

St Denys Primary School



Year 3 and Year 4

Home Learning

**Week beginning:
29th June 2020**

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

Year 3 and Year 4 - 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.



Class 4, if you want to try some online lessons, check out BBC Bitesize.

Year 4/ P5 online lessons					 Bitesize Daily lessons
Monday 29 June - Friday 3 July					
Monday	Tuesday	Wednesday	Thursday	Friday	
English Suffixes (er, ing, est, ed and y)	English Fiction and non-fiction	English Writing a letter	English Bullet points	English Reading lesson: Frank Einstein and the Antimatter Motor by Jon Scieszka	
Maths Interpret charts	Maths Comparison, sum and difference	Maths Introducing line graphs	Maths Line graphs	Maths Challenge of the week	
History Maya Civilisation	Geography Oceans	Science Rocks, soil and fossils	German At home, school, activities and hobbies	Design and Technology Design skills	
Find all this content and more at: bbc.co.uk/bitesize/dailylessons					

Lessons are available daily. Here is the schedule for this week.



accident (ally)	disappear	interest	pressure
actual (ly)	early	island	probably
address	earth	knowledge	promise
answer	eight/eighth	learn	purpose
appear	enough	length	quarter
arrive	exercise	library	question
believe	experience	material	recent
bicycle	experiment	medicine	regular
breath	extreme	mention	reign
breathe	famous	minute	remember
build	favourite	natural	sentence
busy/business	February	naughty	separate
calendar	forward (s)	notice	special
caught	fruit	occasion (ally)	straight
centre	grammar	often	strange
century	group	opposite	strength
certain	guard	ordinary	suppose
circle	guide	particular	surprise
complete	heard	peculiar	therefore
consider	heart	perhaps	though/although
continue	height	popular	thought
decide	history	position	through
describe	imagine	possess (ion)	various
different	increase	possible	weight
difficult	important	potatoes	woman/women

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

Y3/4 Spellings Words Search

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

circle

earth

bicycle

heart

interest

perhaps

pressure

natural

difficult

recent

Y3/4 Spellings Words Search

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

complete

experience

notice

remember

strange

straight

address

often

height

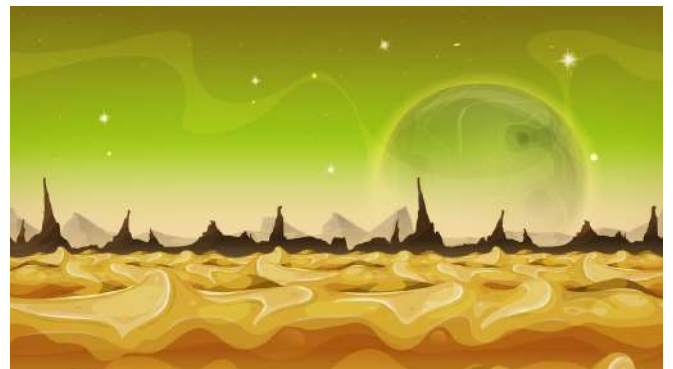
increase

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.



Design a Planet



You have discovered a brand new planet! Complete an astronaut report to send to Mission Control about what you have found.

Name of Planet: _____

Key Facts

Colour: _____

Size: _____

Number of moons: _____

Inhabitants

(People Who Live There)

Other information: _____

Surface

Materials: _____

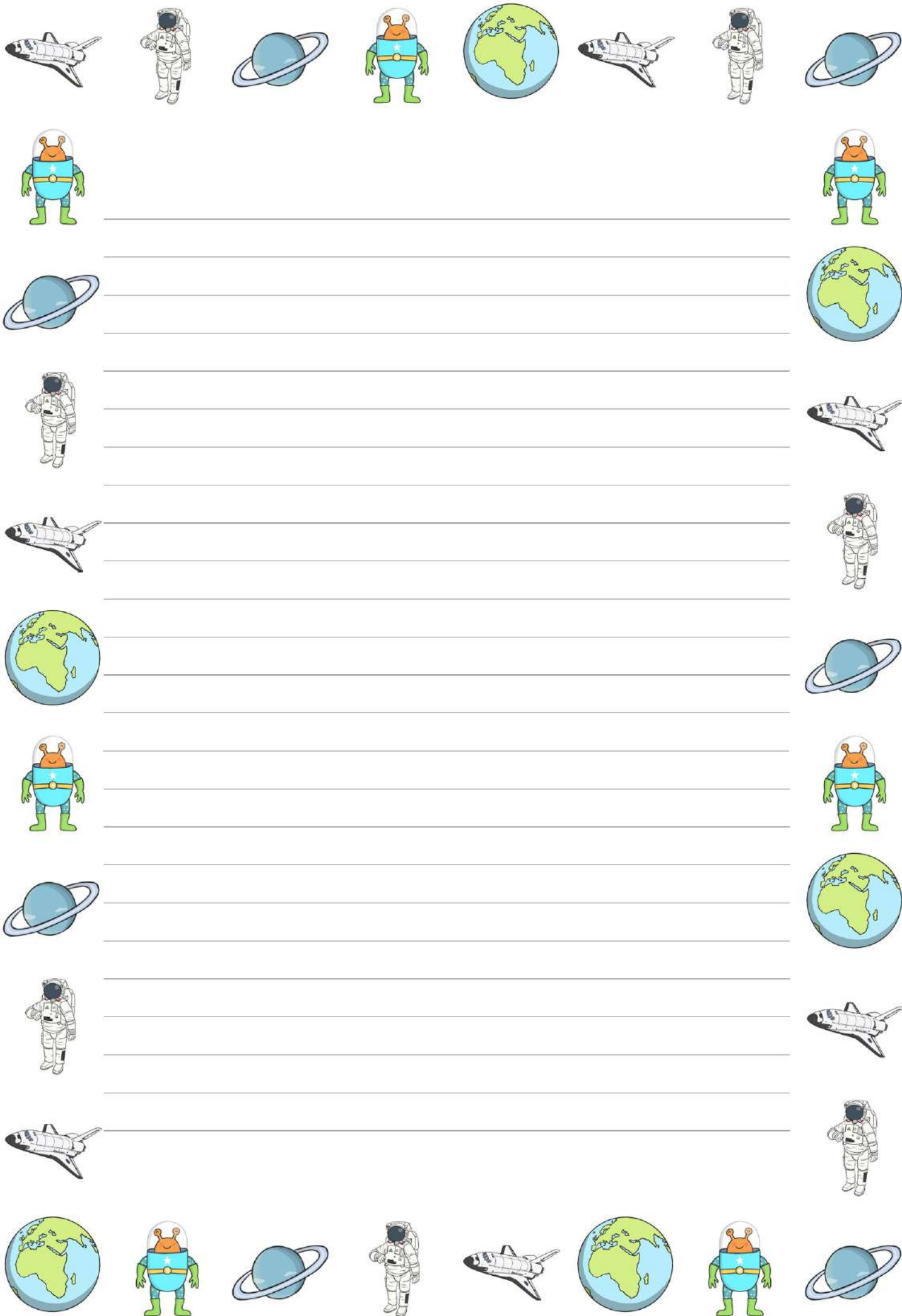
Signs of life (water, oxygen):

