

# St Denys Primary School



**Year 5 and Year 6**

**Home Learning**

**Week beginning:  
29<sup>th</sup> June 2020**

**Creativity, Choice, Challenge  
Achievement for All**



# Year 5 and Year 6 - Home Learning

Whilst we are not expecting you to replicate school at home, it will be important that you all try to do some work each school day to keep your skills up.

And don't forget to stay active!



In this booklet you will find a range of different activities and tasks that you can choose to complete during the week.

There is also a separate booklet for each class that will contain your new spelling words and your daily Times Table Rockstar challenge. These can be collected from the school office or downloaded online.

Each morning your teacher will still be saying 'Hello' on Class Dojo. You'll also be able to ask any questions or just them about what you have been up to! As your teachers will be in school, remember they might not be able to respond straight away. You will still be able to post things to your Class Dojo portfolio but it might not always be your teacher who approves and leaves comments for you.









A	B	C	D	E	F	G	H	I	J	K	L	M	
Z	<b>Year 5 and Year 6 Spelling Words</b>												A
Y													B
X	accommodate	correspond	identity	queue									C
W	accompany	criticise	immediate (ly)	recognise									D
V	according	curiosity	individual	recommend									E
U	achieve	definite	interfere	relevant									F
T	aggressive	desperate	interrupt	restaurant									G
S	amateur	determined	language	rhyme									H
R	ancient	develop	leisure	rhythm									I
Q	apparent	dictionary	lightning	sacrifice									J
P	appreciate	disastrous	marvellous	secretary									K
O	attached	embarrass	mischievous	shoulder									L
N	available	environment	muscle	signature									M
A	average	equip (-ed, -ment)	necessary	sincere (ly)									N
B	awkward	especially	neighbour	soldier									O
C	bargain	exaggerate	nuisance	stomach									P
	bruise	excellent	occupy	sufficient									
	category	existence	occur	suggest									
	cemetery	explanation	opportunity	symbol									
	committee	familiar	parliament	system									
	communicate	foreign	persuade	temperature									
	community	forty	physical	thorough									
	competition	frequently	prejudice	twelfth									
	conscience	government	privilege	variety									
	conscious	guarantee	profession	vegetable									
	controversy	harass	programme	vehicle									
	convenience	hindrance	pronunciation	yacht									

N O P Q R S T U V W X Y Z

Colour in the word if you can read it, spell it and use it in your own sentence.

Y5/6 Spellings Word Search

u	u	e	x	i	s	t	e	n	c	e	t
f	i	z	d	e	f	i	n	i	t	e	b
l	r	a	t	e	t	a	c	h	e	d	x
l	h	m	r	x	p	l	m	w	d	c	c
t	y	t	q	e	j	j	l	u	l	e	l
u	t	r	m	c	v	g	h	o	l	a	
m	h	p	o	n	a	o	v	z	n	l	n
t	m	o	z	f	l	d	g	h	e	e	g
o	c	c	u	p	y	x	x	n	n		u
g	j	i	r	d	z	e	q	v	i	t	a
i	n	d	i	v	i	d	u	a	l	s	g
k	y	f	o	r	e	i	g	n	k	x	e

- |           |            |
|-----------|------------|
| rhythm    | occupy     |
| language  | foreign    |
| excellent | existence  |
| recognise | individual |
| definite  | attached   |

Y5/6 Spellings Word Search

p	o	a	v	a	i	l	a	b	l	e	u
u	q	d	m	n	a	y	c	l	n	z	v
f	o	p	t	y	l	s	o	i	r	p	e
e	s	a	r	z	s	t	n	g	e	r	g
o	h	r	l	c	i	o	s	h	s	i	e
z	o	l	h	c	g	m	c	t	t	v	t
l	u	i	e	o	n	a	i	n	a	i	a
s	l	a	n	d	a	c	e	i	u	l	b
g	d	m	i	y	t	h	n	n	r	e	l
x	e	e	m	k	u	l	c	g	a	g	e
n	r	n	j	y	r	m	e	p	n	e	n
g	n	t	t	k	e	f	x	z	t	r	a

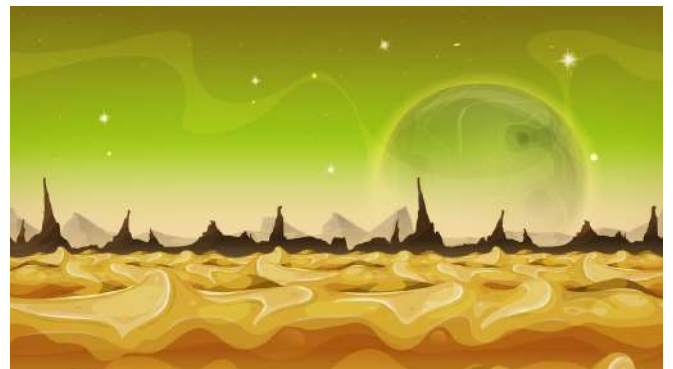
- |            |            |
|------------|------------|
| available  | stomach    |
| signature  | parliament |
| conscience | shoulder   |
| lightning  | restaurant |
| privilege  | vegetable  |

# Weekly Writing Challenge

Let's plan, write and publish a short story! The idea for your story is '**Alien Planet**'.

## Think about the following:

- How you landed on the planet.
- Describe what you saw when you stepped out onto the planet surface.
- Are there any plants?
- Is there any water?
- How far can you see?
- Are there hills or is it flat?
- Does anything make you think there are creatures here?
- Can you breathe? Do you need a space suit?
- Are you floating? Is there enough gravity to keep you on the ground?
- Can you hear or smell anything?
- What sort of temperature is it?
- Are you frightened?
- Who or what do you meet?



## Remember to:

- Plan your story with a beginning, middle and end. How are you going to hook the reader at the start? You could write down notes, draw a picture or create a storyboard.
- Organise your ideas into paragraphs.
- Choose your words carefully to entertain the reader.
- Write in sentences. Think about some of the things we have used in class like inverted commas or fronted adverbials.
- Pay attention to your spelling and punctuation.
- Read, check and edit your work carefully.
- Decide how you are going to publish your story: writing it out, typing it, making a book?



# Alien Planet

1.

2.

3.

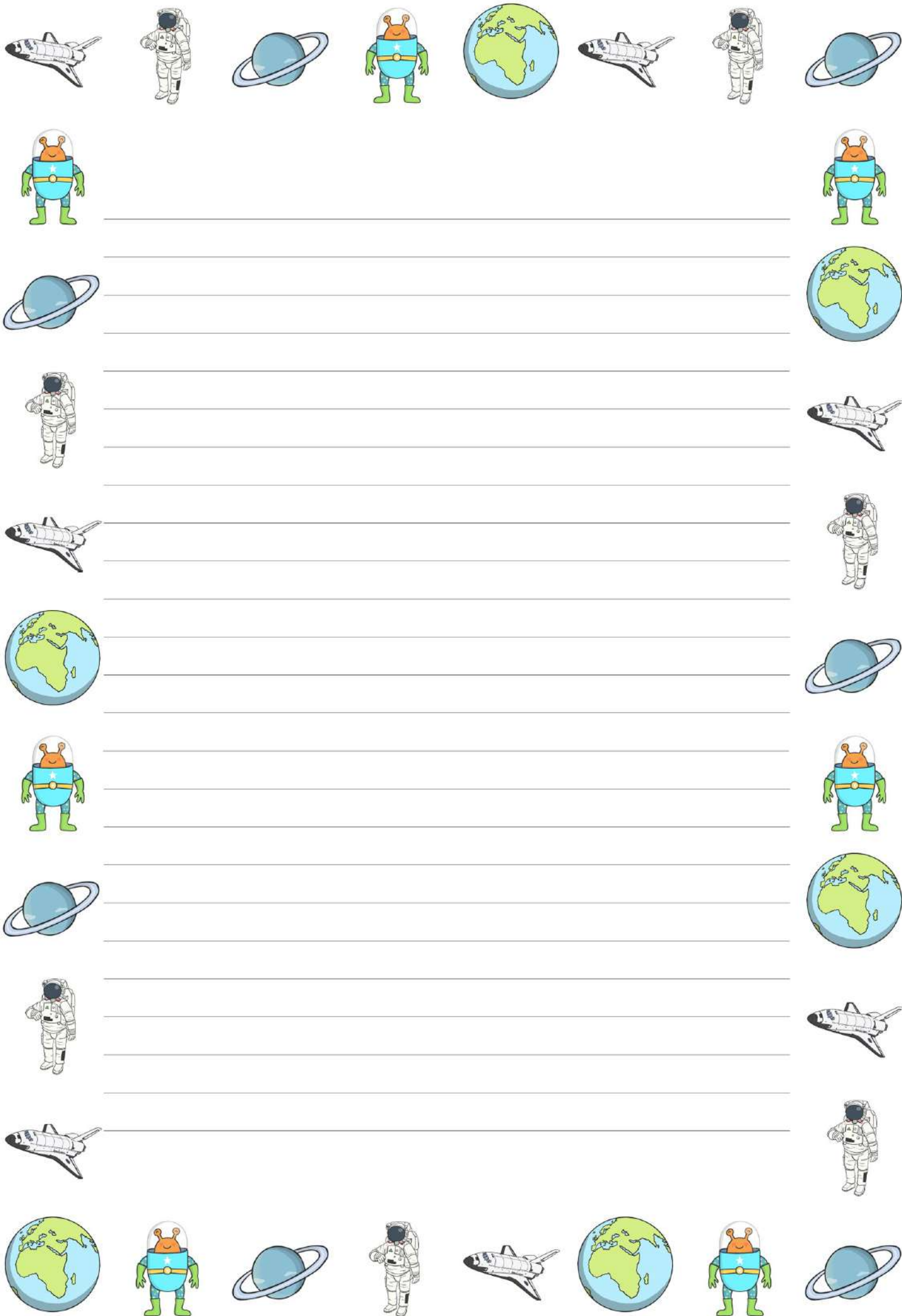
4.

