}{3}$ because the ratio of brown to yellow is 2 to 3

Rosie



The fraction of brown cubes is $\frac{2}{5}$

Who is correct? _____

Explain your answer.

- 7 Scott draws a bar and divides it into 8 equal parts.



He shades 25% of the bar.

What is the ratio of shaded to non-shaded parts?

 to

- 8 A pencil case contains felt tips and pencils.

$\frac{3}{8}$ of the contents are pencils.

What is the ratio of felt tips to pencils?

 to

- 9 Ron has some limes and strawberries.

The ratio of strawberries to limes is 5 to 1




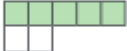
a) How do you know he has more strawberries than limes?

b) What fraction of the fruits are strawberries?

c) What fraction of the fruits are limes?

Introducing the ratio symbol

- 1 The ratios show shaded parts to non-shaded parts.
Match the ratios, statements and bar models.

2:3	five to two	
5:2	three to two	
2:5	two to three	
3:2	two to five	

2 



The ratio of purple to yellow is 5:4

Mo

It is 4:5



Alex

Who is correct? _____

Explain your answer.

- 3 Dani has some counters, cubes and marbles.
Complete the sentences.

The ratio of counters to marbles is :

The ratio of marbles to cubes is :

The ratio of cubes to counters is :

The ratio of counters to cubes is :

The ratio of counters to cubes to marbles is : :



- 4 Brett has drawn some triangles and squares.

The ratio of triangles to squares is 1:3

a) Are there more triangles or more squares? _____

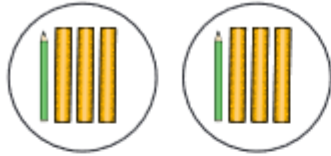
Explain how you know.

b) Brett has drawn more than 10 shapes.

Draw what Brett might have drawn.



- 5 Here are some rulers and some pencils.



a) What is the ratio of pencils to rulers?

:

b) Here are some more rulers and pencils.



The ratio of pencils to rulers is the same as in part a).

Ron

Ron is wrong because there are more pencils and more rulers.



Dora

Who is correct? _____

Explain your answer.

- 6 The ratio of horses to chickens in a field is 2:5
Here are the horses. Draw the chickens.



- 7 Shade squares so that the ratio of shaded to non-shaded squares is 1:4



- 8 A box contains dark, white and milk chocolates.

$\frac{3}{8}$ of the box are dark chocolates.

$\frac{1}{2}$ of the box are milk chocolates.

The rest are white chocolates.

What does each ratio represent?

a) 1:3

b) 4:1

c) 3:5



Calculating ratio

- 1 Eva is baking cakes and cookies.
For every 1 cake, she will bake 2 cookies.



a) If Eva bakes 3 cakes, how many cookies will she bake?

b) If Eva bakes 10 cookies, how many cakes will she bake?

- 2 The ratio of red to yellow counters is 2:3
There are 20 counters in total.
How many counters of each colour are there?
You can colour the counters to help you.



yellow red



- 3 Tom has 5 green cubes for every 3 yellow cubes.
He has 16 cubes in total.
Draw a diagram to represent this.

- 4 Esther is building a tower of cubes.
The ratio of red to yellow cubes is 3:1
The tower has 6 yellow cubes. How many red cubes are there?

- 5 Nijah plays 21 games of chess.
For every 2 games she wins, she loses 5 games.
How many more games does she lose than win?



- 6 a) Huan is making a drink by mixing 1 part juice with 5 parts water.
Complete the table to show the amounts he would need to use.

Juice	Water
1 litre	5 litres
2 litres	
4 litres	
100 ml	
200 ml	
300 ml	
	30 litres
	750 ml

- b) Huan makes 1 litre 500 ml of drink in total.
How much juice and water does he need to use?

juice

water

- 7 A group of students study French or German in the ratio 3:7

- a) Which subject has the most students? _____
b) Draw a diagram to represent this.

- c) There are 80 students in total.
How many more students study German than French?

- 8 Describe a situation for each bar model.

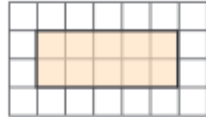


- Compare answers with a partner.
What is the same and what is different?

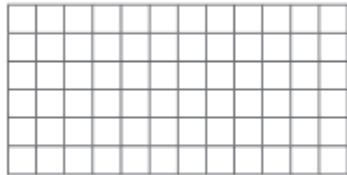


Using scale factors

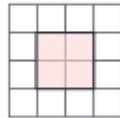
- 1 a) Here is a rectangle.



Draw another rectangle where each side is twice as big.



- b) Here is a square.

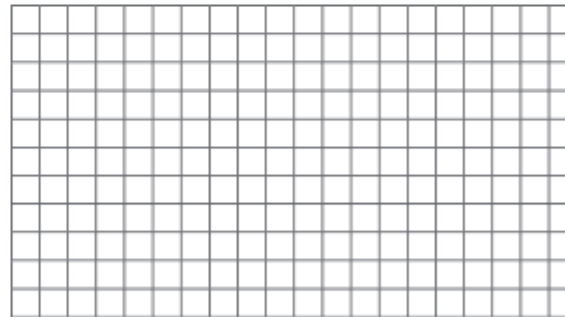
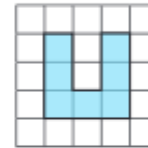
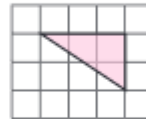


Draw another square where each side is 4 times as big.