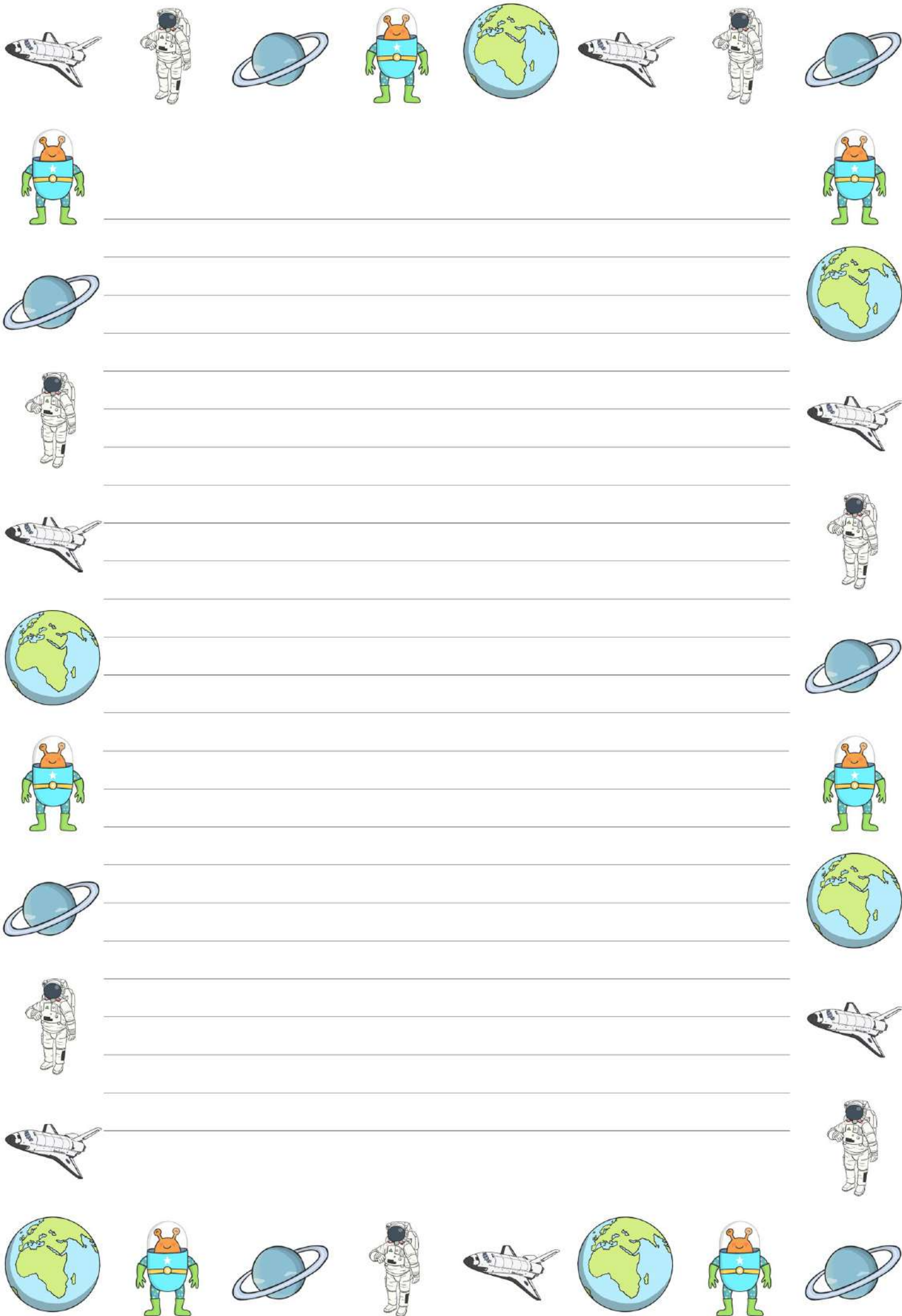


Design an Alien



Can you design your own alien in the space below?







Record Breaker

What is the Mariana Trench?

- The Mariana Trench is a crescent-shaped trench in the Pacific Ocean.
- The deepest known point in it is called Challenger Deep.

Illustration: Kathy Sullivan.

Kathy Sullivan Visits Deepest Point

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 used to be an astronaut. She recently went down to Challenger Deep in the Mariana Trench, in the Pacific Ocean. It's the deepest point in the world's oceans!

She was only the eighth person to ever reach the deepest part of the ocean and she was also the first woman to do so.

Kathy slowly went down for almost 11 000m into the Mariana Trench.

That is so deep that you could hide the highest mountain in the world, Mount Everest, in it.

You wouldn't see the mountain, though. Its peak would still be more than 2km below the waves.

The journey down took around four hours. But, she couldn't stay for long because of the enormous water pressure down there. At that

depth, it is like having 2200 tonnes of force pushing down on their small submersible.

So how does it feel to have been in space and visited the deepest point? Kathy said, 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, when Kathy made it back to the ship, she put in a call... to the International Space Station!

Glossary

trench	A deep area of an ocean.
peak	The pointed top of a mountain.
water pressure	The force that the weight of water puts on an object as it goes deeper.
submersible	A small craft designed to operate under water.

Questions

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

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’? Tick one.

- ☐ She means that she has been to the Moon.
☐ She means that the bottom of the Mariana Trench is made of cheese.
☐ She means that the Mariana Trench is on the Moon.
☐ She means that the bottom of the Mariana Trench looks like the Moon’s surface.

3. Tick to say whether each statement is true or false.

	True	False
The Mariana Trench is deeper than Mount Everest is tall.		
Kathy Sullivan still works as an astronaut.		
Kathy Sullivan was the first person to reach Challenger Deep.		
Kathy Sullivan was the first woman to reach Challenger Deep.		

4. Reread the paragraph beginning ‘The journey down.’
Find and copy a word that means the same as ‘large’.

5. Why do you think Kathy Sullivan phoned the International Space Station?

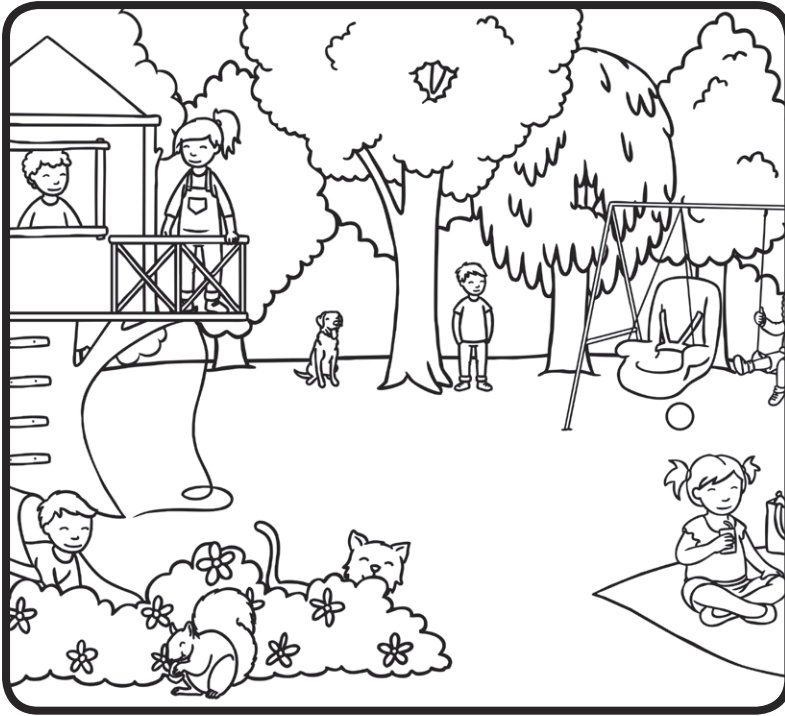
6. Write a summary of the story in 20 words or fewer.

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

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

[illegible]

Story Settings Description



Key Words

beautiful fantastic

lovely green leafy

noisy crowded lively

fun entertaining busy

enjoyable relaxing

wonderful pleasant

Can you write a paragraph about this setting?

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

Colour in the picture when you have finished.

Correct the Sentence Punctuation

Write the correct sentence underneath by adding in capital letters, full stops and question marks:

1. my brothers dog is called charlie

2. i like watching a film on sunday afternoons

3. the titanic was a famous ship it sunk in 1912

4. jake and robert are going on holiday to greece in august

5. martha took her grandchildren to the zoo yesterday afternoon

6. when i go to mcdonalds i always get a cheese burger

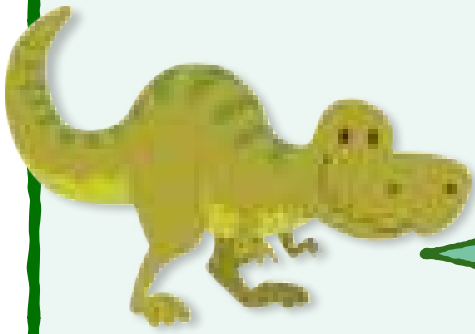
7. ayesha and i are going to the cinema on friday

8. did you bake the chocolate chip cookies for the food stall

9. my auntie is having a baby she's calling him william

10. have you chosen what you're wearing to the party?

SYNONYM WORD SEARCH

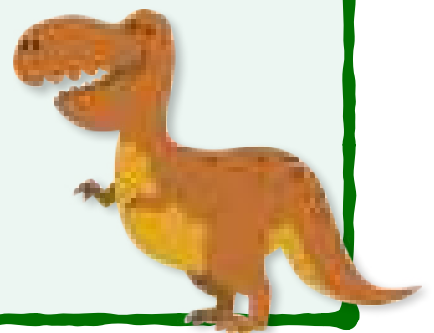


This word search contains 14 synonyms for the boring word 'said'. Can you find them all? You can use a **thesaurus** to help you search for any unfamiliar words.

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!



Compound Sentences

Useful Information

A sentence that expresses two complete thoughts is a compound sentence.

In a compound sentence, two independent clauses can be joined by a comma and a conjunction. Each clause has a subject and a verb.

When you are writing, it would be strange to only use short, simple sentences. Instead, try making some compound sentences.

'I do not like eating meat.' is a simple sentence.

'I love vegetables.' is also a simple sentence.

By putting the two sentences together and joining them with a conjunction, we can make a much more interesting compound sentence.

'I do not like eating meat' + but + 'I love vegetables.'

'I do not like eating meat, but I love vegetables.'

Remember, commas are not conjunctions and they should never be used to join two sentences together. (Commas are not sticky, so you can't use them to stick information together!)

Challenge 1

Join the following sentences together to make compound sentences. Choose a suitable conjunction.

1. I enjoy reading. I don't enjoy cooking.
2. Ben is thoughtful. He always plays with me when I'm lonely.
3. Kate walked home from school slowly. She was tired.
4. Babies cry all the time. They can get some attention from their mum.
5. Year Five is a hardworking class. All of the children want to do well at school.
6. I can use simple sentences in my writing. I can use compound ones to make it more interesting.

Challenge 2

Tell whether or not each sentence is a compound sentence. Write compound or not compound next to the sentence.

1. Mr. Dubois is fixing the roof on his house.
2. Chloe and her friends went to the cinema, but they didn't buy any popcorn.
3. Brandon went to the football game last night, but his favourite team lost.
4. Dr. Brown said I could come to his office on Wednesday or I could come on Thursday of next week.
5. I'm going to buy a new tablet computer or I might buy a new mobile phone.
6. Grandma is a terrific cook, and we love staying at her house.
7. I'm going to pick up cheese, crackers, and juice at the shop.
8. Would you like some hot chocolate or orange juice?

