

Year 5 Home Learning Pack

March/April 2020

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PE- Fitness activities

1. Set up a relay race - this teaches teamwork and sportsmanship.
2. Play Hula Hoop Games. Hula Hoops are so versatile- you can play jump-rope with them, use them as a bean bag toss, or have hula contests. (A skipping rope can be used for lots of different games too!)
3. Indoor fitness circuits:
 - climb up and down the stairs 20 times
 - complete 20 sit ups
 - 20 lunges
 - 20 star jumps
 - 20 press ups (these can be from your knees)
 - 'Plank' for as long as you can.

Can you do all of this without stopping for longer than 30 seconds between activities?

4. Walk the dog. This one kills two birds with one stone by getting your pet and your child exercise.
5. Try Yoga - for kids! (YouTube: Yoga for Kids!)
<https://www.youtube.com/watch?v=X655B4ISakg>

Home Learning: Outdoor Adventurous Activities

1. Create a map of your garden, or a space within your home. Remember to include a key to show what the symbols in your map mean.



2. Compose a set of warm-up exercises to show your family and friends. Remember: the purpose of a warm-up is to raise your heart rate and loosen your joints. It is also meant to be fun!



3. Can you find different equipment around your house to create an obstacle course? This could be anything from cushions to spoons! Then, set up a small obstacle course to be completed by your family members. How could this course be made trickier?



4. Point of contact game. Gather your family and friends round and make a small team. You will be the teacher. You must instruct your team to have a specified number of specific body parts in contact with the floor. They must hold their position for five seconds. Who will be the winner?



For example: All three points on the floor. This would be similar to the artic fox position in yoga.

5. What is the history of Outdoor Adventures? Research this sport and create a timeline to show other children your age the history of orienteering.

This website may help you: <http://orienteering.org/about-the-iof/history/>



6. What is sportsmanship? Create a display poster to explain what it is. Remember to show the different qualities a good sportsperson should display.

Create your poster for children who are the same age as you.









TODAY IS
GOING TO BE
AWESOME

Fireworks in a Glass

You Will Need

- Warm Water
- Oil
- A Tall Glass
- Food Colouring



This is a very cool, simple and fun experiment, and also completely safe, just don't drink the water!

Method

- 1 Fill the tall glass with warm water.
- 2 Pour a small amount of oil into another container and add a few drops of food colouring.
- 3 Give it a good stir, if it doesn't mix, add a bit of water.
- 4 Pour the food colouring and oil mixture into the warm water and watch the fireworks!

The Science Bit

Oil and water don't mix. Also oil is less dense than water (meaning there is less of it in the same volume) and therefore floats on top of water in a nice layer. The food colouring we used was water based and therefore does not mix with the oil, instead it sinks through the oil into the water below. Since the addition of the colouring makes the food colouring heavier than the water, it sinks to the bottom leaving trails (resembling fireworks) as some of the colour diffuses into the water.

Dissolving

Which solids dissolve in water?

You Will Need

- Water (hot and cold)
- Transparent Containers
- Substances to try and dissolve; sand, sugar, salt, coffee etc



Method

- 1 Add a teaspoon of whichever solid you are testing to a glass of cold water and a glass of hot water, stir and observe the difference.
- 2 Look to see if the solid dissolves in the hot water and cold water and if one is better than the other.
- 3 Can you design a chart to record your observation?

The Science Bit

Things like salt, sugar and coffee dissolve in water. They are soluble. They usually dissolve faster and better in hot water. Pepper and sand are insoluble, they will not dissolve even in hot water.

For Older Children

Everything is made of particles which are always moving. When a soluble solid (solute) is mixed with the right liquid (solvent), it forms a solution. This process is called dissolving.