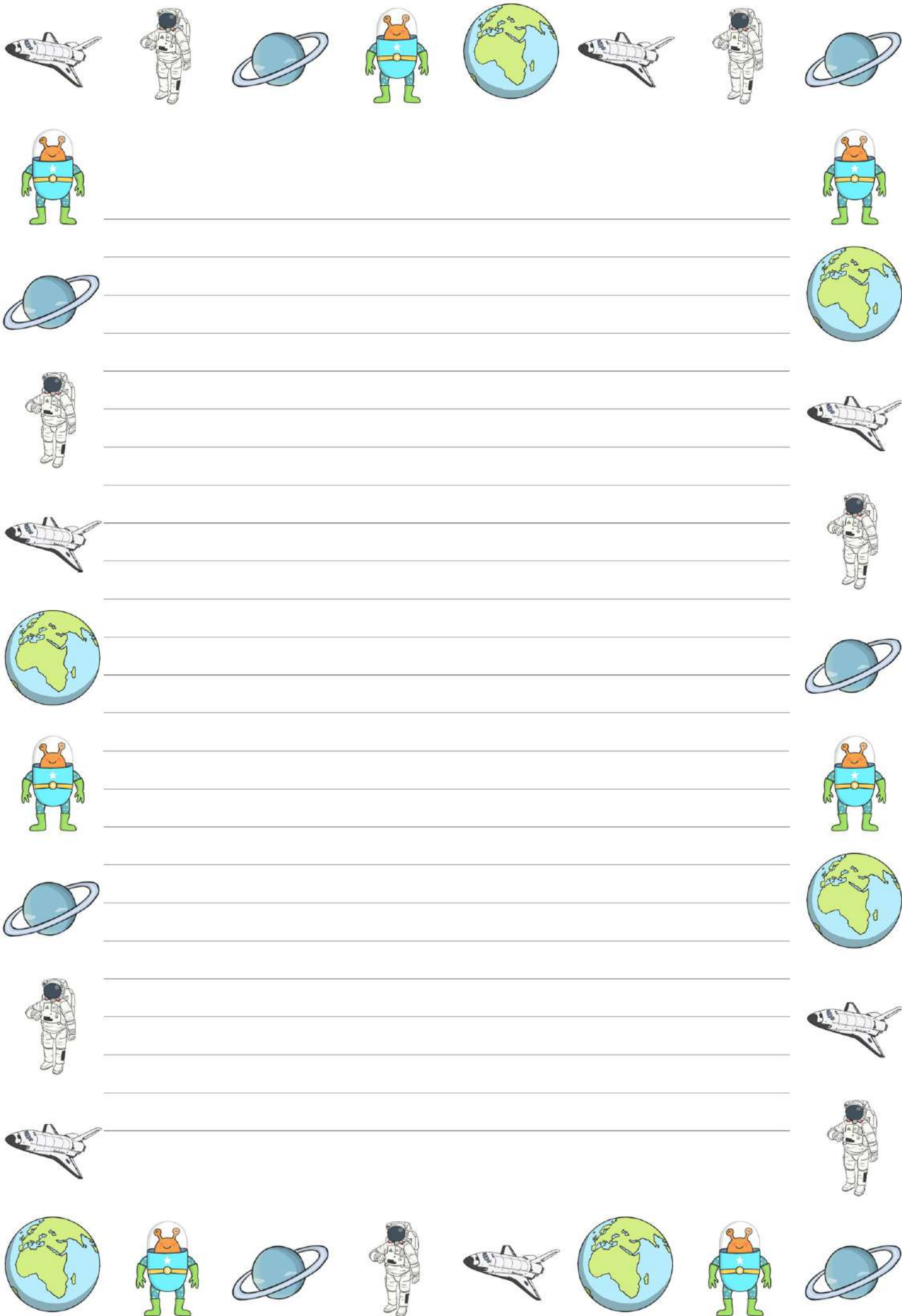
5.

6.

7.

8.







## First Person to Visit Space and Deepest Point in the Ocean

### What is the Mariana Trench?

- The Mariana Trench is a crescent-shaped trench in the West Pacific. It is roughly 1580 miles long and 43 miles wide.
- The trench is near to the Mariana Islands, in the Pacific Ocean, and the deepest known point in it (around 11 000m) is called Challenger Deep.

Over 550 people have been into space; only eight have been to Challenger Deep, the deepest known point in the ocean. Now, though, Kathy Sullivan has become the first person to do both!

Kathy Sullivan visited Challenger Deep in the Mariana Trench. The trench lies about 200 miles from the small island of Guam, in the west of the Pacific Ocean. In doing so, Kathy becomes the first person to have done so who has also been into space.

As only the eighth person to ever reach the deepest part of the ocean, she was also the first woman to do so. However, Kathy is used to breaking records.

In 1978, she was in the first NASA class of women astronauts. Then, in 1984, she became the first American woman to complete a spacewalk.

However, rather than a spacecraft, she set her most recent record in a specially built **submersible** called Limiting Factor.

Kathy slowly **descended** for almost 11 000m into the Mariana Trench. The trench is so deep that if you were to drop Mount Everest down to Challenger Deep, the mountain's peak would still be more than 2000m below the surface of the water!

The journey down took around four hours. But, they couldn't stay for long because of the

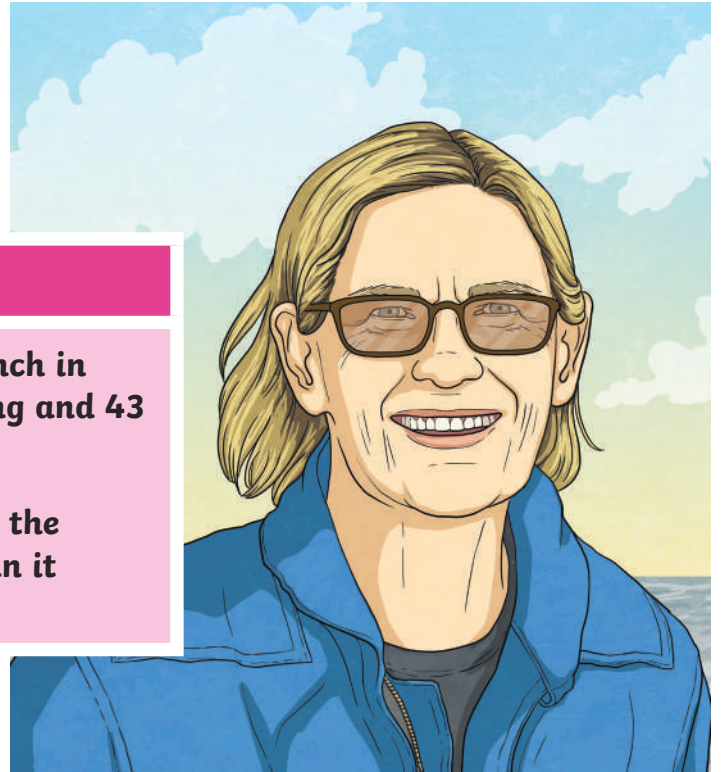


Illustration: Kathy Sullivan.

enormous water pressure down there. At that depth, it is like having 2200 tonnes of pressure pushing down on the small underwater vehicle.

Kathy said that as an "**oceanographer** and astronaut, this was an extraordinary day". She went on to say it was, "a once in a lifetime day, seeing the moonscape of the Challenger Deep and then comparing notes with my colleagues on the ISS [International Space Station]".

This is because after making an equally slow **ascent** back to the ship on the surface, Kathy put in a call to the International Space Station!

### Glossary

**submersible** A small craft designed to operate under water.

**descended** To have fallen, moved or gone down.

**oceanographer** Someone who studies the marine environment.

**ascent** To have climbed, risen or gone up.

# Questions

1. How long did it take for the Limiting Factor to reach the deepest point in the ocean?

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2. When Kathy said, “a once in a lifetime day, seeing the moonscape of the Challenger Deep and then comparing notes with my colleagues on the ISS”, what do you think she meant by the word ‘moonscape’?

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3. Number these events 1 to 4 in the order they happened. One has been done for you.

- ☐ Kathy Sullivan reached Challenger Deep.
- ☐ Kathy Sullivan became the first American woman to do a spacewalk.
- ☐ Kathy Sullivan phoned the astronauts on the International Space Station.
- ☒ 1 Kathy Sullivan began astronaut training.

4. In the paragraph beginning ‘The journey down took...’, find and copy a word that means ‘very large’.

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5. Why do you think the author chose to use an exclamation mark at the end of this sentence: “Because after making an equally slow ascent back to the ship on the surface, Kathy put in a call to the International Space Station!” **Tick two.**

- ☐ They wanted to show anger.
- ☐ They wanted to show astonishment.
- ☐ Because this is a silly thing for her to have done.
- ☐ Because this is an exciting thing for her to have done.

6. Summarise the key information in this story in 15 words or fewer.

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# DICTIONARY CHALLENGE

Use a dictionary to complete the following challenges!

**Can you find...**

...a six-letter word beginning with **p** and ending in **t**?

...a five-letter word beginning with **sq**?

...a seven-letter word beginning with **s** and ending with **g**?

...an eight-letter word beginning with **h** and ending in **n**?

...a word longer than 6 letters that begins with **w** and contains three different vowels?

...a word longer than 5 letters that begins with **f** and contains 'ee'?

...a seven-letter word beginning **and** ending with **r**?

...three words containing the letter **z** (but not at the beginning)?

Can you find a word which contains **all** of the vowels?

**Make sure you know the definitions of all of these words!**



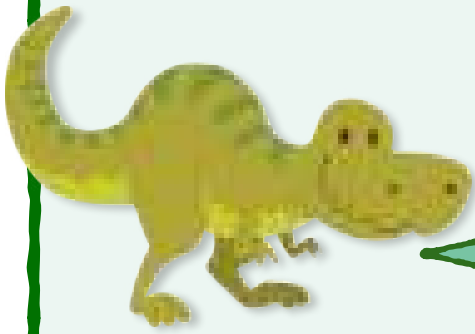


What do you think happened 30 seconds before this picture was taken?!

What do you think happened 30 seconds after this picture was taken?!

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# SYNONYM WORD SEARCH

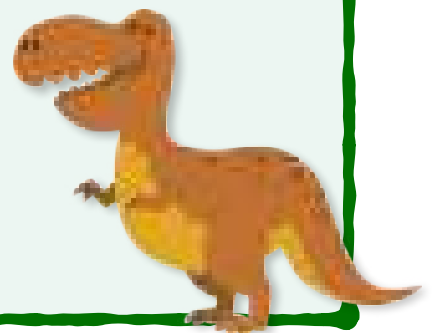


This word search contains 14 synonyms for the boring word 'said'. Can you find them all? You can use a **thesaurus** to help you search for any unfamiliar words.