Challenge 3

1. Write a compound sentence. Draw a red line under the first independent clause. Draw a blue line under the second independent clause.

2. Write another compound sentence. Draw a green line under the conjunction.

Challenge 4

Explain why each compound sentence is incorrectly written:

- a) I wanted to visit my cousin, I didn't have enough money for a bus ticket.

- b) My dog lost her favourite toy, I bought her a new one.

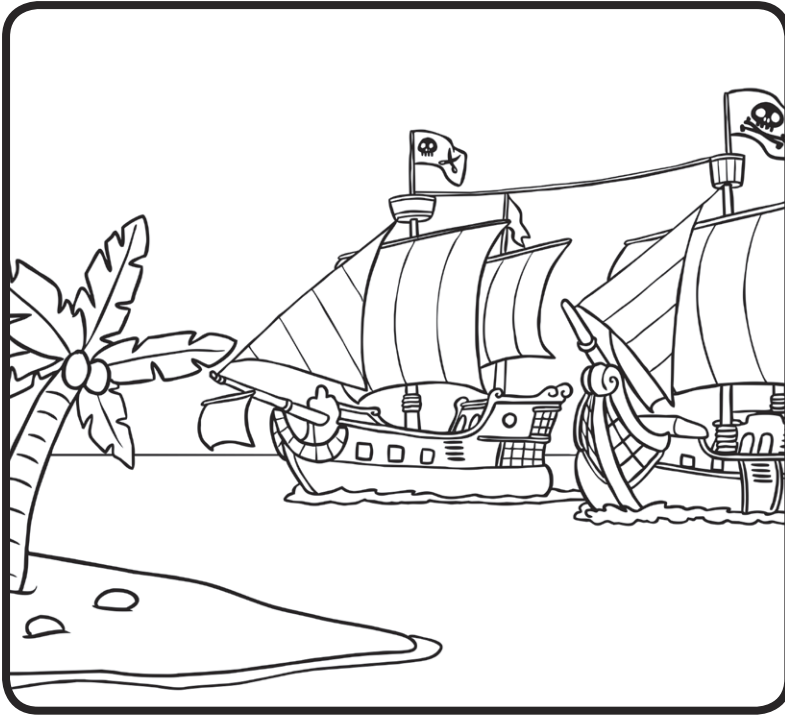


What do you think happened 30 seconds before this picture was taken?!

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.

Story Settings Description



Key Words

windy warm hot tropical

beautiful magnificent

noisy dangerous

ferocious swashbuckling

daring sandy exciting

adventurous frightening

Can you write a paragraph about this setting?

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

Colour in the picture when you have finished.

Expanding Sentences

Extend these simple three word sentences by adding adverbs, adjectives and further information to make them more interesting. The first one has been done for you.

1. An owl hooted.

An elegant, snow-white owl hooted loudly from high up in the trees.

2. A boy shouted.

3. The witch laughed.

4. My uncle sneezed.

5. The teacher talked.

6. A dog barked.

Expanding Sentences

7. A bat swooped.

8. The sun shone.

9. The snake slithered.

10. The bird landed.

11. The child cried.

12. The wind howled.

13. The rocket launched.

14. The horse trotted.



Adjoining
means next to.

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

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.

Find a number.

Find six words with three or more letters.

Find a word that rhymes with 'mouse'.

Find a number.

Find a colour.

Find a word that rhymes with 'mouse'.

Find a compass point.

Find a body part.

Find a food.

Find a synonym for a fight.

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.

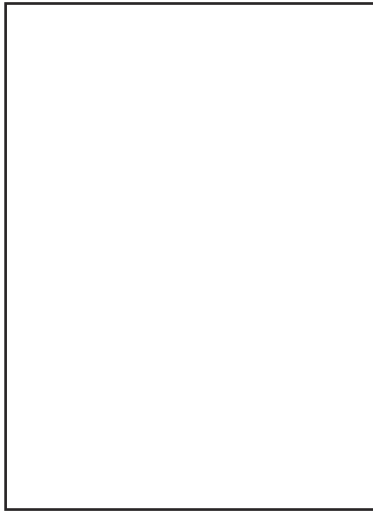
T	R	A	I	P	S	E	I	O	T	R	F	M
Y	O	N	K	R	A	M	B	L	E	S	D	E
H	A	B	L	T	U	Z	Y	L	K	F	S	A
F	M	G	O	N	N	X	J	D	N	I	P	N
A	I	D	V	B	T	H	K	A	B	C	V	D
Q	T	S	C	V	E	U	P	R	A	N	C	E
U	Y	T	E	E	R	R	U	T	M	N	A	R
M	A	R	C	H	S	S	W	A	G	G	E	R
T	E	O	H	F	D	T	W	E	Y	T	N	B
B	N	L	S	E	W	O	V	C	J	K	I	O
C	P	L	O	D	N	M	I	O	P	S	E	R
B	E	E	S	T	D	P	F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



Book Review



Book Cover

Book Title

Author _____

Illustrator _____

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

Plot

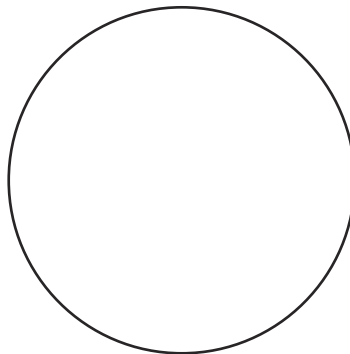
Event 1 _____

Event 2 _____

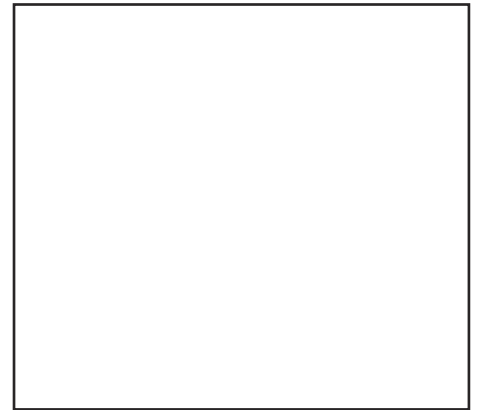
Event 3 _____

Setting

Picture of the setting



Character



Name _____

Personality _____

Physical Appearance _____

How I feel about this character
and why: _____

Cause and Effect of one the events in the book

Cause

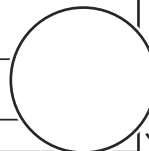
Effect

My Star Rating

Why I rated the book _____ stars

This book made me feel

because _____



Draw how you felt!



Coal Free

UK Doesn't Use Coal for 2 Months

Last week marked the second full month that Britain has gone without using coal to make energy.

This is remarkable because coal had been used to make power in Britain for over 130 years. In fact, even ten years ago, Britain got around four tenths of its power from coal.

The UK has been using more renewable sources of energy lately. Solar, wind and tidal power are called renewable because they don't run out.

For example, solar power is created using light from the sun to make electricity. Renewable energy sources also don't release **greenhouse gases** as they create energy.

When burnt in a power plant, coal heats water up to create steam. This steam is able to spin **turbines** that create huge amounts of electricity.

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

Because of climate change, the UK government is aiming to reach net zero

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 make electricity.

Photo: Solar power uses sunlight to make energy.

carbon **emissions** by 2050. This means that any carbon that gets into the air, through things such as cars and power stations, must be removed from the air.

To do this, the UK government says that they want to plant more trees. Trees absorb carbon dioxide and produce oxygen, which we need to breathe. They also want more energy to be made using renewable sources.

Glossary

greenhouse gas	Gases that trap heat and cause the planet to get warmer.
turbine	A machine in which a wheel or rotor with blades that create electricity.
climate change	Changes to the world's weather due to more greenhouse gases.
emissions	When gases are released.

Questions

1. Which of the following is **not** a renewable energy source?

- ☐ coal power
- ☐ solar power
- ☐ tidal power
- ☐ wind power

2. In the second paragraph, which word means 'unusual, special or surprising'?

3. Give one example of how renewable energy sources are different from fossil fuels.

4. Tick each statement to show whether it is true or false.

	True	False
Britain has not used coal for two months		
Solar energy is not being used to make energy.		
Burning coal produces no greenhouse gasses.		
Wind energy is a fossil fuel.		

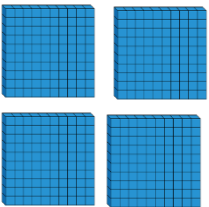


5. Why do the UK government want to plant more trees?

6. Summarise the key information in this story in 20 words or fewer.

Year 3

Place Value Assessment

- 1 Anna has made a number.

Hundreds	Tens	Ones
		

What number has Anna made?

Is the number odd or even?

How do you know?