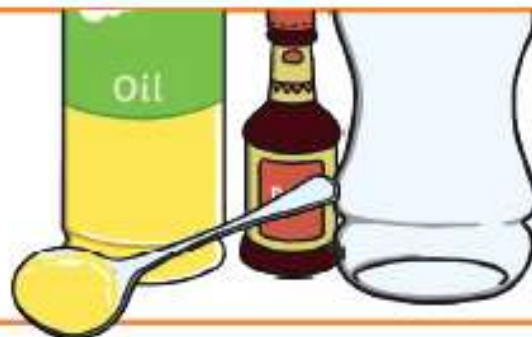
Two things that affect the speed at which the solid dissolves are temperature and the size of the grains of the solid. Caster sugar which is made of fine particles will dissolve quickly, but bigger sugar particles will take longer.

Solids dissolve faster in hot water as in hot water the water molecules are moving faster, so bump into the solid more often which increases the rate of reaction.

Lava Lamp

You Will Need

- Water
- Vegetable Oil
- A Clear Plastic Bottle or Jar
- Food Colouring
- Effervescent Tablets



Method

- 1 Fill the bottle or jar a quarter full with water.
- 2 Top up, almost to the top with the vegetable oil
- 3 They should separate into two layers, water at the bottom and oil sitting on top.
- 4 Add about 6-8 drops of food colouring once the oil and water separate.
- 5 The colour will mix with the water at the bottom.
- 6 Pop in half an effervescent tablets and watch the bubbles form. Add more effervescent tablets bit by bit to keep the bubbles rising and falling.

The Science Bit

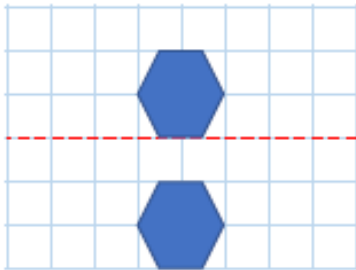
Firstly water and oil will not mix – this is because we say that water is a polar molecule – its structure means that it has a positive charge on one end and a negative charge on the other. Water molecules stick together because the positive end of one water molecule is attracted to the negative end of another. Oil molecule structure is different – it is non polar, meaning that its charge is more evenly spread out, so the oil is not attracted to water – in fact we call it hydrophobic (water fearing) so it tries to get as far away from water as possible and will not mix. The reason that oil rests on top of the water rather than underneath is because it has a different density to water.

As the effervescent tablets are added (this is made of citric acid and sodium bicarbonate) it reacts with the water and forms carbon dioxide gas and sodium citrate. It is the carbon dioxide bubbles that carry the coloured water to the top.

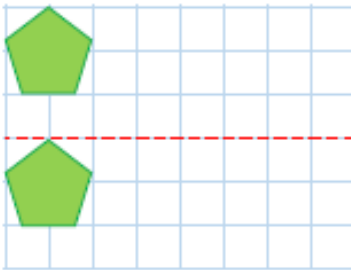
Reflection

4. True or false? The following images have been reflected correctly.

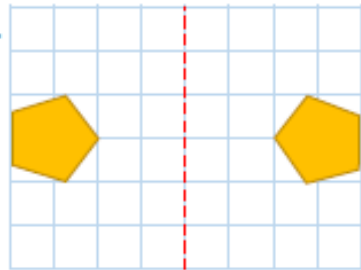
A.



B.

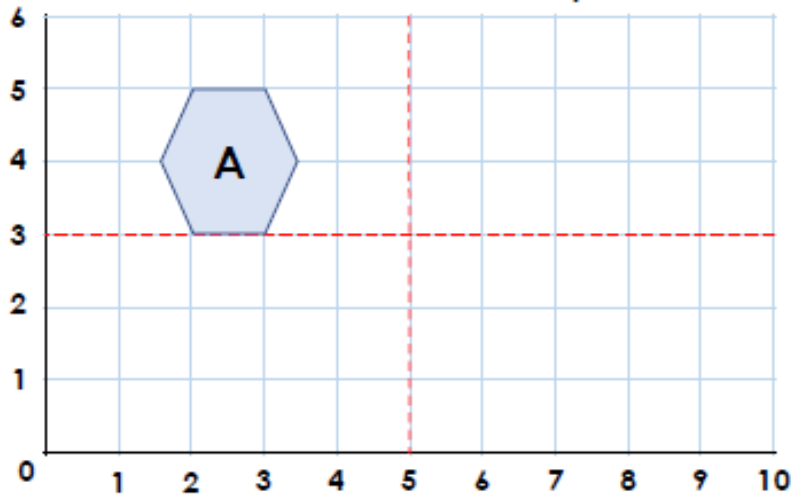


C.