- 2 a) Explain what it means for a shape to be enlarged by a scale factor of 2

- b) Enlarge the shapes by a scale factor of 2



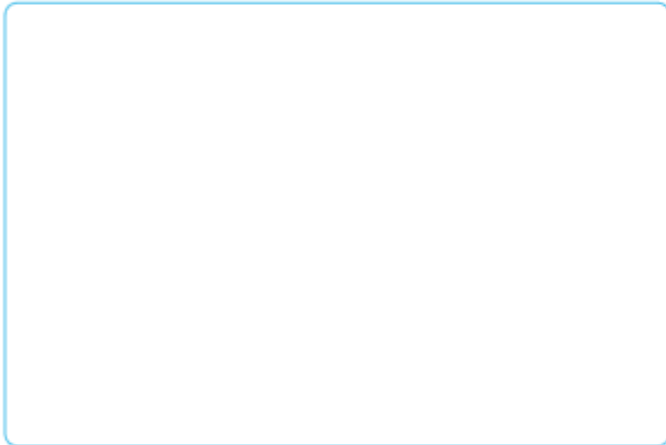
- 3 Complete the sentence.

A shape in which each side has tripled in size has been enlarged by a scale factor of

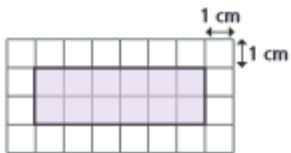
- 4 Here is a rectangle.



- a) Measure the side lengths of the rectangle and label them on the diagram.
 b) Enlarge the rectangle by a scale factor of 3 and label the side lengths.



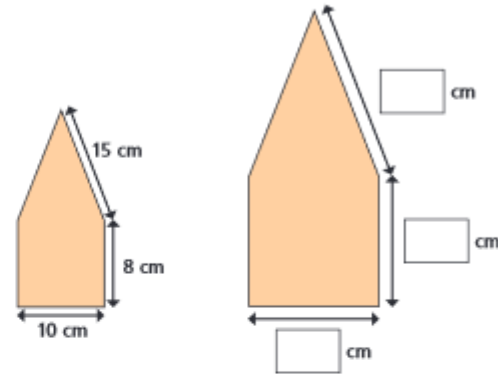
- 5 The sides of the rectangle are increased by a scale factor of 2
 What is the perimeter of the new shape?



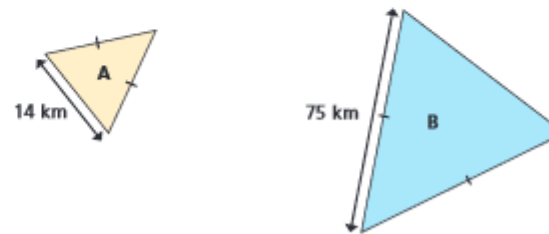
cm



- 6 The shape has been enlarged by a scale factor of $1\frac{1}{2}$
 Fill in the dimensions of the new shape.



- 7 Triangle A has been enlarged by a scale factor of 5 to make triangle B.
 Find the perimeter of each triangle.



perimeter of A = perimeter of B =



Other Fun Stuff

When you aren't doing some of the work above, why not have a go at something new? Take a look at the things below and don't be scared to let us know how you get on.

Which celebrities are getting involved?

- [Carol Vorderman](#)

The former *Countdown* presenter has made her [online maths school](#) free for all children aged 4-11 until schools re-open.

- [David Walliams](#)

Children's author and TV personality David Walliams will be releasing a free audio story every day for the next 30 days.

- [Jennifer Garner and Amy Adams](#)

The Hollywood actors have launched a new [Instagram account](#) in aid of charity Save the Children. It features stories told by celebrities.

- [Dan Snow](#)

Dan Snow, also known as The History Guy, is offering free access to his [history documentary channel](#) History Hit for 30 days.

- [Brian Cox](#)

The professor of particle physics and TV personality has said he will be getting involved with "several great initiatives" over the coming weeks. On Saturday, he took part in a Q&A session for the Comic Shambles Network's [Stay At Home Festival](#).

- [Steve Backshall](#)

The naturalist, broadcaster and author will be running a live "wildlife chat" on Facebook, Instagram and YouTube on Wednesday night.

- [Joe Wicks \(aka The Body Coach\)](#)

Fitness coach Joe Wicks has been broadcasting at-home PE lessons for children of all ages. They are broadcast live on his [YouTube channel](#) at 9am every weekday morning.

- [Myleene Klass](#)

The classical musician and radio presenter is offering free music lessons as part of a "Klass timetable" for children stuck at home.

- [Jamie Oliver](#)

Chef Jamie Oliver is hosting a nightly cooking show on Channel 4 to help families plan their meals "in these unique times".

- [Theo Michaels](#)

The former *MasterChef* star is streaming [live cooking classes](#) on his Instagram account and YouTube channel.

- [Dame Darcey Bussell](#)

The former *Strictly* judge's organisation [DDMIX for Schools](#) is hosting a 10-minute "shake up" on Facebook Live every day this week.