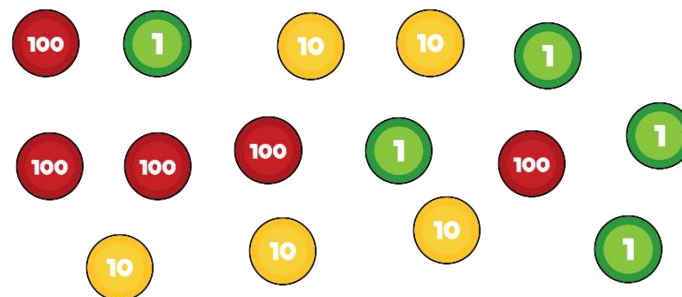
- 2 Circle the number that has the digit 7 in the tens column.

725 572 257

- 3 Max is making a number using some counters. Max chooses 6 counters.

He makes a number greater than 300

Circle the counters Max could have chosen.



- 4 Match the numbers.

Six hundred and six 676

Six hundred and sixty 606

Six hundred and seventy-six 660

- 5 Complete the missing numbers.

255	265	275				
-----	-----	-----	--	--	--	--

- 6 Here are some digit cards.



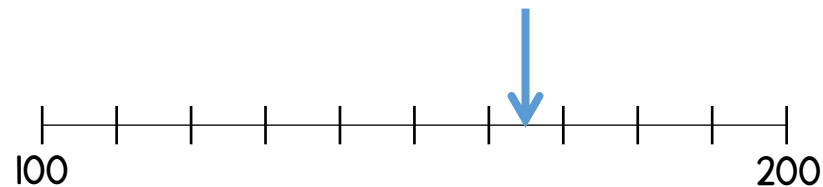
Max uses the cards to make a 3 digit number.
Write down all the numbers between 250 and
550 Max can make.

- 7 What is 100 less than 719? _____

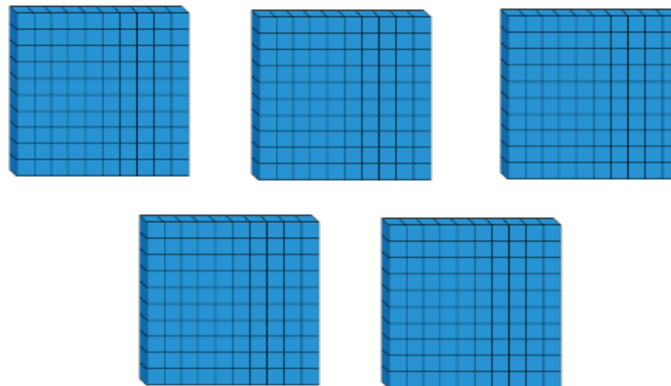
What is 10 more than 97? _____

What is 10 less than 205? _____

- 8 What number is the arrow pointing to?



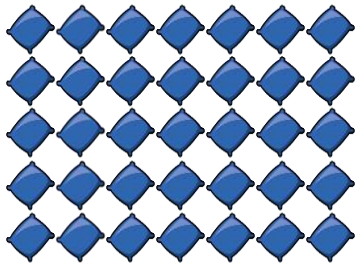
- 9 How many tens are there in 500? _____



Year 3

Multiplication and Division

- 1 Use the array to complete the number sentences.



$$\begin{array}{l} \square \times \square = \square \\ \square \times \square = \square \\ \square \div \square = \square \\ \square \div \square = \square \end{array}$$

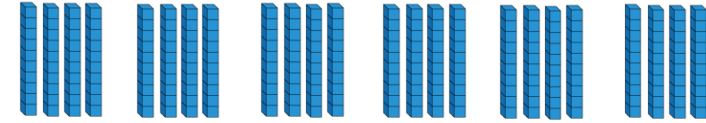
- 2 A shop has 32 apples.
They are put into 8 equal groups.
How many apples are in each group?

 apples

- 3 Use the diagrams to help you.



$$6 \times 4 = \square$$



$$6 \times 40 = \square$$

- 4 Complete the calculation.

Tens	Ones

	T	O
	1	3
×		3

- 5 There are 4 jars of sweets.
Each jar has 23 sweets.



How many sweets are there altogether?

	T	O
×		

 sweets

- 6 Evie has calculated 21×4
Her answer is 804
Explain her mistake.

	T	O
	2	1
\times		4
8	0	4

- 7 Work out 37×5

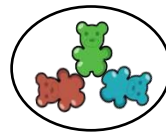
- 8 Calculate $96 \div 3 =$

Use the place value grid to help.

Tens	Ones
10 10 10	1 1
10 10 10	1 1
10 10 10	1 1

Calculate $84 \div 4 =$

- 9 Amir makes groups of 3 gummy bears.



He makes 7 groups and has 2 bears left over.
How many gummy bears does he have altogether?

 gummy bears

- 10 There are 25 green cubes in a box.
There are 5 times as many blue cubes than green cubes in the box.
How many cubes are there **altogether**?

 cubes

Year 3

Money

- 1 Eva has these notes and coins.



How much money does she have?

 £ and p

- 2 Circle 4 pounds and 65 pence.



- 3 Max empties his money box.



He spends £1 and 72 pence on a present.

Circle the coins he could have used.

How much money does he have left?

 £ and p

- 4 Tick the sets of coins that add up to £1



5 How much money is there altogether?



 £ and p

6

Pricelist	
Milkshake	£1 and 70p
Water	£1 and 25p
Hot Chocolate	£2 and 45p
Flapjack	£1 and 29p
Brownie	75p

How much does a milkshake and a flapjack cost altogether?

 £ and p

Whitney has £5 and 60p. She buys a hot chocolate. How much does she have left?

 £ and p

How much does a brownie and a flapjack cost altogether?

 £ and p

7 Complete.

£1 and 36p = pence

£ and p = 512 pence

£8 = p

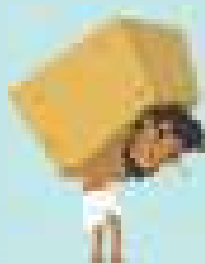
8 Teddy buys a sandwich for £3 and 55p.
How much change does he get from £10?

 £ and p

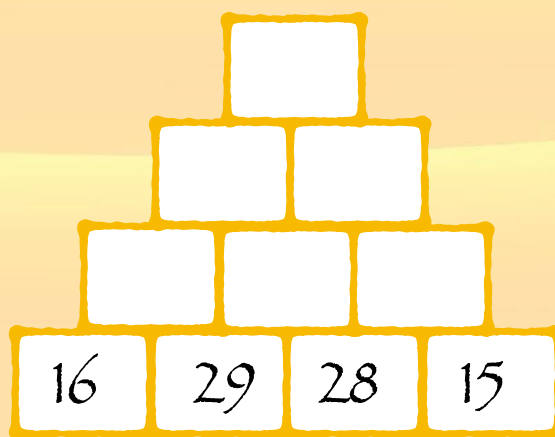
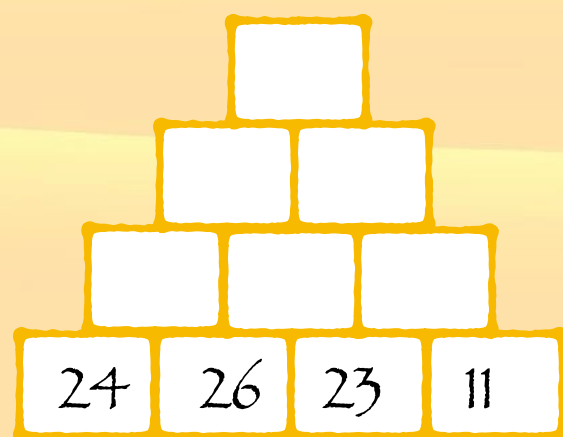
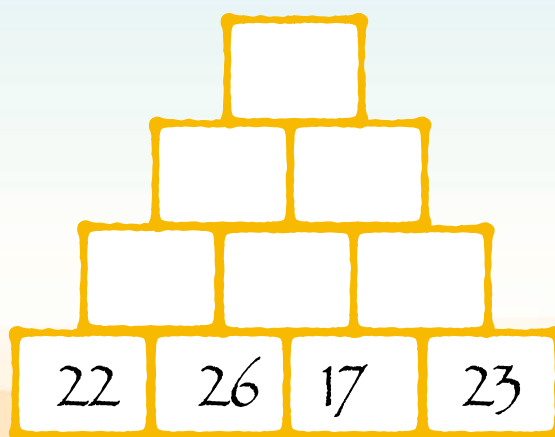
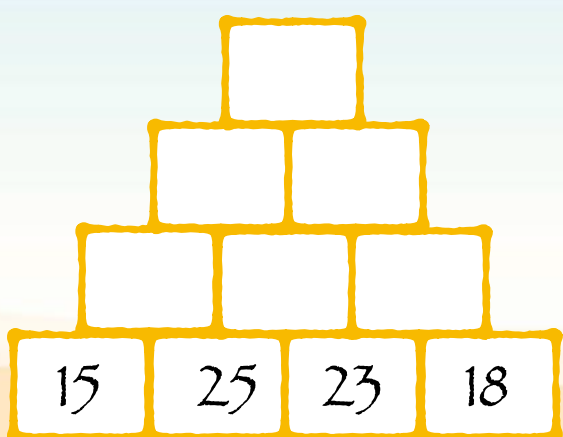
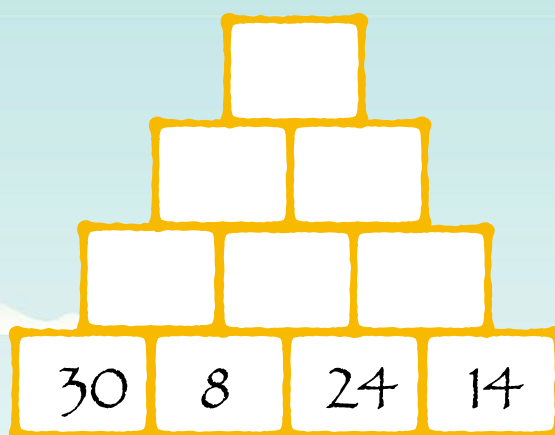
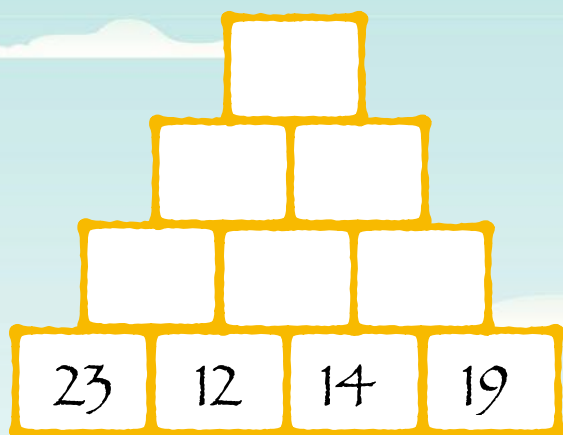
9 Mo buys a kettle and a toaster.
The kettle costs twice as much as the toaster.
The total cost is £63
How much does the kettle cost?