R	B	L	U	R	T	E	D	R	O	U	T	V
S	F	E	U	E	X	C	L	A	I	M	E	D
A	I	W	E	M	N	M	E	O	C	U	J	E
S	O	T	C	A	C	K	L	E	D	T	O	C
O	L	P	A	R	I	S	Y	U	Z	T	R	L
B	M	I	E	K	L	B	H	W	O	E	L	A
B	O	O	M	E	D	N	U	A	L	R	K	R
E	U	S	E	D	T	D	I	I	W	E	N	E
D	T	B	R	T	Y	E	L	L	E	D	X	D
A	H	I	S	S	E	D	Y	E	S	H	U	I
Q	E	F	R	E	W	L	S	D	T	V	B	A
U	D	W	C	L	G	R	U	M	B	L	E	D
I	K	W	H	I	S	P	E	R	E	D	O	K

What do you call a dinosaur who always uses boring words?

**A Dinobore!**



# Wordle

Follow the word rule in each of the categories and using the letters below, see if you can fill them up! You can only use each letter once per word and each letter needs to connect to the next. Have fun!

o	c	d	i
h	u	l	b
s	e	w	t
o	t	n	y

Find four words with five or more letters.

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Find a number.

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Find six words with three or more letters.

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Find a word that rhymes with 'mouse'.

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Find a number.

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Find a colour.

---

Find a word that rhymes with 'mouse'.

---

---

Find a compass point.

---

Find a body part.

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---

Find a food.

---

Find a synonym for a fight.

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## Game 1

S	T	V	E
K	E	N	O
T	P	U	Y
E	O	M	P

### POINTS GUIDE

3 letter words	1 point
4 letter words	2 points
5 letter words	3 points
6 letter words	4 points
7+ letter words	5 points

How many different words can you create using adjoining letters?  
The letters must touch each other but can join in any direction - horizontally, vertically or diagonally. You cannot use the same letter cube more than once in a single word.



_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Now add up your total points score using the Points Guide and record it in the box.



### TOTAL POINTS

_____
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# SYNONYM WORD SEARCH



This word search contains **13** synonyms for the boring word 'walk'. Can you find them all? You can use a **thesaurus** to help you search for any unfamiliar words.

T	R	A	I	P	S	E	I	O	T	R	F	M
Y	O	N	K	R	A	M	B	L	E	S	D	E
H	A	B	L	T	U	Z	Y	L	K	F	S	A
F	M	G	O	N	N	X	J	D	N	I	P	N
A	I	D	V	B	T	H	K	A	B	C	V	D
Q	T	S	C	V	E	U	P	R	A	N	C	E
U	Y	T	E	E	R	R	U	T	M	N	A	R
M	A	R	C	H	S	S	W	A	G	G	E	R
T	E	O	H	F	D	T	W	E	Y	T	N	B
B	N	L	S	E	W	O	V	C	J	K	I	O
C	P	L	O	D	N	M	I	O	P	S	E	R
B	E	E	S	T	D	P	F	T	E	A	T	L
H	E	A	F	L	O	U	N	C	E	I	O	N

What do you call a dinosaur with a very good vocabulary?

**A Thesaurus!**



# Reading Response (Fiction)

Use a book you have  
read recently to  
complete the following  
pages.




What was your favourite part of the story? Why?

[illegible]

Draw a picture of your favourite part:

Draw a picture of your favourite part:

Draw a picture of your favourite character from the story. Write a description of who they are and what you have learnt about them from your reading.

[illegible]

Draw a picture of one of the settings in the story and then write a description of it and what happened there.

[illegible]



Find 10 adjectives in the book.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

Make up sentences describing characters or situations from the story using at least two of these adjectives in each one.

[illegible]

Find five interesting words (maybe new to you) in the book. Use a dictionary to find their definitions.

1.

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Definition:

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2.

---

Definition:

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---

3.

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Definition:

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---

4.

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Definition:

---

---

5.

---

Definition:

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---

Use some of the words in sentences of your own.

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Write a paragraph trying to convince someone to read this book. Remember to use **persuasive language**.

[illegible]

Draw a story map for this book.

A large, empty rectangular box with a thin black border, intended for drawing a story map. The box occupies the majority of the page below the instruction.

Write an alternative ending for the book.

[illegible]

Illustrate your ending

Illustrate your ending



Write a detailed book review. How many stars would you give the book? Why?



### Plot

Event 1 \_\_\_\_\_

\_\_\_\_\_

Event 2 \_\_\_\_\_

\_\_\_\_\_

Event 3 \_\_\_\_\_

\_\_\_\_\_

Cause



Effect

### My Star Rating



Why I rated the book

\_\_\_\_\_ stars: \_\_\_\_\_

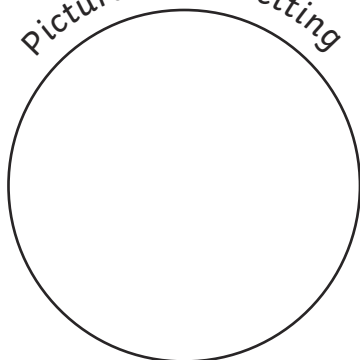
\_\_\_\_\_

### Setting

\_\_\_\_\_

\_\_\_\_\_

picture of the setting



### Book Title

Author \_\_\_\_\_

Illustrator \_\_\_\_\_

Gernre (tick as many as apply to your book)

- |                                      |                                    |                                       |
|--------------------------------------|------------------------------------|---------------------------------------|
| <input type="checkbox"/> fiction     | <input type="checkbox"/> scary     | <input type="checkbox"/> animal story |
| <input type="checkbox"/> non-fiction | <input type="checkbox"/> fairytale | <input type="checkbox"/> biography    |
| <input type="checkbox"/> fantasy     | <input type="checkbox"/> adventure | <input type="checkbox"/> historical   |
| <input type="checkbox"/> humour      | <input type="checkbox"/> sports    | <input type="checkbox"/> mystery      |
| <input type="checkbox"/> other _____ |                                    |                                       |

### Character



Name \_\_\_\_\_

Personality \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How I feel about this character and why: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Draw how you feel!





## UK Doesn't Use Coal Power for Two Months

### What are fossil fuels?

- Fossil fuels are non-renewable fuels, such as coal, oil and gas.
- They can all be burned to create energy which can be used to generate electricity. They also produce greenhouse gases which cause climate change.

Due to the lockdown, there has been less demand for electricity. It has also been a record-breakingly sunny May causing more solar power to be produced.

Therefore, last week a significant breakthrough occurred as Britain went for two months without using coal to create energy.

This is remarkable because coal has been used in powering Britain for over 130 years. In fact, even ten years ago, Britain got around 40% of its power from coal-fired power plants.

However, instead of coal, Britain has recently been using more renewable sources of energy such as solar, wind and tidal power. These are called renewable because they don't run out. They also don't release greenhouse gases as they make energy.

When burnt in a power plant, coal heats water up to create steam. This steam is able to power large turbines, which spin to create huge amounts of electricity. This is the electricity we use to power our homes, TVs and games consoles.

However, when coal is burned, it releases carbon dioxide into the atmosphere. Carbon dioxide is a greenhouse gas which contributes to climate change.

Climate change is when the climate of an area changes. Scientists from all over the world have seen climates changing and becoming warmer.



Photo: Solar power involves using energy from the sun to create electricity.

This 'global warming' is caused because there are too many greenhouse gases in the atmosphere.

Because of the impact of climate change, the UK government is aiming to reach net zero carbon emissions by 2050.

The UK government says that this means that carbon released into the atmosphere by things like cars and factories must be completely balanced out by things which capture the carbon. To do this, the UK government wants to plant more trees and move away from using fossil fuels to create electricity.

### Glossary

<b>greenhouse gas</b>	A gas that adds to the greenhouse effect.
<b>turbine</b>	A machine in which a wheel or rotor with blades on is made to spin by a fast-moving liquid or gas.
<b>climate</b>	The weather conditions in an area over a long period.
<b>emissions</b>	When gases are released.

# Questions

1. Name a fossil fuel mentioned in the story.

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2. Why did the warm weather in May help?

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3. Tick to show whether each statement is a fact or an opinion.

	Fact	Opinion
Coal is bad.		
Coal is a fossil fuel.		
Tidal energy is renewable.		
Not using coal for two months is a huge achievement.		

4. 'In fact, even ten years ago, Britain got 40% of its power solely from coal.' This suggests that...

- ☐ Coal powered Britain alone.
- ☐ There were other power sources.
- ☐ Coal is useless.
- ☐ Solar power is more useful.

5. How do you feel climate change campaigners feel about this news?

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6. Summarise the story in 15 words or fewer.

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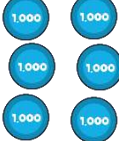
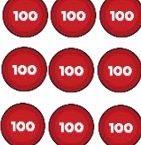


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# Year 5

## Place Value Assessment

- 1 What number is represented below?

10,000s	1,000s	100s	10s	1s
				

Georgia says that the number is multiple of 5  
Is Georgia correct? Explain your answer.

- 2 Complete the missing numbers.

$$47,603 = 40,000 + \text{-----} + 600 + 3$$

$$\text{-----} = 50,000 + 300 + 70 + 4$$

$$80,000 + 7,000 + \text{-----} = 88,300$$

- 3 In a game, people have some play money to buy houses.  
Each person starts with the following play money.

£100,000	£10,000	£1,000
£100,000	£10,000	£1,000
£100,000	£10,000	
£100,000	£10,000	
	£10,000	

How much money do they each start with?

£

- 4 Circle **all** the numbers that round to 4,750 to the nearest 10

4,752    748    4,748    4,745    4,755

- 5 What is the missing number?