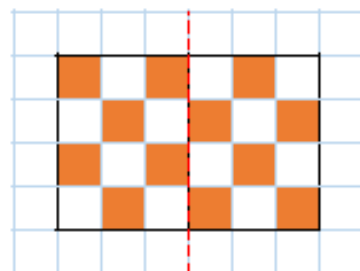
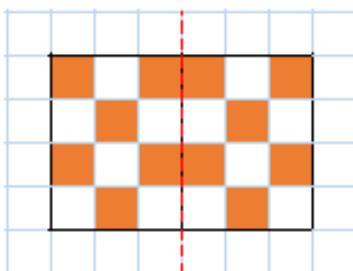
VF
HW/Ext

5. Reflect the shape across the horizontal mirror line. Label this shape 'B'. Then reflect A and B across the vertical mirror line. Label the new shapes C and D.



VF
HW/Ext

6. Steph and Sean are reflecting patterns across a mirror line.



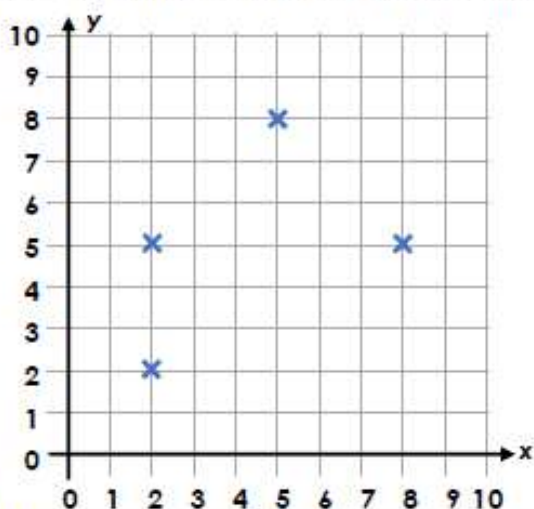
Who has reflected the pattern accurately?
Explain how you know.



RPS
HW/Ext

Position in the First Quadrant

4. Whose coordinates will make a pentagon when they are connected?



Harris

I will plot my coordinates at (8, 2).



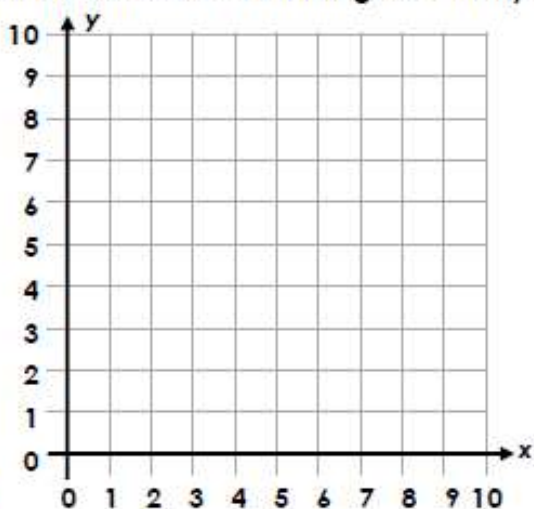
Lily

I will plot my coordinates at (2, 8).