 £

Addition Pyramids 2



Each pair of blocks in this pyramid adds up to the block directly above it. Can you work out what the missing numbers are?



Can you make it through the multiple maze? Start on the shapes. From the diamond you will need to COUNT ON in **multiples of six** and from the circle you will need to COUNT BACK in **multiples of six**. Good

$$6 \times 10 = 60$$

$$60 \div 10 = 6$$

23	43	58	9	10	44	16	11	7	10	19	28	40	46	56	58	32	42	41	19	45	44	35	22	18	17	○	3	12
39	21	59	11	14	24	25	8	6	12	18	20	42	48	54	52	26	27	29	55	8	16	21	29	23	55	60	54	52
7	50	6	13	15	40	44	46	60	15	24	30	36	50	60	62	17	31	26	33	13	33	55	37	15	29	43	48	28
14	11	32	40	38	41	42	48	54	55	35	25	34	8	6	12	14	28	34	32	45	46	56	64	13	30	36	42	40
29	19	10	11	16	17	36	37	53	45	63	12	4	12	9	18	24	30	36	31	33	48	54	60	28	24	35	45	44
30	45	14	12	18	24	30	28	11	55	32	34	17	19	14	15	22	28	42	40	41	42	56	6	12	18	19	13	23
44	38	59	6	16	21	29	31	16	52	27	38	19	11	34	25	50	54	48	44	37	36	38	8	10	16	26	65	66
17	29	58	60	58	40	28	30	15	9	41	14						60	58	43	28	30	24	18	17	40	44	48	50
6	16	53	54	48	42	41	35	32	19	20	11						9	11	27	14	9	22	12	20	48	42	36	38
7	44	38	52	50	36	33	40	26	13	5	35						12	18	41	17	12	8	6	60	54	40	30	28
◇	11	13	19	34	30	24	22	23	17	15	19						57	65	23	42	56	62	10	59	52	26	24	25
6	12	14	16	35	28	18	17	16	18	12	6						34	23	44	56	62	64	40	9	6	12	18	20
8	18	24	30	32	10	12	6	14	24	22	8	7	13	45	31	16	28	50	48	54	60	59	41	46	60	58	11	12
7	16	22	36	37	62	58	60	50	30	36	24	19	6	15	22	40	43	44	42	40	6	7	42	48	54	52	32	30
15	52	40	42	40	38	40	54	62	40	42	34	36	29	35	40	37	28	30	36	34	12	13	36	46	52	23	54	53
32	50	54	48	49	36	42	48	44	46	48	54	45	30	36	42	41	14	24	22	20	18	24	30	45	7	17	56	58
9	58	60	11	19	30	32	42	41	19	45	60	15	24	33	48	46	12	18	29	31	16	52	27	38	45	29	26	24
41	9	6	12	18	24	26	27	29	55	8	6	12	18	52	54	60	6	16	28	30	15	9	41	14	14	34	18	20
8	13	7	14	15	23	17	31	26	33	13	9	10	16	19	52	58	4	23	41	35	32	19	20	11	34	16	9	10

Sudoku 4 x 4 Puzzles

Each row and column contains all the digits 1 to 4.

4			3
3	1		
2			1
		2	

	1		2
2		1	4
1	4	2	
	2		

4	1	3	
		1	
1			4

2	4	1	3
3	1		4
		4	

2	4	1	
	1		
4		3	

	4		
2			4
	1		2
4		3	1

A detailed black and white line drawing of a farm scene. In the background, there is a large barn with a chimney, a smaller shed, and a tractor. In the middle ground, a woman is standing near a chicken coop, and a man is milking a cow. In the foreground, there are two sheep and a pig. Various farm structures and animals are labeled with multiplication problems involving the number 8.

Labels in the image include:

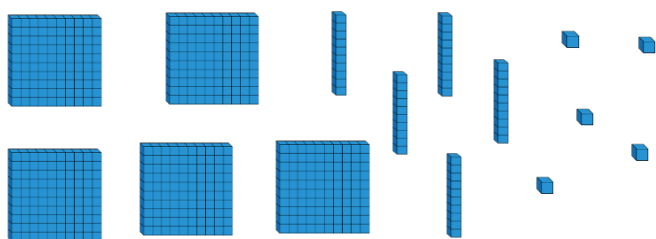
- 8×12 (Tractor)
- 8×7 (Barn roof)
- 8×5 (Shed roof)
- 8×2 (Barn roof)
- 8×8 (Barn window)
- 8×5 (Chicken coop)
- 8×4 (Chicken coop)
- 8×2 (Pig pen)
- 8×6 (Sheep)
- 8×3 (Pig)
- 8×11 (Cow)
- 8×5 (Cow)
- 8×9 (Pig pen)
- 8×2 (Pig pen)
- 8×5 (Pig pen)
- 8×6 (Pig pen)
- 8×7 (Pig pen)
- 8×8 (Pig pen)
- 8×12 (Pig pen)

16	grey
24	dark green
32	bright green
40	brown
48	white
56	light green
64	pink
72	blue
88	dark blue
96	light yellow

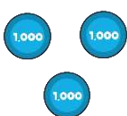

Year 4

Place Value Assessment

1 Circle 341

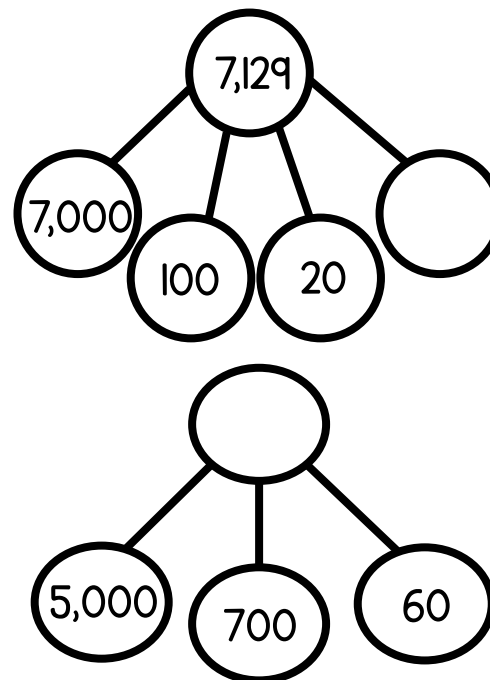


2 What number is shown on the place value grid?

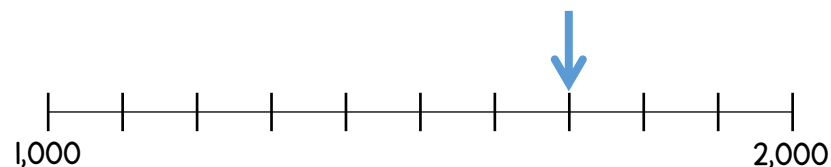
Thousands	Hundreds	Tens	Ones
			

Draw more counters to make the number 3,048

3 Complete the part-whole diagrams.



4 What number is shown by the arrow?



Draw an arrow to the number 1,999

- 5 What is the value of the 5 digit in each of these numbers?
Match the correct number to the correct value.

511

5 thousands

5,103

5 hundreds

6,950

5 tens

695

5 ones

- 6 Using the digit cards make an even number between 7000 and 8000



- 7 Complete the missing numbers.

6,100		6,200	6,250	6,300		
-------	--	-------	-------	-------	--	--

- 8 Jim makes a 4 digit number.
- The hundreds digit is a 7
 - The tens digit is one more than the thousands digit.
 - The sum of all the digits is 10
- What number did Jim make?

- 9 Circle which of the following is equal to 5,042

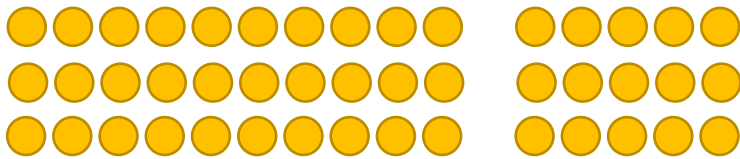
$50 + 42$

$50 + 40 + 2$

$5000 + 400 + 2$

$5,000 + 40 + 2$

- 1 Georgia and Dan each have some counters.