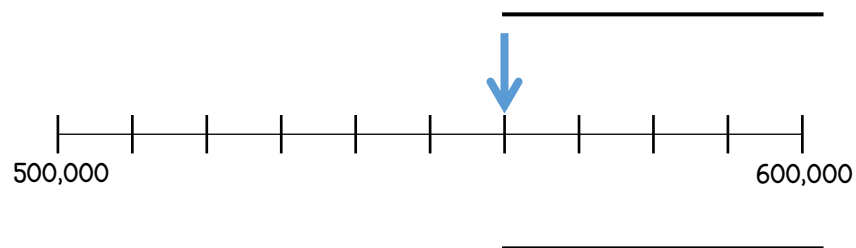
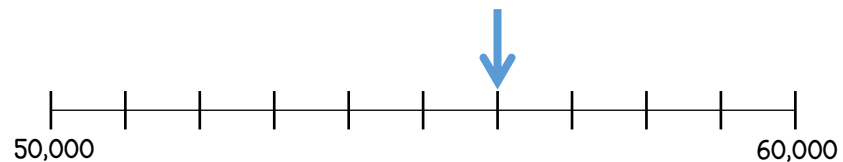
305,700		
300,000	?	700

- 6 Which is the greater number? Explain your answer.

XCIX

CX

- 7 What numbers are shown by the arrows?



- 8 Complete the following using  $<$ ,  $>$  or  $=$

12,900  2,980

57,000  570,000

999,999  1 million

- 9 Arrange the digit cards to make an **odd** number between 70,000 and 100,000

1  4  6  8  9

Round your number to the nearest 1,000

Round your number to the nearest 10,000

- 10 Complete the missing numbers.

19	10,019		30,019		
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- 11 Put the following weights in order starting with the smallest.

A 700,000 kg

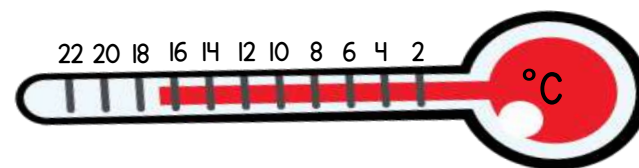
B 87,000 kg

C Ninety-four thousand kg

D 399,458 kg

\_\_\_\_\_ smallest \_\_\_\_\_

- 12 The thermometer shows the temperature in London in May.



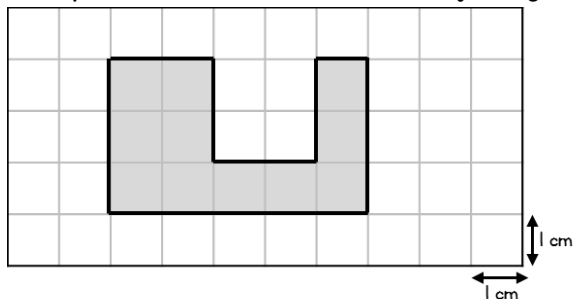
In January the temperature was 20 degrees colder.  
What was the temperature in London in January?

\_\_\_\_\_ °C

# Year 5

## Area and Perimeter

- 1 The shape is drawn on a centimetre square grid.



What is the area of the shape?

\_\_\_\_\_  $\text{cm}^2$

What is the perimeter of the shape?

\_\_\_\_\_  $\text{cm}$

- 2 Sally says,



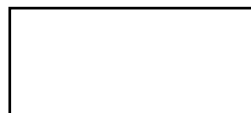
The two rectangles have the same area, so they must have the same perimeter.

2 cm



9 cm

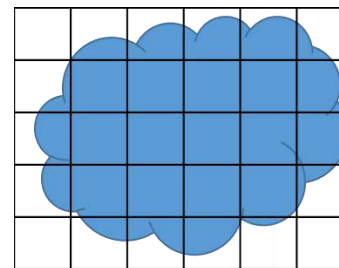
3 cm



6 cm

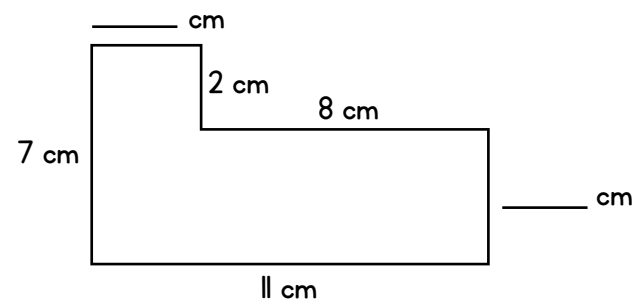
Explain why Sally is wrong.

- 3 Estimate, in squares, the area of the shape.



\_\_\_\_\_ squares

- 4

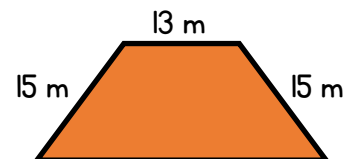


Complete the missing lengths.

Work out the perimeter of the shape.

\_\_\_\_\_  $\text{cm}$

- 5 The perimeter of the shape is 60 m.

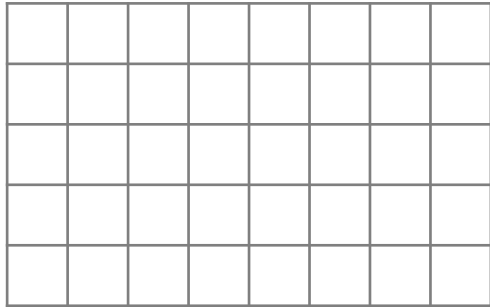


Find the length of the missing side.

\_\_\_\_\_  $\text{m}$



- 6 Draw a rectangle which has an area of 12 squares and a perimeter of 16 squares.



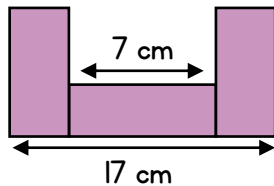
- 7 The square and the regular hexagon have the **same** perimeter.



Work out the length of one side of the square.

\_\_\_\_\_ cm

- 8 The shape is made up of three identical rectangles.



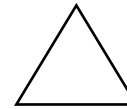
Work out the area of the shape.

\_\_\_\_\_ cm<sup>2</sup>

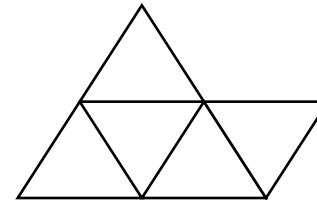
- 9 Ian wants to paint a wall measuring 3 metres by 7 metres. Each tin of paint covers 5 m<sup>2</sup>. How many tins of paint will Ian need?

\_\_\_\_\_ tins

- 10 An equilateral triangle has a perimeter of 21 cm.



John uses 5 of these triangles to make this shape.



What is the perimeter of the new shape he has made?

\_\_\_\_\_ cm

# Year 5

## Multiplication and Division

1 Calculate.

$$312 \times 3 = \underline{\hspace{2cm}}$$

$$312 \div 3 = \underline{\hspace{2cm}}$$

$$1,371 \times 7 = \underline{\hspace{2cm}}$$

$$798 \div 5 = \underline{\hspace{2cm}}$$

2 Complete the calculation.

		2		7
×				6
	1		4	2

3 Jack is thinking of a number.  
When he multiplies his number by 7, he gets 161  
What is Jack's number?

4 Complete the grid for the multiplication  $36 \times 14$

	30	6
10	300	
4		

Use the grid to work out  $36 \times 14$

- 5 In a theatre there are 45 rows of chairs.  
There are 36 chairs in each row.  
How many chairs are there altogether?

\_\_\_\_\_ chairs

- 6 Jen and Max each have 5 digit cards.



Jen arranges her cards to make a 3-digit and 2-digit number.

1	5	7	×	4	8
---	---	---	---	---	---

She multiplies the two numbers together.  
What is her answer?

\_\_\_\_\_

Max arranges his cards to make a 3-digit and 2-digit number.  
He multiplies his numbers and his answer ends in a 5  
What could the 3-digit and 2-digit number be?

			×		
--	--	--	---	--	--

- 7 A jacket costs £52  
Eight jackets and three skirts cost £653  
How much does a skirt cost?

\_\_\_\_\_ £

- 8 Some cards are shared between 7 boxes.  
There are 63 cards in each box and 4 left over.  
How many cards were shared between the boxes?

\_\_\_\_\_ cards

- 9 Work out  $25 \times 87 \times 4$   
Explain or show your method.

\_\_\_\_\_



# Take One Number...

Think of a 3-digit number, and  
write it in the cauldron.



Write it in words:

Place Value:

Hundreds: \_\_\_\_\_

Tens: \_\_\_\_\_

Ones: \_\_\_\_\_

Double it:

Halve it:

Round to the nearest:

10: \_\_\_\_\_

100: \_\_\_\_\_

More than:

10 more: \_\_\_\_\_

100 more: \_\_\_\_\_



Less than:

10 less: \_\_\_\_\_

100 less: \_\_\_\_\_



Multiply by:

10: \_\_\_\_\_

100: \_\_\_\_\_

Divide by:









10: \_\_\_\_\_

100: \_\_\_\_\_



Write a word problem that has this number as the answer:

# Converting Time Worksheet

Time in Words	24 Hour Clock	12 Hour Clock	Analogue
seven o'clock in the evening	19:00	7:00p.m.	
		11:00a.m.	
	14:15		
		8:20p.m	
midday			
		6:40p.m.	
midnight			
seven minutes to eight at night			

# Vowel-less Operations!

Below are the names of different words associated with the four operations. However, the vowels are missing! Work out each word from the consonants given.



Good luck! Or should I say, gd lck!

dvd



pls



tms



lss



sbtrct



dcrs



prdct



nvrs



mltply



ncrs



qtnt



ttl



mns



rmndr



shr



qls



sm



mr



dffrnc



dd



# Sudoku 6 x 6 Puzzles

Each row and column contains all the digits 1 to 6.

	2		3	6	
			5		2
1	5				4
2		3	1	5	6
4	3		6	1	
6	1		4	2	

	5			4	3
6				1	5
		6		3	
		3		6	
4	6	5	3		1
3			4	5	

6	3	2	4		
4		1	6	3	
	6	3	1		
1		5		6	
5			3		4
					6

5	2	4		3	
			5		2
	4		6	1	5
6	5	1		2	
			2	5	3
2			4	6	1

1	3	2			4
4	5	6		3	2
				1	
5	4	1	6		
2		5	3		1
3	1	4	2		

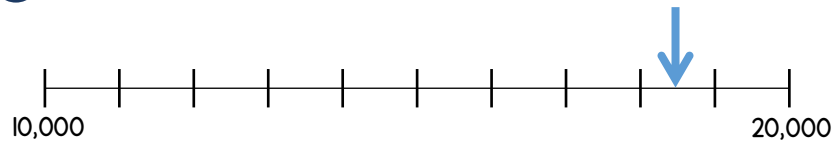
	6		5		
	4	3		2	
				5	
6					4
					1
	3		4		5



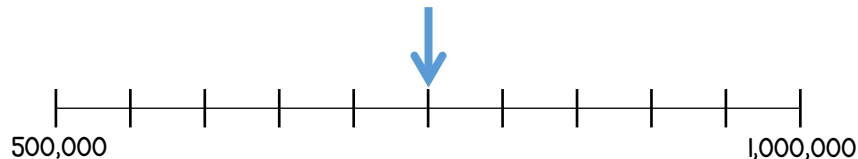
# Year 6

## Place Value Assessment

- 1 What numbers are shown by the arrows?