VF
HW/Ext

5. Plot the coordinates on the grid. Identify the shape created when they are joined.



(3, 3)

(6, 3)

(2, 5)

(7, 5)

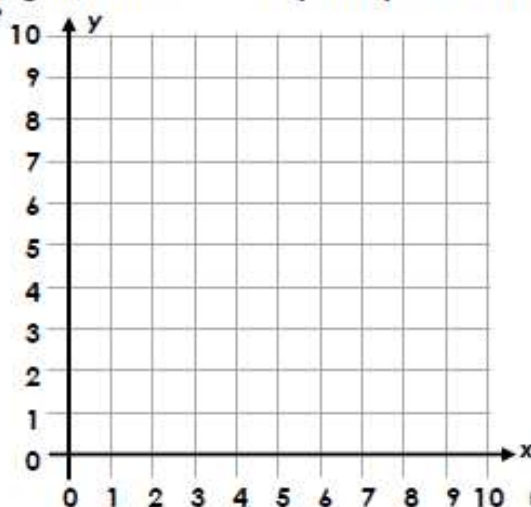
(3, 7)

(6, 7)



VF
HW/Ext

6. Lucy was plotting the points to make a pentagon, but someone spilled paint on her work. What could the missing coordinates be?



RP3
HW/Ext

Emoji Coordinates

Draw the lines made by these coordinates. Use a different colour for each line.

$(0,-8)$ $(-3,-7)$ $(-5,-6)$ $(-6,-5)$ $(-7,-4)$ $(-8,-1)$ $(-8,1)$

$(-8,1)$ $(-7,4)$ $(-5,6)$ $(-3,7)$ $(0,8)$

$(0,-8)$ $(3,-7)$ $(5,-6)$ $(7,-4)$ $(8,-1)$

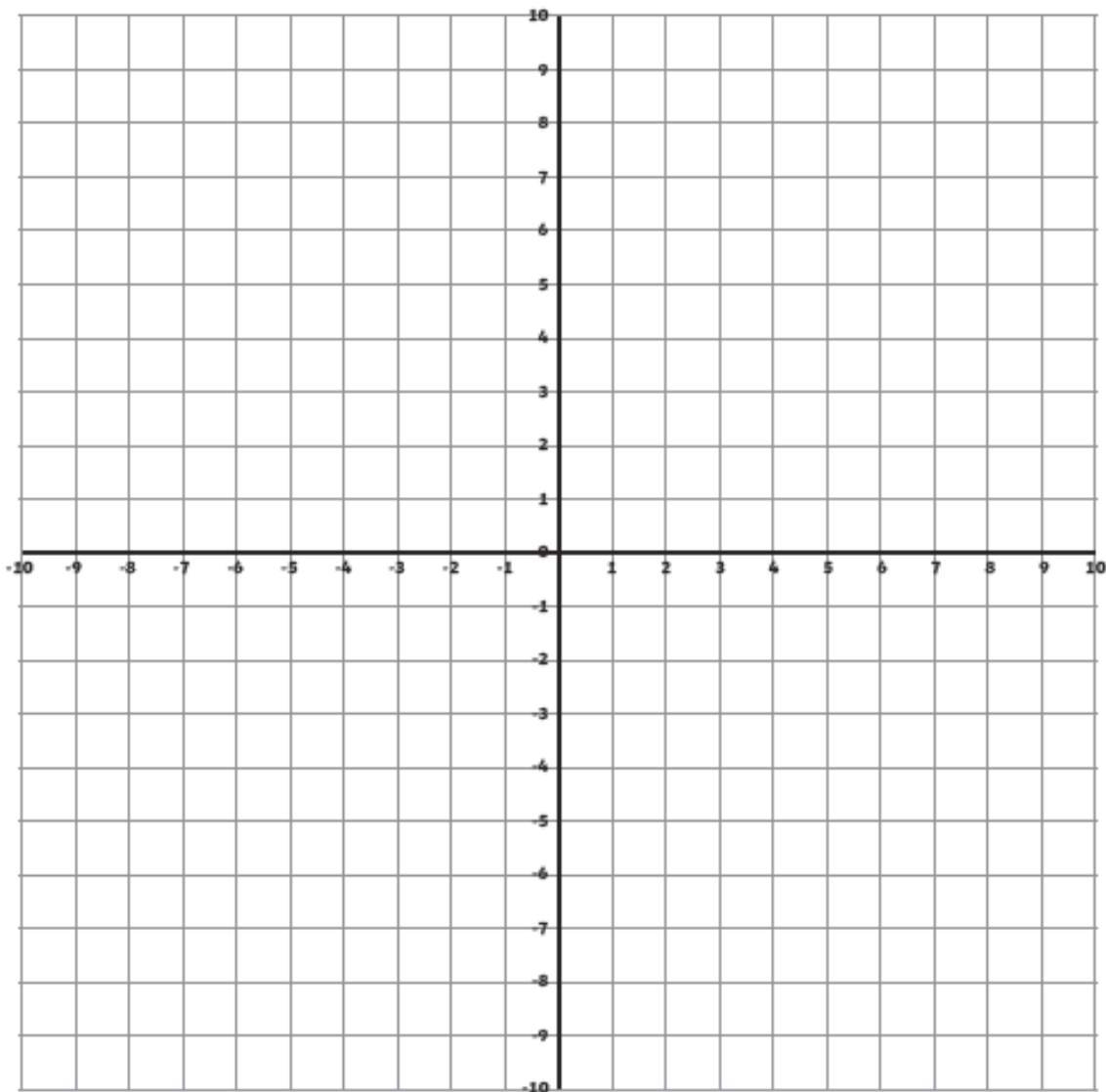
$(8,-1)$ $(8,1)$ $(7,4)$ $(5,6)$ $(3,7)$ $(0,8)$