Georgia's Counters

Dan's Counters

Write down a multiplication to work out how many counters Georgia has.

$$\square \times \square = \square$$

Write down a multiplication to work out how many counters Dan has.

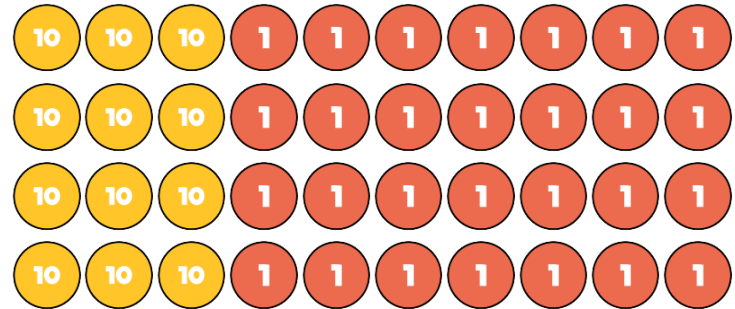
$$\square \times \square = \square$$

How many counters do they have altogether?

 counters

- 2 Amir is working out 37×4

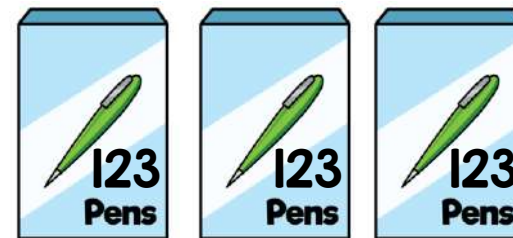
He uses place value counters to help him.



Work out 37×4

Show all your working.

- 3



How many pens in total?

 pens

- 4 Work out the following multiplications.

$$36 \times 8 = \underline{\hspace{2cm}}$$

$$215 \times 7 = \underline{\hspace{2cm}}$$

- 5 Tina has £2,000
She buys 6 new paintings.
Each painting costs £259
How much money does she have left?

£

- 6 Work out $5 \times 797 \times 2 = \underline{\hspace{2cm}}$
Show or explain your method.

- 7 Complete the missing numbers.

	5	4	2
×			
<hr/>			
			8
<hr/>			

|

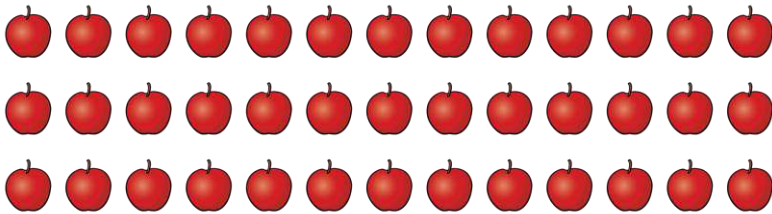
- 8 A small bag of sweets contains 15 sweets.
A large bag of sweets contains 7 times as many as the small bag.
Max buys 8 bags of each.
How many sweets does he buy in total?

 sweets

Year 4

Multiplication and Division B

- 1 Max has 39 apples.

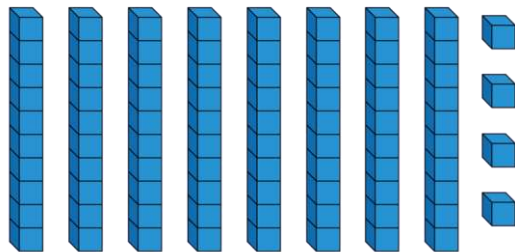


He puts them into bags.

He puts 3 apples in each bag.

How many bags does he need?

- 2 Work out $84 \div 4 =$



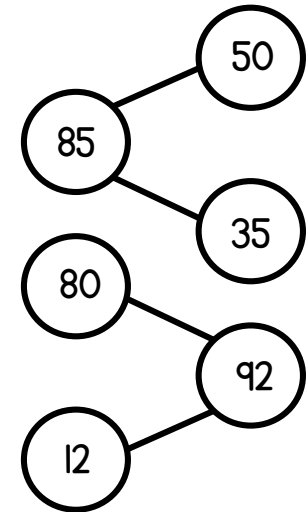
_____ bags

- 3 Calculate the divisions.

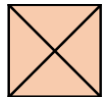
Use the part-whole models to help you.

$$85 \div 5 = \square$$

$$92 \div 4 = \square$$



- 4 Gina is making squares using triangles.



Gina has 27 triangles.



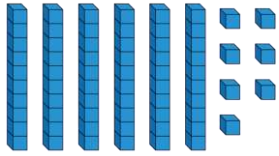
How many complete squares can Gina make?

_____ squares

How many triangles does she have left over?

_____ triangles

5 Work out $67 \div 3 =$



6 The length of 5 identical pencils is 95 cm.
What is the length of 1 of the pencils?

_____ cm

What is the length of 2 of the pencils?

_____ cm

7 Some doughnuts are shared between boxes.
There are 6 doughnuts in each box.
There is 1 doughnut left over.
Circle how many doughnuts there could be.

65

66

67

68

Explain your answer.

8 696 pens are packed into boxes of 3



How many boxes are there?

_____ boxes

9 Work out

$126 \div 3 =$ _____ $675 \div 5 =$ _____

10 Complete the missing number.

$\div 4 = 134 \text{ r } 1$

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 submersible 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'? Tick one.
 - ☐ She means that she has been to the Moon.
 - ☐ She means that the bottom of the Mariana Trench is made of cheese.
 - ☐ She means that the Mariana Trench is on the Moon.
 - ☒ **She means that the bottom of the Mariana Trench looks like the Moon's surface.**
3. Tick to say whether each statement is true or false.

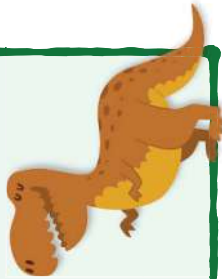
	True	False
The Mariana Trench is deeper than Mount Everest is tall.	✓	
Kathy Sullivan still works as an astronaut.		✓
Kathy Sullivan was the first person to reach Challenger Deep.		✓
Kathy Sullivan was the first woman to reach Challenger Deep.	✓	
4. Reread the paragraph beginning 'The journey down.'
Find and copy a word that means the same as 'large'.
enormous
5. Why do you think Kathy Sullivan phoned the International Space Station?
Accept any answer that refers to the fact that she was an astronaut or that she became the first person to go into space and to visit Challenger Deep, e.g. I think she phoned the International Space Station because she used to be an astronaut.
6. Write a summary of the story in 20 words or fewer.
Accept an answer of 20 words or fewer which includes the main facts from the story.
E.g. Kathy Sullivan has become the only person to go to space and visit 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!**

Compound Sentences – Answers

Challenge 1

Example answers (other co-ordinating conjunction choices are possible):

1. I enjoy reading but I don't enjoy cooking.
2. Ben is thoughtful and he always plays with me when I'm lonely.
3. Kate walked home from school slowly for she was tired.
4. Babies cry all the time so they can get some attention from their mum.
5. Year Five is a hardworking class and all of the children want to do well at school.
6. I can use simple sentences in my writing but I can use compound ones to make it more interesting.

Challenge 2

1. Mr. Dubois is fixing the roof on his house. – **not compound**
2. Chloe and her friends went to the cinema but they didn't buy any popcorn. – **compound**
3. Brandon went to the football game last night but his favourite team lost. – **compound**
4. Dr. Brown said I could come to his office on Wednesday or I could come on Thursday of next week. – **compound**

5. I'm going to buy a new tablet computer or I might buy a new mobile phone. – **compound**

6. Grandma is a terrific cook and we love staying at her house. – **compound**

7. I'm going to pick up cheese, crackers, and juice at the shop. – **not compound**

8. Would you like some hot chocolate or orange juice? – **not compound**

Challenge 3

1. Write a compound sentence. Draw a red line under the first independent clause. Draw a blue line under the second independent clause.

Example answer: I don't like sprouts but I do like cabbage

2. Write another compound sentence. Draw a green line under the conjunction.

Example answer: I was feeling very tired yet I still went to football training.

Challenge 4

Explain why each compound sentence is incorrectly written:

- a. I wanted to visit my cousin, I didn't have enough money for a bus ticket.

The compound sentence needs the co-ordinating conjunction 'but' instead of the comma.

- b. My dog lost her favourite toy, I bought her a new one. Please note that this question needs changing as there was nothing wrong with it!

The co-ordinating conjunction 'yet' doesn't fit into this sentence. It needs replacing with 'so' or 'and'.

Answers

1. Which of the following is **not** a renewable energy source?

- ☒ coal power
- ☐ solar power
- ☐ tidal power
- ☐ wind power

2. In the second paragraph, which word means 'unusual, special or surprising'?
remarkable

3. Give one example of how renewable energy sources are different from fossil fuels.

Accept an answer which refers to renewable energy sources not running out or not releasing greenhouse gases as they create energy.