\_\_\_\_\_



\_\_\_\_\_

- 2 Here are some digit cards.



Fred makes the largest 3 digit **even** number he can make.  
He rounds his number to the nearest 10  
What is his answer?

\_\_\_\_\_

- 3 Complete the missing numbers.

$$127,084 = 100,000 + 20,000 + \text{-----} + 80 + 4$$

$$\text{-----} = 7000 + 500 + 3$$

- 4 The length of four rivers is shown in the table.

River	Length in km
Mississippi	6,275
Saint Lawrence	3,058
Nile	6,853
Rio Grande	3,057

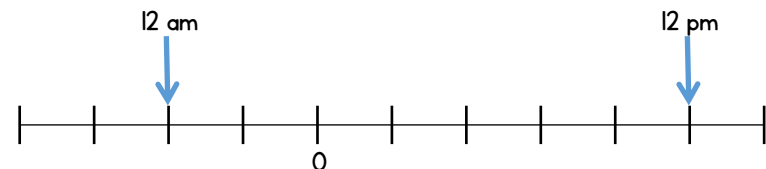
Put the rivers in order of their length starting with the shortest.

Round the length of the Mississippi river to the nearest 100 km.

\_\_\_\_\_ km

- 5 The number line shows the temperature at 12 am and 12 pm on Monday in a town.

The difference between the temperatures is  $14^{\circ}\text{C}$ .



What is the temperature at 12pm?

\_\_\_\_\_  $^{\circ}\text{C}$

- 6 Here are 3 digit cards.



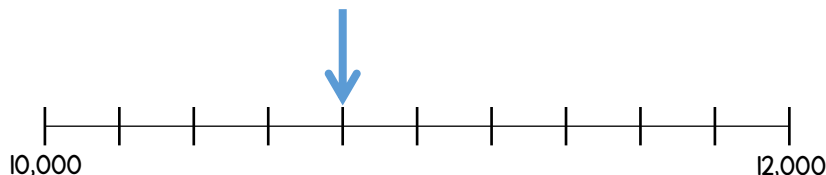
Use each card once to make the statement correct.



Arrange all 6 cards to make a number between 395,000 and 425,000



- 7 Nick marks a number on the number line.



Draw an arrow to show 100 more than Nick's number.

- 8 Here is part of a number sequence.  
The sequence increases by 50 each time.

6,250	6,300	A	B	C	D	E	F	G
-------	-------	---	---	---	---	---	---	---

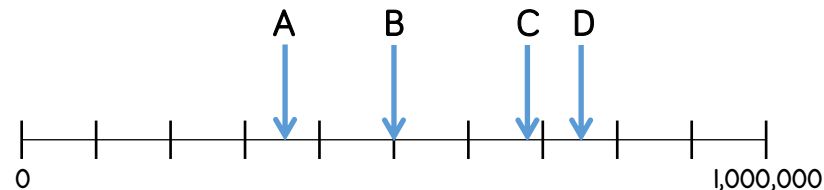
Which box will have the first number greater than 6,500?

\_\_\_\_\_

- 9 What is the **smallest** digit that can be used to make this statement correct?

$$34,3\_8 > 34,359$$

- 10 Some numbers are marked on a number line.



Which numbers round to 1 million to the nearest million?

\_\_\_\_\_

Which number rounds to 700,000 to the nearest thousand?

\_\_\_\_\_

- 11 What is 35 ones + 35 tens?

\_\_\_\_\_

# Year 6

## Fractions (+ and -)

A

1


Use the fraction bars to simplify the fractions.

$$\frac{6}{9} =$$

$$5\frac{3}{6} =$$

2 Max says  $\frac{30}{50}$  in its simplest form is  $\frac{15}{25}$

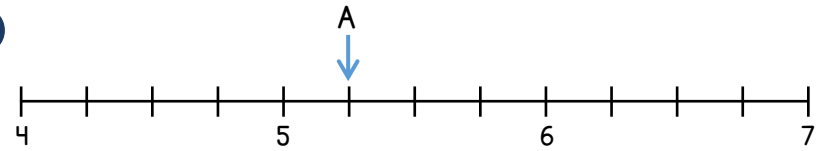
Is Max correct?

Yes

No

Explain your answer.

3



What number is the arrow pointing to?

\_\_\_\_\_

Draw an arrow to the number that is  $\frac{3}{4}$  less than A.

What number is  $1\frac{1}{2}$  greater than A?

\_\_\_\_\_

4

Tick the statements that are true.

$\frac{3}{5}$  is greater than  $\frac{3}{7}$  ☐

$1\frac{3}{8}$  is less than  $\frac{7}{8}$  ☐

$\frac{2}{8}$  is equal to  $\frac{5}{20}$  ☐

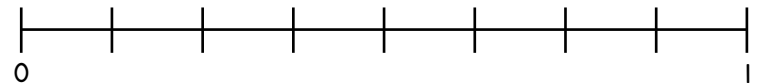
$2\frac{1}{4}$  is greater than  $\frac{11}{4}$  ☐

5

Write the fractions in order from smallest to largest.

You may use the number line to help you.

$\frac{3}{4}$     $\frac{5}{8}$     $\frac{3}{8}$     $\frac{1}{16}$



\_\_\_\_\_

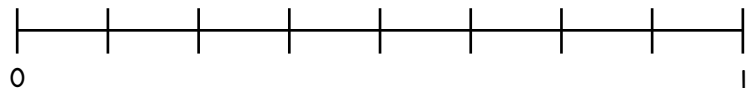
- 6 Calculate

$$\frac{2}{3} + \frac{1}{9} =$$

$$\frac{5}{6} - \frac{3}{4} =$$

$$2\frac{3}{5} + 1\frac{1}{2} =$$

- 7 Draw arrows from each fraction to its position on the number line.



$$\frac{36}{48}$$

$$\frac{33}{66}$$

$$\frac{29}{29}$$

- 8 Jenny reads  $\frac{1}{4}$  of her book on Monday.

She reads  $\frac{1}{3}$  of the book on Tuesday.

On Wednesday she reads the rest of the book.

What fraction of the book did she read on Wednesday?

- 9 Three friends share a chocolate bar.

Laura gets  $\frac{3}{9}$ , Phil gets  $\frac{4}{12}$  and Matt gets  $\frac{7}{21}$

Did they share the chocolate bar equally?

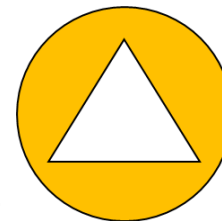
Explain your answer.

- 10 A circle has an area of  $18\frac{1}{6} \text{ cm}^2$ .

Max cuts a triangle from the circle.

The triangle has an area of  $5\frac{2}{3} \text{ cm}^2$ .

What is the area of the circle that is left?



$\text{cm}^2$

# Year 6

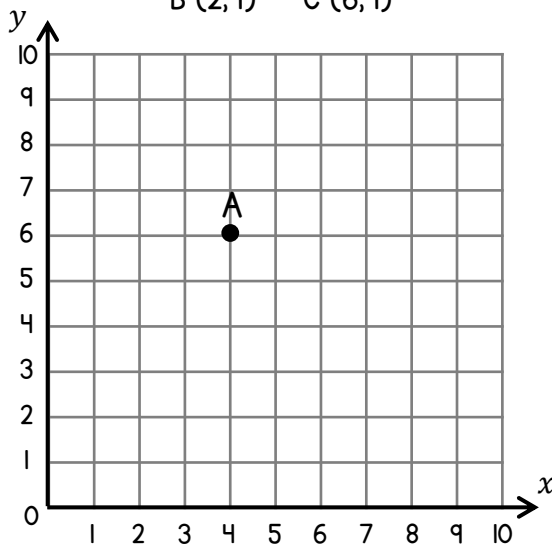
## Position and Direction

- 1 Write down the coordinates of point A.

(     ,     )

Plot the points B and C on the grid.

B (2, 1)    C (6, 1)

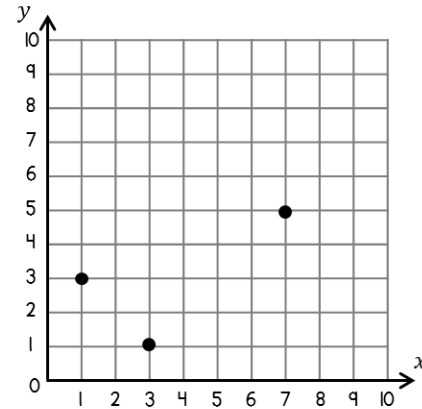


Join up the 3 points to make a triangle.

What type of triangle have you drawn?

\_\_\_\_\_

- 2 Teddy is drawing a rectangle on a grid.

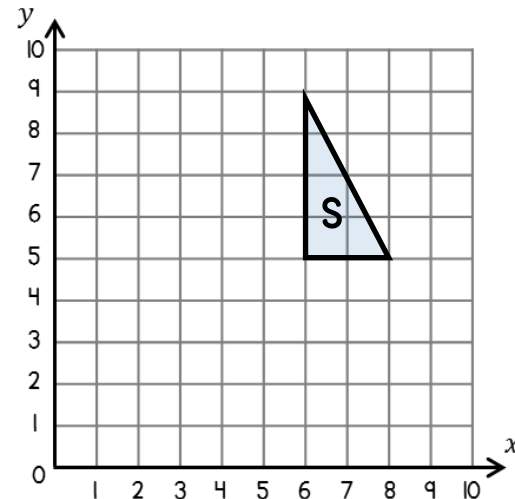


Plot the final vertex of the rectangle.