$(-3,1)$ $(-5,3)$ $(-5,4)$ $(-4,5)$ $(-3,4)$ $(-2,5)$ $(-1,4)$ $(-1,3)$ $(-3,1)$

$(3,1)$ $(5,3)$ $(5,4)$ $(4,5)$ $(3,4)$ $(2,5)$ $(1,4)$ $(1,3)$ $(3,1)$

$(-4,-2)$ $(-1,-3)$ $(1,-3)$ $(4,-2)$ $(3,-4)$ $(0,-5)$ $(-3,-4)$ $(-4,-2)$

What shape do they make together?



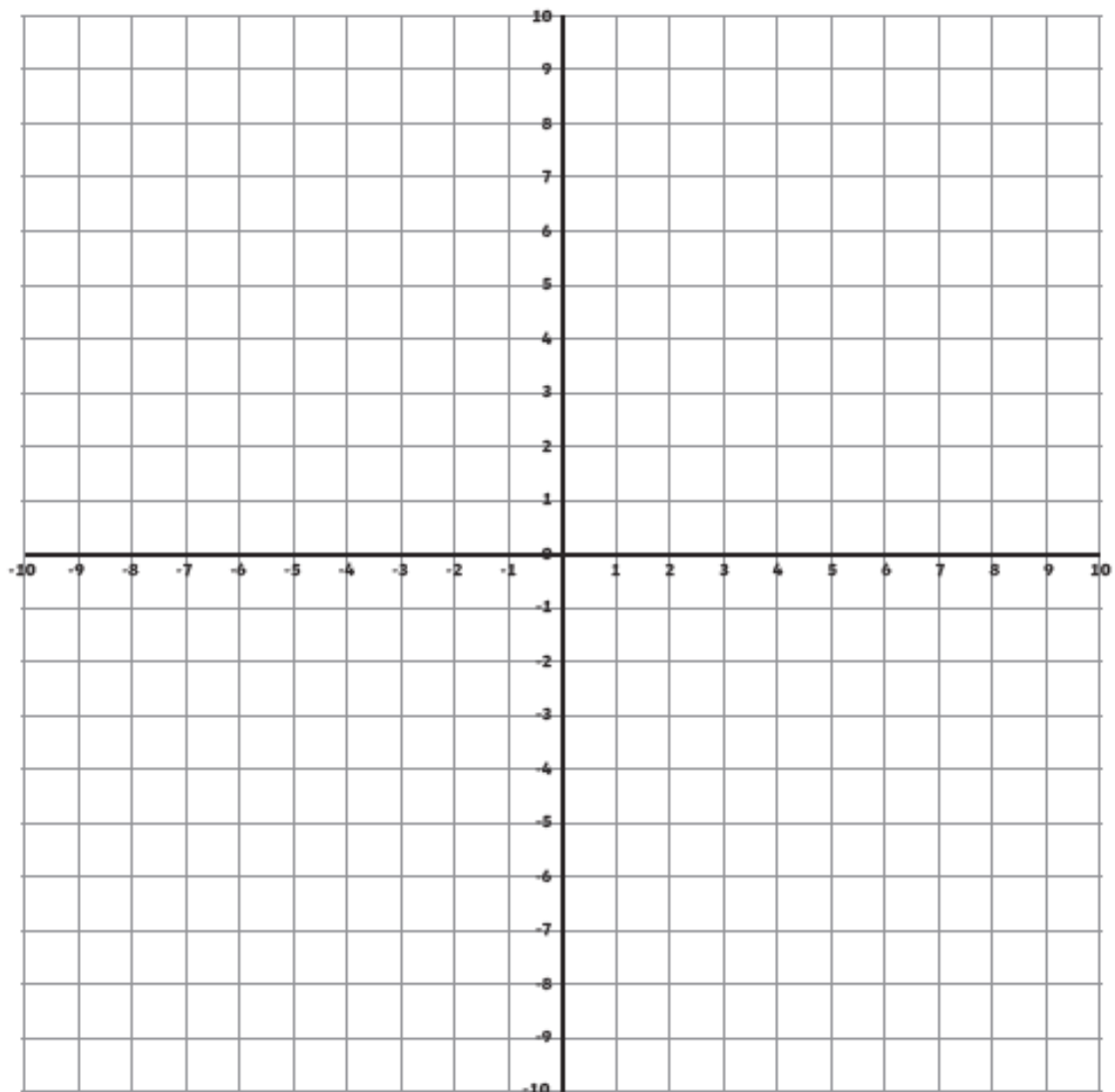
Emoji Coordinates

Draw the lines made by these coordinates. Use a different colour for each line.

$(-3,-9)$ $(-7,-4)$ $(-7,0)$ $(-5,2)$ $(-3,0)$ $(-1,2)$ $(1,0)$ $(1,-4)$ $(-3,-9)$

$(-2,1)$ $(-3,2)$ $(-3,5)$ $(-1,7)$ $(1,5)$ $(3,7)$ $(5,5)$ $(5,1)$ $(1,-4)$

What shape do they make together?