4. Tick each statement to show whether it is true or false.

	True	False
Britain has not used coal for two months	✓	
Solar energy is not being used to make energy.		✓
Burning coal produces no greenhouse gasses.		✓
Wind energy is a fossil fuel.		✓

5. Why do the UK government want to plant more trees?

Accept any answer which refers to the following, e.g. Trees absorb carbon dioxide and produce oxygen, which we need to breathe.

6. Summarise the key information in this story in 20 words or fewer.

Accept any reasonable answer which refers to the story and is 20 words or fewer in length, e.g. Britain has gone two months without using coal to create electricity. Instead, Britain has been using more renewable energy.

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	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



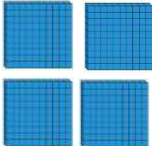


What do you call a dinosaur with a very good vocabulary?

A Thesaurus!

Year 3

Place Value Assessment

- 1 Anna has made a number.

Hundreds	Tens	Ones
		

What number has Anna made?

425

Is the number odd or even?

How do you know?

The number is odd because it has an odd digit in the ones place value column.

(Explanation needed for award of the mark - only the word 'odd' is insufficient).

- 2 Circle the number that has the digit 7 in the tens column.

725 572 257

- 3 Max is making a number using some counters. Max chooses 6 counters.

He makes a number greater than 300

Circle the counters Max could have chosen.

Any 6 counters circled whose sum is more than (not equal) to



300. Exactly 6 counters should be circled.

- 4 Match the numbers.

Six hundred and six 676
Six hundred and sixty 606
Six hundred and seventy-six 660

- 5 Complete the missing numbers.

255	265	275	285	295	305	315
-----	-----	-----	-----	-----	-----	-----

- 6 Here are some digit cards.



Max uses the cards to make a 3 digit number. Write down all the numbers between 250 and 550 Max can make.

294

429

492. All 3 numbers for 2 marks.

2 correct numbers for 1 mark.

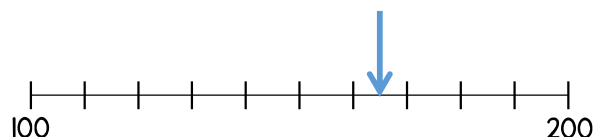
- 7 What is 100 less than 719? 619

What is 10 more than 97? 107

What is 10 less than 205? 195

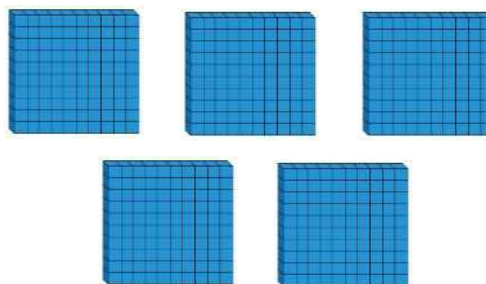
1 mark per correct answer.

- 8 What number is the arrow pointing to?



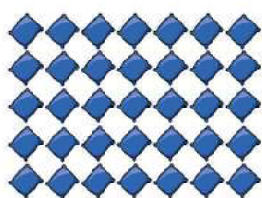
165

- 9 How many tens are there in 500?



50

- 1 Use the array to complete the number sentences.



$$\begin{array}{l} 5 \times 7 = 35 \\ 7 \times 5 = 35 \\ 35 \div 5 = 7 \\ 35 \div 7 = 5 \end{array}$$

1 mark for 3 correct.

- 2 A shop has 32 apples.
They are put into 8 equal groups.
How many apples are in each group?

4 apples

- 6 Evie has calculated 21×4
Her answer is 804
Explain her mistake.

Evie has multiplied 4 by 20
and put 80 in the wrong
place. 80 should just be an 8
in the tens column.

	T	O
	2	1
×		4
8	0	4

- 7 Work out 37×5
185

1 mark for correct method with 1 error.

- 8 Calculate $96 \div 3 =$ 32

Use the place value grid to help.

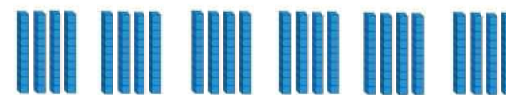
Tens	Ones

Calculate $84 \div 4 =$ 21

- 3 Use the diagrams to help you.



$$6 \times 4 = \boxed{24}$$



$$6 \times 40 = \boxed{240}$$

- 4 Complete the calculation.

Tens	Ones

	T	O
	1	3
×		3
	3	9

- 5 There are 4 jars of sweets.
Each jar has 23 sweets.
How many sweets are there altogether?



	T	O
	2	3
×		4
	9	2

92 sweets

- 9 Amir makes groups of 3 gummy bears.



He makes 7 groups and has 2 bears left over.
How many gummy bears does he have
altogether?

23 gummy bears

- 10 There are 25 green cubes in a box.
There are 5 times as many blue cubes than
green cubes in the box.
How many cubes are there **altogether**?
1 mark for 125 blue cubes.

150 cubes

- 5 How much money is there altogether?



£ 1 and 19 p

6

Pricelist	
Milkshake	£1 and 70p
Water	£1 and 25p
Hot Chocolate	£2 and 45p
Flapjack	£1 and 29p
Brownie	75p

How much does a milkshake and a flapjack cost altogether?

£ 2 and 99 p

Whitney has £5 and 60p. She buys a hot chocolate. How much does she have left?

£ 3 and 15 p

How much does a brownie and a flapjack cost altogether?

£ 2 and 4 p

- 7 Complete.

£1 and 36p = 136 pence

£ 5 and 12 p = 512 pence

£8 = 800 p

- 8 Teddy buys a sandwich for £3 and 55p.
How much change does he get from £10?

£ 6 and 45 p

- 9 Mo buys a kettle and a toaster.
The kettle costs twice as much as the toaster.
The total cost is £63
How much does the kettle cost?

£ 42

Year 3

Money

- 1 Eva has these notes and coins.



How much money does she have?

£ 9 and 80 p

- 2 Circle 4 pounds and 65 pence.



- 3 Max empties his money box.



He spends £1 and 72 pence on a present.

Circle the coins he could have used.

There are other possible ways to circle the 70p

Eg: 50p, 10p, 10p, or 2x 20p and 3x 10p

How much money does he have left?

£ 1 and 57 p

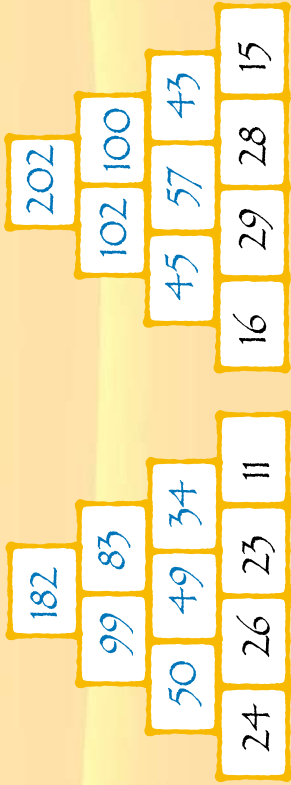
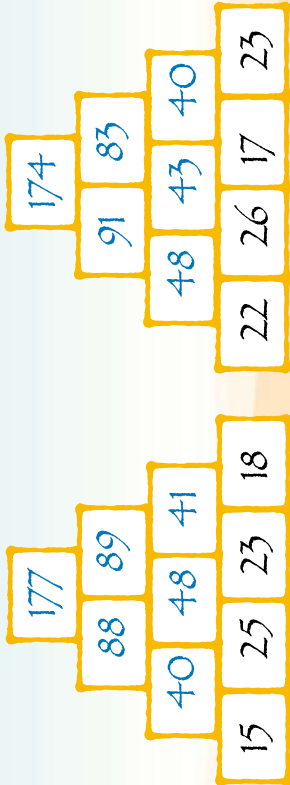
- 4 Tick the sets of coins that add up to £1



ANSWERS Addition Pyramids 2



Each pair of blocks in this pyramid adds up to the block directly above it. Can you work out what the missing numbers are?



Sudoku 4 x 4 Puzzles Answers

4	2	1	3
3	1	4	2
2	4	3	1
1	3	2	4

4	1	3	2
2	3	1	4
1	4	2	3
3	2	4	1

3	2	4	1
4	1	3	2
2	4	1	3
1	3	2	4

2	4	1	3
3	1	2	4
1	3	4	2
4	2	3	1

1	3	4	2
2	4	1	3
3	1	2	4
4	2	3	1

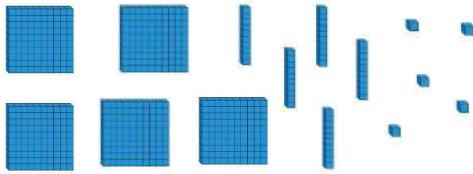
1	4	2	3
2	3	1	4
3	1	4	2
4	2	3	1

Year 4

Place Value Assessment

1 Circle 341

Any 3 hundred blocks circled, any 4 tens blocks circled, any 1 one block circled.



2 What number is shown on the place value grid?

Thousands	Hundreds	Tens	Ones

3,004

Draw more counters to make the number 3,048

5 What is the value of the 5 digit in each of these numbers?

Match the correct number to the correct value.