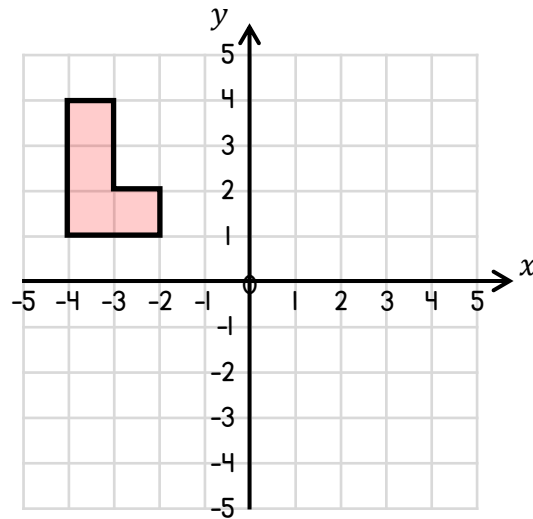
What are the coordinates of the final vertex?

(     ,     )

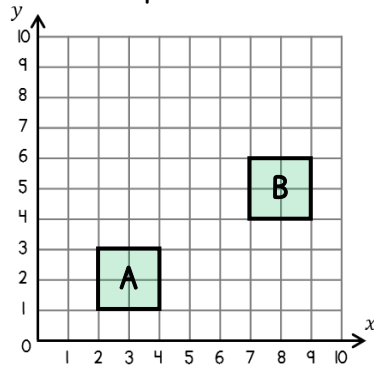
- 3 Translate triangle S, 2 left and 3 down.  
Label your triangle T.



- 4 Reflect the shape in the  $y$  axis.



- 5 Eva translates shape A, 3 right and 1 up. She labels her new shape B.

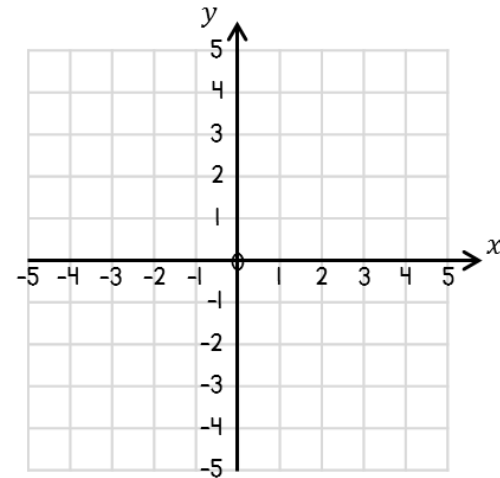


Explain why Eva is wrong.

What are the coordinates of the correctly translated shape?

(   ,   ) (   ,   ) (   ,   ) (   ,   )

- 6 On the grid, draw the shape with vertices at  $(-2, -3)$ ,  $(-4, -3)$  and  $(-4, -1)$



Reflect the shape in the  $x$  axis, label your shape P.

Translate shape P, 6 right and 2 down.

Label your new shape Q.

- 7 A square is drawn on a grid. Two of its vertices are at  $(3,3)$  and  $(7,7)$ . What is the perimeter of the square?

\_\_\_\_\_ units

# Answers



Use your **green** and **pink** highlighters to check your answers just like you would in the classroom.



If an answer is not correct, look again at your question so you understand what mistake you have made.

## Answers

1. How long did it take for the Limiting Factor to reach the deepest point in the ocean?  
**It took around four hours.**
2. When Kathy said, "a once in a lifetime day, seeing the moonscape of the Challenger Deep and then comparing notes with my colleagues on the ISS". what do you think she meant by the word 'moonscape'?  
**Accept an answer which refers to either that the ocean floor must have looked similar to the surface of the Moon or that it must be rocky and empty down there (similar to the Moon).**
3. Number these events 1 to 4 in the order they happened. One has been done for you.  

<input checked="" type="checkbox"/> 3	Kathy Sullivan reached Challenger Deep.
<input checked="" type="checkbox"/> 2	Kathy Sullivan became the first American woman to do a spacewalk.
<input checked="" type="checkbox"/> 4	Kathy Sullivan phoned the astronauts on the International Space Station.
<input checked="" type="checkbox"/> 1	Kathy Sullivan began astronaut training.
4. In the paragraph beginning 'The journey down took...', find and copy a word that means 'very large'.  
**enormous**
5. Why do you think the author chose to use an exclamation mark at the end of this sentence: "Because after making an equally slow ascent back to the ship on the surface, Kathy put in a call to the International Space Station!" **Tick two.**  

<input type="radio"/>	They wanted to show anger.
<input checked="" type="radio"/>	<b>They wanted to show astonishment.</b>
<input type="radio"/>	Because this is a silly thing for her to have done.
<input checked="" type="radio"/>	<b>Because this is an exciting thing for her to have done.</b>
6. Summarise the key information in this story in 15 words or fewer.  
**Accept an answer which includes the main facts from the story, e.g. Kathy Sullivan is the only person who has been to space and Challenger Deep.**

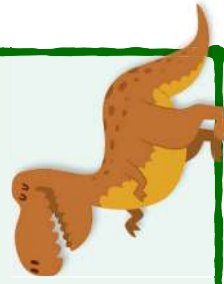


## SYNONYM WORD SEARCH ANSWERS



This word search contains 14 synonyms for the boring word 'said'. Can you find them all? You can use a **thesaurus** to help you search for any unfamiliar words.

R	B	L	U	R	T	E	D	R	O	U	T	V
S	F	E	U	E	X	C	L	A	I	M	E	D
A	I	W	E	M	N	M	E	O	C	U	J	E
S	O	T	C	A	C	K	L	E	D	T	O	C
O	L	P	A	R	I	S	Y	U	Z	T	R	L
B	M	I	E	K	L	B	H	W	O	E	L	A
B	O	O	M	E	D	N	U	A	L	R	K	R
E	U	S	E	D	T	D	I	I	W	E	N	E
D	T	B	R	T	Y	E	L	L	E	D	X	D
A	H	I	S	S	E	D	Y	E	S	H	U	I
Q	E	F	R	E	W	L	S	D	T	V	B	A
U	D	W	C	L	G	R	U	M	B	L	E	D
I	K	W	H	I	S	P	E	R	E	D	O	K



What do you call a dinosaur who always uses boring words?

A Dinobore!

## SYNONYM WORD SEARCH ANSWERS



This word search contains 13 synonyms for the boring word 'walk'. Can you find them all? You can use a **thesaurus** to help you search for any unfamiliar words.

T	R	A	I	P	S	E	I	O	T	R	F	M
Y	O	N	K	R	A	M	B	L	E	S	D	E
H	A	B	L	T	U	Z	Y	L	K	F	S	A
F	M	G	O	N	N	X	J	D	N	I	P	N
A	I	D	V	B	T	H	K	A	B	C	V	D
Q	T	S	C	V	E	U	P	R	A	N	C	E
U	Y	T	E	E	R	R	U	T	M	N	A	R
M	A	R	C	H	S	W	A	G	E	R	R	R
T	E	O	H	F	D	T	W	E	Y	T	N	B
B	N	L	S	E	W	O	V	C	J	K	I	O
C	P	L	O	D	N	M	I	O	P	S	E	R
B	E	E	S	T	D	P	F	T	E	A	T	L
H	E	A	F	L	O	U	N	C	E	I	O	N



What do you call a dinosaur with a very good vocabulary?

A Thesaurus!

# Answers

1. Name a fossil fuel mentioned in the story.  
**Accept coal, oil or gas.**

2. Why did the warm weather in May help?  
**The warm weather in May helped because solar power was easier to make.**

3. Tick to show whether each statement is a fact or an opinion.

	Fact	Opinion
Coal is bad.		✓
Coal is a fossil fuel.	✓	
Tidal energy is renewable.	✓	
Not using coal for two months is a huge achievement.		✓

4. 'In fact, even ten years ago, Britain got 40% of its power solely from coal.' This suggests that...

☐ Coal powered Britain alone.

☒ **There were other power sources.**

☐ Coal is useless.

☐ Solar power is more useful.

5. How do you feel climate change campaigners feel about this news?  
**Accept any reasonable answer which suggests they will find the news encouraging, e.g. I think that climate change campaigners will be pleased that coal has not been used for two months because it means that carbon emissions have decreased.**

6. Summarise the key information in the story in 15 words or fewer.  
**Accept any reasonable summary that refers to the following and is 15 words or fewer in length, e.g. The UK has not used coal to power electricity for two months.**

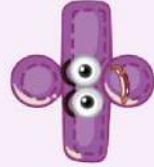
# Vowel-less Operations!

Below are the names of different words associated with the four operations. However, the vowels from each word are missing! Work out each word from the consonants given.



Good luck! Or should I say, gd lck!

dvd	pls	tms	lss
divide	plus	times	less
sbtrct	dcrs	prct	nvrs
subtract	decrease	product	inverse
mltply	ncrs	qnt	ttl
multiply	increase	quotient	total
mns	rmndr	shr	qls
minus	remainder	share	equals
sm	mr	dffnc	dd
sum	more	difference	add



# Year 5

## Place Value Assessment

- 1 What number is represented below?



16,915

Georgia says that the number is multiple of 5  
Is Georgia correct? Explain your answer.

Yes she is correct because the number has a multiple  
of 5 in its 1s place.

Yes because it is in the 5 times table.

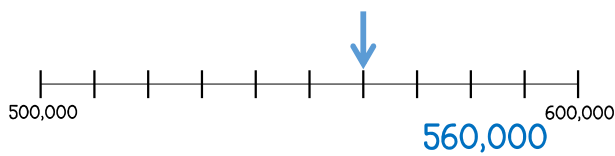
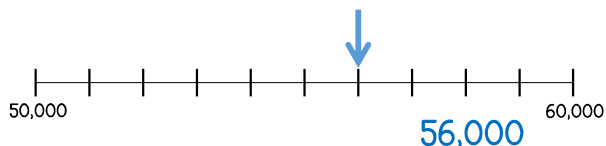
- 2 Complete the missing numbers.

$$47,603 = 40,000 + \underline{7,000} + 600 + 3$$

$$\underline{50,374} = 50,000 + 300 + 70 + 4$$

$$80,000 + 7,000 + \underline{1,300} = 88,300$$

- 7 What numbers are shown by the arrows?