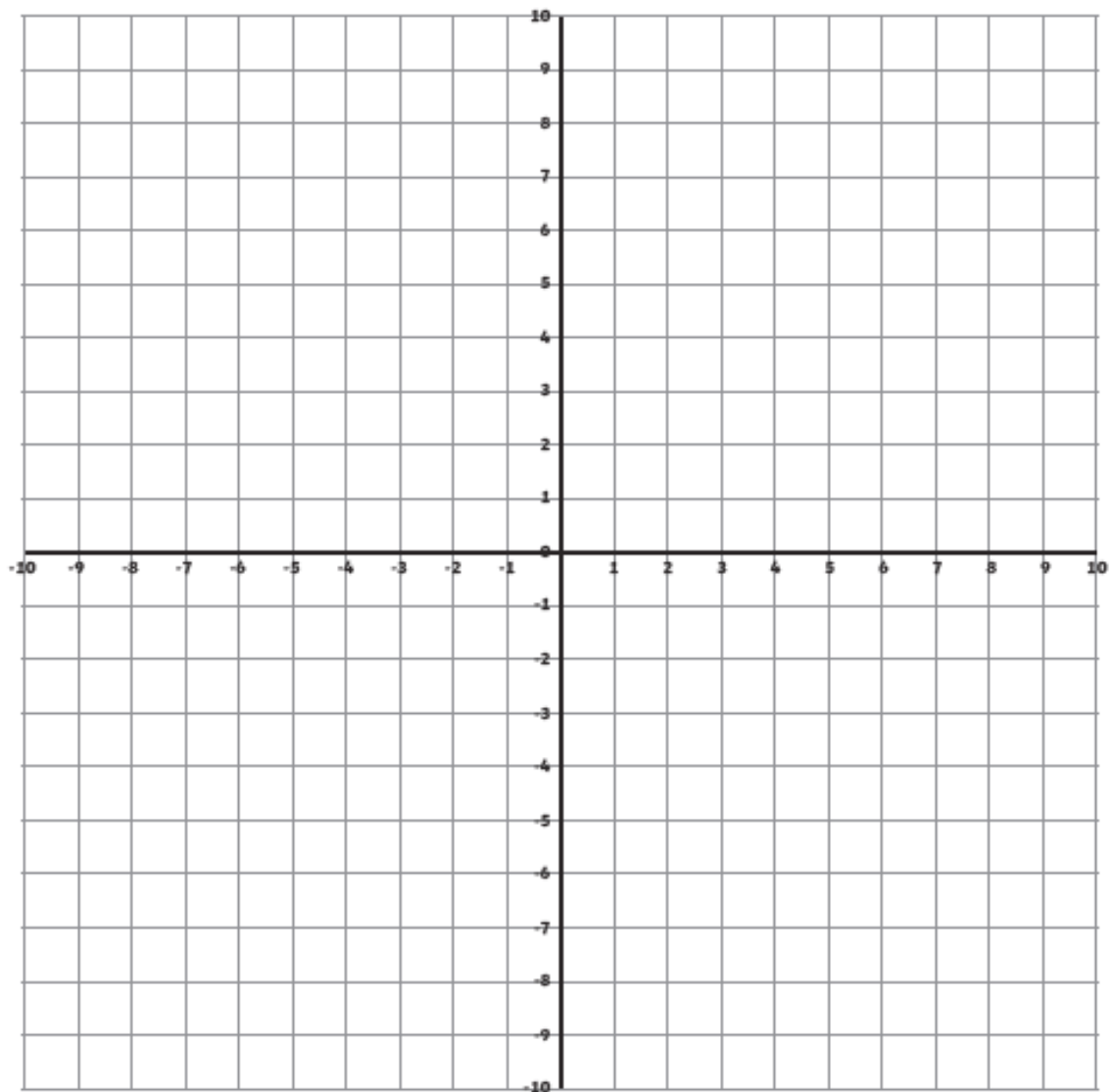


Emoji Coordinates

Draw the lines made by these coordinates. Use a different colour for each line.

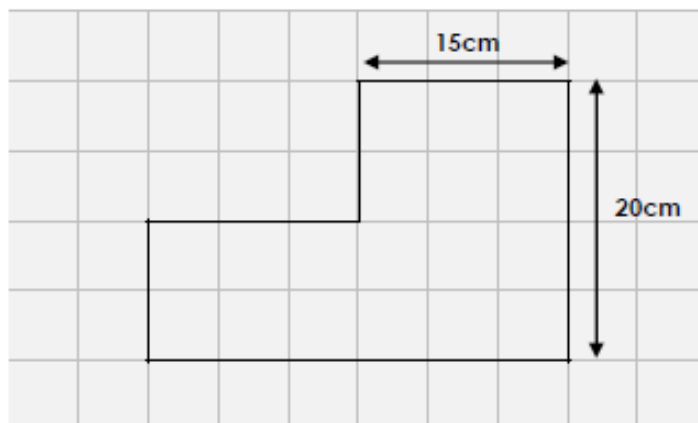
$(3,-7)$ $(2,-9)$ $(-1,-9)$ $(-3,-8)$ $(-2,-4)$ $(-1,-2)$ $(-2,-3)$ $(-3,-3)$ $(-5,-2)$ $(-6,0)$ $(-5,1)$ $(-3,2)$ $(-2,3)$
 $(-2,3)$ $(-3,6)$ $(-1,4)$
 $(-2,3)$ $(0,5)$ $(0,4)$
 $(-1,3)$ $(0,4)$ $(1,5)$ $(1,4)$ $(0,3)$
 $(-2,3)$ $(-2,2)$ $(-1,1)$ $(-1,3)$
 $(0,3)$ $(2,1)$ $(1,0)$ $(2,0)$ $(2,-1)$ $(3,-2)$ $(2,-3)$ $(1,-3)$ $(2,-4)$ $(1,-5)$ $(1,-6)$ $(2,-7)$ $(3,-7)$
 $(1,4)$ $(3,2)$ $(2,1)$ $(3,2)$ $(4,1)$ $(4,0)$ $(5,-1)$ $(4,-1)$ $(3,0)$ $(3,2)$ $(3,1)$ $(2,0)$
 $(2,-4)$ $(3,-4)$ $(4,-3)$ $(4,-1)$ $(5,-2)$ $(5,-4)$ $(4,-6)$ $(5,-6)$ $(4,-7)$ $(3,-7)$
 $(-2,1)$