511 ~~5 thousands~~

5,103 ~~5 hundreds~~

6,950 5 tens

695 5 ones

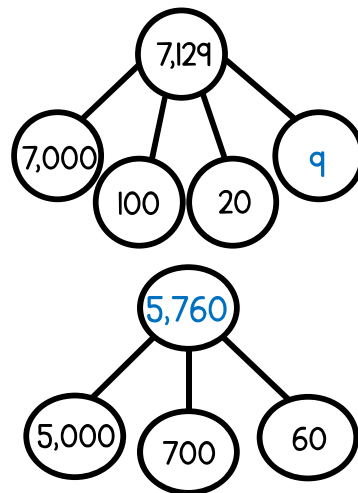
All 4 matched correctly for 2 marks, 2 matched correctly for 1 mark.

6 Using the digit cards make an even number between 7000 and 8000

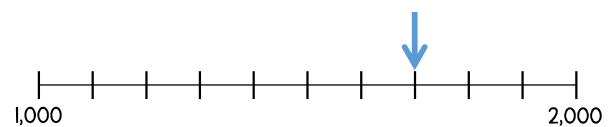


7,154 or 7,514

3 Complete the part-whole diagrams.



4 What number is shown by the arrow?



1,700

Draw an arrow to the number 1,999

Arrow drawn very close to but not at 2,000.

7 Complete the missing numbers.

6,100	6,150	6,200	6,250	6,300	6,350	6,400
-------	-------	-------	-------	-------	-------	-------

8 Jim makes a 4 digit number.

- The hundreds digit is a 7
- The tens digit is one more than the thousands digit.
- The sum of all the digits is 10

What number did Jim make?

1,720

9 Circle which of the following is equal to 5,042

$$50 + 42$$

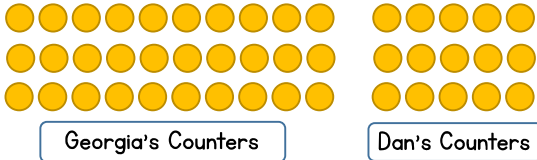
$$50 + 40 + 2$$

$$5000 + 400 + 2$$

$$5,000 + 40 + 2$$

Award mark for the correct numbers unambiguously indicated (Ceg

- 1 Georgia and Dan each have some counters.



Write down a multiplication to work out how many counters Georgia has.

$$\boxed{3} \times \boxed{10} = \boxed{30}$$

or $10 \times 3 = 30$

Write down a multiplication to work out how many counters Dan has.

$$\boxed{3} \times \boxed{5} = \boxed{15}$$

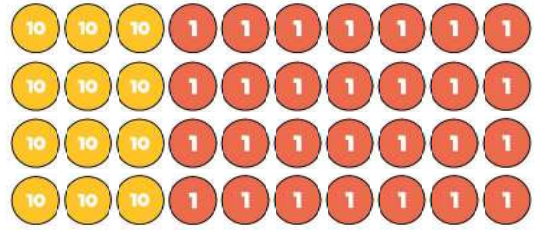
or $5 \times 3 = 15$

How many counters do they have altogether?

45 counters

- 2 Amir is working out 37×4

He uses place value counters to help him.

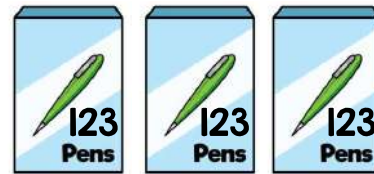


Work out 37×4

Show all your working.

148

- 3



How many pens in total?

369 pens

- 4 Work out the following multiplications.

$$36 \times 8 = \underline{288}$$

$$215 \times 7 = \underline{1,505}$$

- 5 Tina has £2,000

She buys 6 new paintings.

Each painting costs £259

How much money does she have left?

I mark for 6 paintings costing £1,554

£ 446

- 7 Complete the missing numbers.

	5	4	2
×			4
2	1	6	8

I mark if I error has been made.

- 8 A small bag of sweets contains 15 sweets.

A large bag of sweets contains 7 times as many as the small bag.

Max buys 8 bags of each.

How many sweets does he buy in total?

I mark for working out that there are 105 sweets in a large bag.

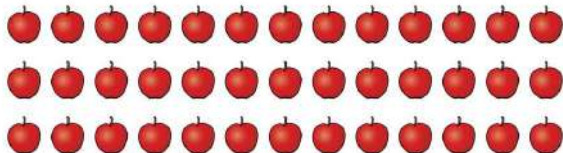
960 sweets

- 6 Work out $5 \times 797 \times 2 = \underline{7,970}$

Show or explain your method.

E.g. I did 5×2 first which is 10, the multiplied 797 by 10

- 1 Max has 39 apples.



He puts them into bags.

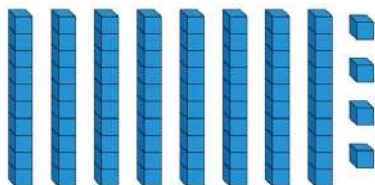
He puts 3 apples in each bag.

How many bags does he need?

13 bags

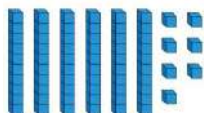
- 2 Work out $84 \div 4 =$

21



- 5 Work out $67 \div 3 =$

22 r 1



- 6 The length of 5 identical pencils is 95 cm.
What is the length of 1 of the pencils?

19 cm

What is the length of 2 of the pencils?

38 cm

- 7 Some doughnuts are shared between boxes.
There are 6 doughnuts in each box.
There is 1 doughnut left over.
Circle how many doughnuts there could be.

65

66

67

68

Explain your answer.

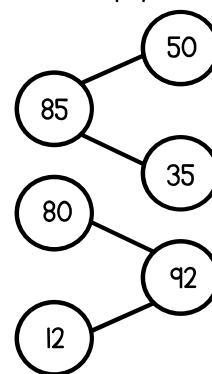
When you divide 67 by a 6 there is remainder of 1. The other numbers do not give a remainder of 1

- 3 Calculate the divisions.

Use the part-whole models to help you.

$85 \div 5 =$ 17

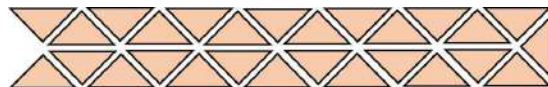
$92 \div 4 =$ 23



- 4 Gina is making squares using triangles.



Gina has 27 triangles.



How many complete squares can Gina make?

6 squares

How many triangles does she have left over?

3 triangles

- 8 696 pens are packed into boxes of 3



How many boxes are there?

232 boxes

- 9 Work out

$126 \div 3 =$ 42 $675 \div 5 =$ 135

- 10 Complete the missing number.

537 $\div 4 = 134 \text{ r } 1$

Can you make it through the multiple maze? Start on the shapes. From the diamond you will need to COUNT ON in **multiples of six** and from the circle you will need to COUNT BACK in **multiples of six**. Good

$$6 \times 10 = 60$$

$$60 \div 10 = 6$$

23	43	58	9	10	44	16	11	7	10	19	28	40	46	56	58	32	42	41	19	45	44	35	22	18	17		3	12
39	21	59	11	14	24	25	8	6	12	18	20	42	48	54	52	26	27	29	55	8	16	21	29	23	55	60	54	52
7	50	6	13	15	40	44	46	60	15	24	30	36	50	60	62	17	31	26	33	13	33	55	37	15	29	43	48	28
14	11	32	40	38	41	42	48	54	55	35	25	34	8	6	12	14	28	34	32	45	46	56	64	13	30	36	42	40
29	19	10	11	16	17	36	37	53	45	63	12	4	12	9	18	24	30	36	31	33	48	54	60	28	24	35	45	44
30	45	14	12	18	24	30	28	11	55	32	34	17	19	14	15	22	28	42	40	41	42	56	6	12	18	19	13	23
44	38	59	6	16	21	29	31	16	52	27	38	19	11	34	25	50	54	48	44	37	36	38	8	10	16	26	65	66
17	29	58	60	58	40	28	30	15	9	41	14						60	58	43	28	30	24	18	17	40	44	48	50
6	16	53	54	48	42	41	35	32	19	20	11						9	11	27	14	9	22	12	20	48	42	36	38
7	44	38	52	50	36	33	40	26	13	5	35						12	18	41	17	12	8	6	60	54	40	30	28
	11	13	19	34	30	24	22	23	17	15	19						57	65	23	42	56	62	10	59	52	26	24	25
6	12	14	16	35	28	18	17	16	18	12	6						34	23	44	56	62	64	40	9	6	12	18	20
8	18	24	30	32	10	12	6	14	24	22	8	7	13	45	31	16	28	50	48	54	60	59	41	46	60	58	11	12
7	16	22	36	37	62	58	60	50	30	36	24	19	6	15	22	40	43	44	42	40	6	7	42	48	54	52	32	30
15	52	40	42	40	38	40	54	62	40	42	34	36	29	35	40	37	28	30	36	34	12	13	36	46	52	23	54	53
32	50	54	48	49	36	42	48	44	46	48	54	45	30	36	42	41	14	24	22	20	18	24	30	45	7	17	56	58
9	58	60	11	19	30	32	42	41	19	45	60	15	24	33	48	46	12	18	29	31	16	52	27	38	45	29	26	24
41	9	6	12	18	24	26	27	29	55	8	6	12	18	52	54	60	6	16	28	30	15	9	41	14	14	34	18	20
8	13	7	14	15	23	17	31	26	33	13	9	10	16	19	52	58	4	23	41	35	32	19	20	11	34	16	9	10