- 8 Complete the following using <, > or =

$$12,900 > 2,980$$

$$57,000 < 570,000$$

$$999,999 < 1 \text{ million}$$

- 9 Arrange the digit cards to make an **odd** number between 70,000 and 100,000

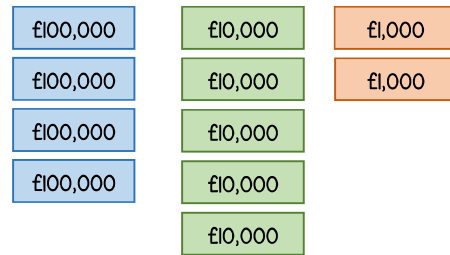
1 4 6 8 9

Range of possible answers. All will be begin with 8 or 9.

Round your number to the nearest 1,000

Round your number to the nearest 10,000

- 3 In a game, people have some play money to buy houses.  
Each person starts with the following play money.



How much money do they each start with?

£ 452,000

- 4 Circle **all** the numbers that round to 4,750 to the nearest 10

4,752 748 4,748 4,745 4,755

- 5 What is the missing number?

305,700		
300,000	?	700

5,000

- 6 Which is the greater number? Explain your answer.

XCIX CX

XCIX is 99 and CX is 110. Explanation needed for the mark.

- 10 Complete the missing numbers.

19	10,019	20,019	30,019	40,019	50,019
----	--------	--------	--------	--------	--------

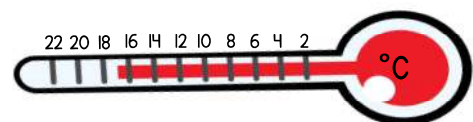
- 11 Put the following weights in order starting with the smallest.

A 700,000 kg B 87,000 kg  
C Ninety-four thousand kg D 399,458 kg

B C D A

smallest

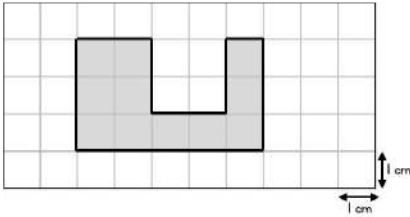
- 12 The thermometer shows the temperature in London in May.



In January the temperature was 20 degrees colder.  
What was the temperature in London in January?

-3 °C

- 1 The shape is drawn on a centimetre square grid.



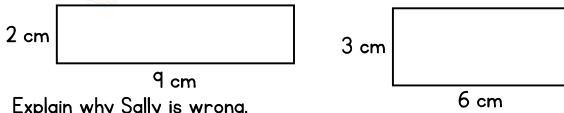
What is the area of the shape?

11 cm<sup>2</sup>

What is the perimeter of the shape?

20 cm

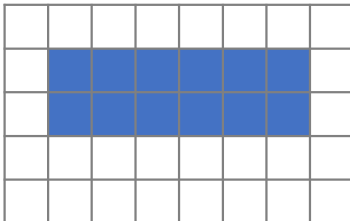
- 2 Sally says, The two rectangles have the same area, so they must have the same perimeter.



Explain why Sally is wrong.

The perimeter of the first rectangle is 22 cm and the perimeter of the second rectangle is 18 cm.

- 6 Draw a rectangle which has an area of 12 squares and a perimeter of 16 squares.



Award 1 mark for a rectangle with area of 12 squares but not a perimeter of 16 or vice versa.

- 7 The square and the regular hexagon have the **same** perimeter.

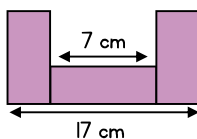


Work out the length of one side of the square.

Award 1 mark for working out the perimeter of the hexagon is 48 cm

12 cm

- 8 The shape is made up of three identical rectangles.



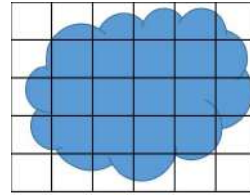
Work out the area of the shape.

Award 1 mark for finding the missing length of each rectangle is 5 cm

Award 2 marks for then calculating the area of each rectangle is 35 cm<sup>2</sup>

105 cm<sup>2</sup>

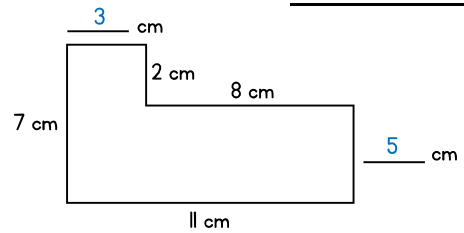
- 3 Estimate, in squares, the area of the shape.



Award 1 mark for evidence of an effective method to count the squares.

19 squares

- 4

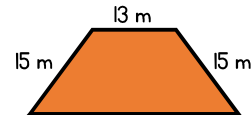


Complete the missing lengths.

Work out the perimeter of the shape.

36 cm

- 5 The perimeter of the shape is 60 m.



Find the length of the missing side.

Award 1 mark for adding the 3 lengths and then subtracting from the total but with an error in the calculation

17 m

- 9 Ian wants to paint a wall measuring 3 metres by 7 metres. Each tin of paint covers 5 m<sup>2</sup>. How many tins of paint will Ian need?

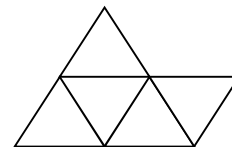
Award 1 mark for calculating the area of the wall is 21 m<sup>2</sup>

5 tins

- 10 An equilateral triangle has a perimeter of 21 cm.



John uses 5 of the triangles to make this shape.



What is the perimeter of the new shape he has made?

Award 1 mark for working out that each side of a triangle is 7 cm but then making a calculation error when adding.

49 cm

# Year 5

## Multiplication and Division

1 Calculate.

$$312 \times 3 = \underline{936}$$

$$312 \div 3 = \underline{104}$$

$$1,371 \times 7 = \underline{9,597}$$

$$798 \div 5 = \underline{159 \text{ r}3}$$

2 Complete the calculation.

		2	0	7
×				6
	1	2	4	2
4				

Allow 1 mark if 1 error has been made.

3 Jack is thinking of a number.

When he multiplies his number by 7, he gets 161

What is Jack's number?

23

4 Complete the grid for the multiplication  $36 \times 14$

	30	6
10	300	60
4	120	24

Allow 1 mark if 1 error has been made.

Use the grid to work out  $36 \times 14$

504

5 In a theatre there are 45 rows of chairs.  
There are 36 chairs in each row.  
How many chairs are there altogether?

1 mark for correct method with 1 error.

1,620 chairs

6 Jen and Max each have 5 digit cards.

1	4	5	7	8
---	---	---	---	---

Jen arranges her cards to make a 3-digit and 2-digit number.

1	5	7	×	4	8
---	---	---	---	---	---

She multiplies the two numbers together.

What is her answer?

1 mark for correct method with 1 error.

7,536

Max arranges his cards to make a 3-digit and 2-digit number.

He multiplies his numbers and his answer ends in a 5

What could the 3-digit and 2-digit number be?

8	7	5	×	4	1
---	---	---	---	---	---

Any combination where one of the ones columns has the 5 in and the other has either 1 or 7

7 A jacket costs £52

Eight jackets and three skirts cost £653

How much does a skirt cost?

1 mark for three skirts costing £237

£ 79

8 Some cards are shared between 7 boxes.

There are 63 cards in each box and 4 left over.

How many cards were shared between the boxes?

445 cards

9 Work out  $25 \times 87 \times 4$

Explain or show your method.

E.g. I did  $25 \times 4$  first which is 100, then multiplied 87 by 100

8,700

Sudoku 6 x 6 Puzzles **Answers**

5	2	4	3	6	1
3	6	1	5	4	2
1	5	6	2	3	4
2	4	3	1	5	6
4	3	2	6	1	5
6	1	5	4	2	3

6	3	2	4	5	1
4	5	1	6	3	2
2	6	3	1	4	5
1	4	5	2	6	3
5	1	6	3	2	4
3	2	4	5	1	6









1	3	2	5	6	4
4	5	6	1	3	2
6	2	3	4	1	5
5	4	1	6	2	3
2	6	5	3	4	1
3	1	4	2	5	6

2	5	1	6	4	3
6	3	4	2	1	5
5	4	6	1	3	2
1	2	3	5	6	4
4	6	5	3	2	1
3	1	2	4	5	6

5	2	4	1	3	6
1	6	3	5	4	2
3	4	2	6	1	5
6	5	1	3	2	4
4	1	6	2	5	3
2	3	5	4	6	1

1	6	2	5	4	3
5	4	3	1	2	6
3	1	4	6	5	2
6	2	5	3	1	4
4	5	6	2	3	1
2	3	1	4	6	5

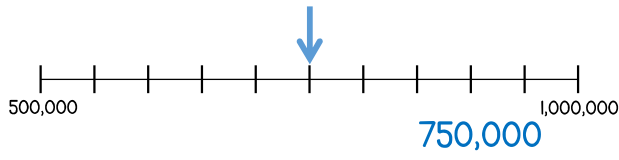
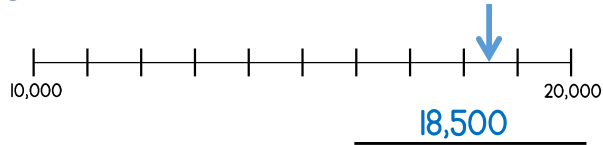
Converting Time Worksheet - **Answers**

Time in Words	24 Hour Clock	12 Hour Clock	Analogue
seven o'clock in the evening	19:00	7:00p.m.	
eleven o'clock in the morning	<b>11:00</b>	11:00a.m.	
quarter past two in the afternoon	14:15	<b>2:15 p.m.</b>	
twenty past eight at night	<b>20:20</b>	8:20p.m	
midday	<b>12:00</b>	<b>12:00 p.m.</b>	
twenty to seven in the evening	<b>18:40</b>	6:40p.m.	
midnight	<b>00:00</b>	<b>00:00 a.m.</b>	
seven minutes to eight at night	<b>19:53</b>	<b>7:53 p.m.</b>	

# Year 6

## Place Value Assessment

- 1 What numbers are shown by the arrows?



- 2 Here are some digit cards.

2 5 8 3

Fred makes the largest 3 digit **even** number he can make.  
He rounds his number to the nearest 10  
What is his answer?

850

- 6 Here are 3 digit cards.

4 8 9

Use each card once to make the statement correct.

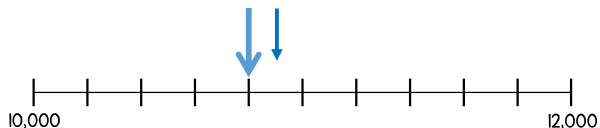
9 0 3 > 8 4 8

4 and 8 can be either way round.  
Arrange all 6 cards to make a number between 395,000 and 425,000

□ □ □ □ □ □

Answer needs to begin 398 or 40.

- 7 Nick marks a number on the number line.



Draw an arrow to show 100 more than Nick's number.

- 8 Here is part of a number sequence.

The sequence increases by 50 each time.

6,250	6,300	A	B	C	D	E	F	G
-------	-------	---	---	---	---	---	---	---

Which box will have the first number greater than 6,500?

E

- 3 Complete the missing numbers.

$$127,084 = 100,000 + 20,000 + \underline{7,000} + 80 + 4$$

$$\underline{7,503} = 7000 + 500 + 3$$

- 4 The length of four rivers is shown in the table.

River	Length in km
Mississippi	6,275
Saint Lawrence	3,058
Nile	6,853
Rio Grande	3,057

Put the rivers in order of their length starting with the shortest.

Rio Grande, Saint Lawrence, Mississippi, Nile

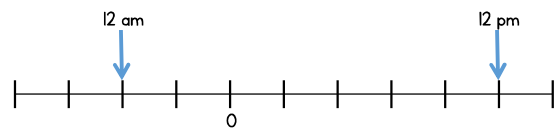
All 4 in correct order for 1 mark.

Round the length of the Mississippi river to the nearest 100 km.

6,300 km

- 5 The number line shows the temperature at 12 am and 12 pm on Monday in a town.

The difference between the temperatures is 14°C.



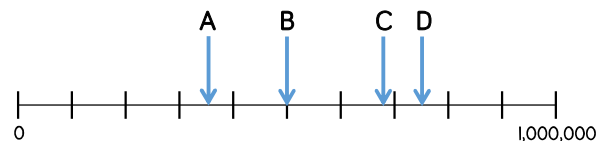
What is the temperature at 12pm?

10 °C

- 9 What is the **smallest** digit that can be used to make this statement correct?

$$34,3 \underline{6} 8 > 34,359$$

- 10 Some numbers are marked on a number line.



Which numbers round to 1 million to the nearest million?

B, C, D

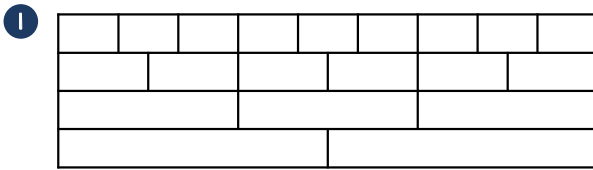
Which number rounds to 700,000 to the nearest thousand?

C

- 11 What is 35 ones + 35 tens?

385





Use the fraction bars to simplify the fractions.

$$\frac{6}{9} = \frac{2}{3}$$

$$5\frac{3}{6} = 5\frac{1}{2}$$

- 2 Max says  $\frac{30}{50}$  in its simplest form is  $\frac{15}{25}$   
Is Max correct?

Yes

No

Explain your answer.

5 is a factor of 15 and 25 so it will simplify to  $\frac{3}{5}$

- 6 Calculate

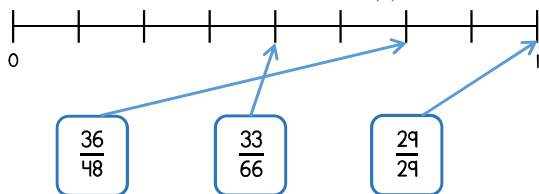
$$\frac{2}{3} + \frac{1}{9} = \frac{7}{9}$$

$$\frac{5}{6} - \frac{3}{4} = \frac{1}{12}$$

$$2\frac{3}{5} + 1\frac{1}{2} = 4\frac{1}{10}$$

- 7 Draw arrows from each fraction to its position on the number line.

Award 1 mark for 1 correctly placed fraction.



- 8 Jenny reads  $\frac{1}{4}$  of her book on Monday.

She reads  $\frac{1}{3}$  of the book on Tuesday.

On Wednesday she reads the rest of the book.

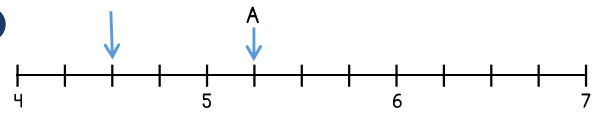
What fraction of the book did she read on Wednesday?

Award 1 mark for 1 correct step of calculation.

- Finding equivalent fractions
- Adding fractions together

$$\frac{5}{12}$$

3



What number is the arrow pointing to?

$$5.25 \text{ or } 5\frac{1}{4}$$

Draw an arrow to the number that is  $\frac{3}{4}$  less than A.

What number is  $1\frac{1}{2}$  greater than A?

$$6.75 \text{ or } 6\frac{3}{4}$$

4

Tick the statements that are true.

$\frac{3}{5}$  is greater than  $\frac{3}{7}$



$1\frac{3}{8}$  is less than  $\frac{7}{8}$



$\frac{2}{8}$  is equal to  $\frac{5}{20}$



$2\frac{1}{4}$  is greater than  $\frac{11}{4}$



5

Write the fractions in order from smallest to largest.

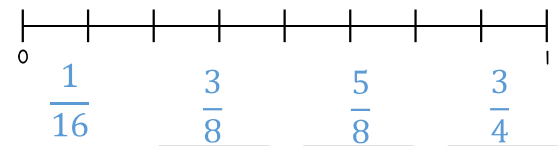
You may use the number line to help you.

$$\frac{3}{4}$$

$$\frac{5}{8}$$

$$\frac{3}{8}$$

$$\frac{1}{16}$$



Award 1 mark for 2 correctly placed fractions.

9

Three friends share a chocolate bar.

Laura gets  $\frac{3}{9}$ , Phil gets  $\frac{4}{12}$  and Matt gets  $\frac{7}{21}$

Did they share the chocolate bar equally?

Explain your answer.

Yes.

Each fraction is equivalent to one third.

10

A circle has an area of  $18\frac{1}{6} \text{ cm}^2$ .

Max cuts a triangle from the circle.

The triangle has an area of  $5\frac{2}{3} \text{ cm}^2$ .

What is the area of the circle that is left?



Award 2 marks for the correct answer.

Award 1 mark for 1 step of correct calculation.

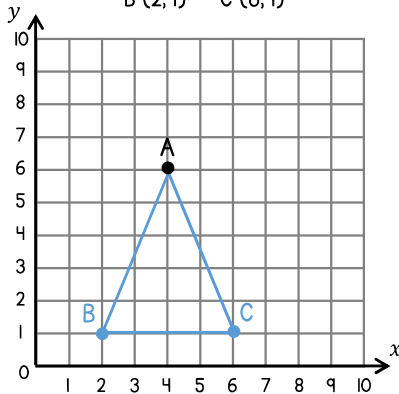
$$12\frac{1}{2} \text{ cm}^2$$

- 1 Write down the coordinates of point A.

( 4 , 6 )

Plot the points B and C on the grid.

B (2, 1) C (6, 1)

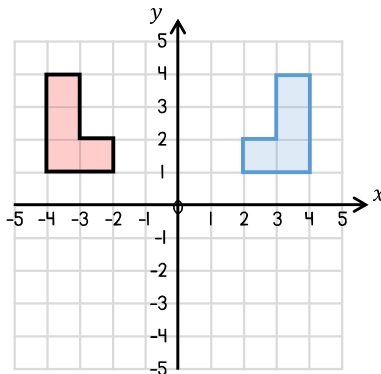


Join up the 3 points to make a triangle.

What type of triangle have you drawn?

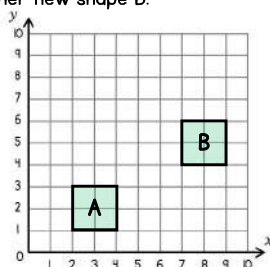
Isosceles

- 4 Reflect the shape in the y axis.



I mark for correctly reflected shape in wrong position.

- 5 Eva translates shape A, 3 right and 1 up. She labels her new shape B.



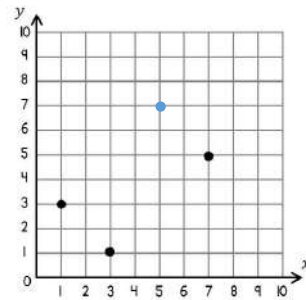
Explain why Eva is wrong.

She has counted 3 across 1 up but then drawn the rest of the shape incorrectly.

What are the coordinates of the correctly translated shape?

( 5 , 2 ) ( 7 , 2 ) ( 5 , 4 ) ( 7 , 4 )

- 2 Teddy is drawing a rectangle on a grid.

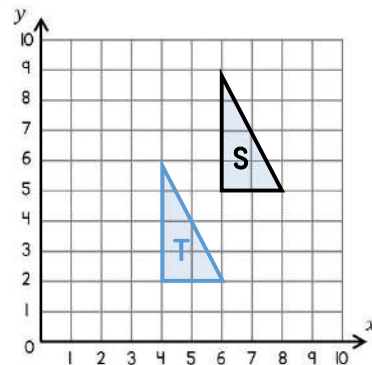


Plot the final vertex of the rectangle.

What are the coordinates of the final vertex?

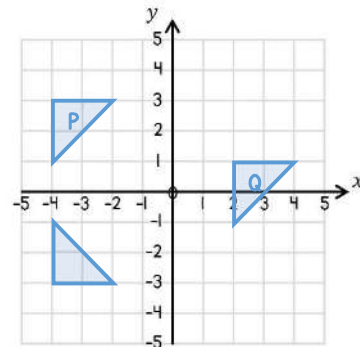
( 5 , 7 )

- 3 Translate triangle S, 2 left and 3 down. Label your triangle T.



I mark for 2 left, I mark for 3 down.

- 6 On the grid, draw the shape with vertices at (-2, -3), (-4, -3) and (-4, -1)



Reflect the shape in the x axis, label your shape P.

I mark for correctly reflected shape in wrong position.

Translate shape P, 6 right and 2 down.

Label your new shape Q. I mark for correct translation of their P

- 7 A square is drawn on a grid. Two of its vertices are at (3,3) and (7,7) What is the perimeter of the square?

I mark for correct side length of 4