What shape do they make together?



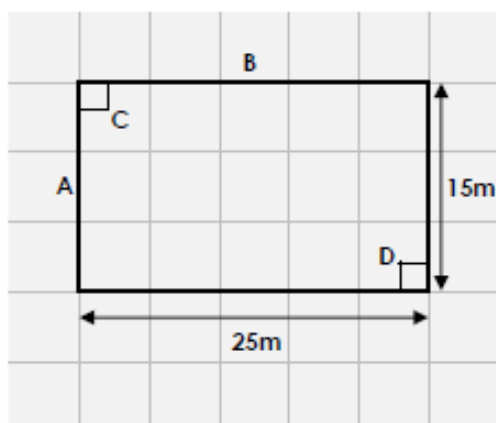
Lengths and Angles in Shapes

1. Calculate the perimeter of the shape.



VF
HW/Ext

2. Calculate the length of the sides A and B and the angles C and D in the shape below.



Side

A = _____

B = _____

Angle

C = _____

D = _____

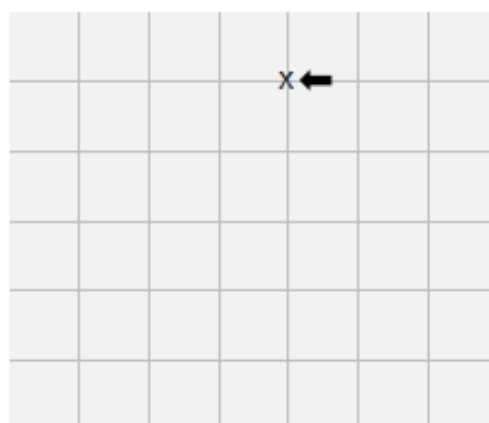


VF
HW/Ext

3. Starting on X, follow Jack's instructions and draw his walking route around the park.



Move forward three squares.
Turn 90° anti-clockwise.
Move forward three squares.
Turn 90° anti-clockwise.
Move forward three squares.
Turn 90° anti-clockwise.
Move forward three squares.



Name the shape you have drawn.



RPS
HW/Ext

Capture the Island

Perimeter Challenge

You will need:

Capture the Island game board, two coloured crayons, coordinate cards.

Instructions:

1. Each player chooses a coloured crayon and writes their name at the top of the board. Cut out the coordinate cards and place them face down in a pile.
2. Player 1 takes a card from the top of the pile and plots the four points. Player 1 then uses their crayon to join the points and form a rectangle. Player one finds the perimeter and writes the number inside the island to capture it.
3. Player 2 takes a card from the pile and repeats step 2 using their crayon to plot and capture an island.
4. Players take it in turns until there are no cards left.
5. At the end of the game, players add up their points. The player with the most points is the winner!



Capture the Island

Perimeter Challenge

A large grid for a perimeter challenge. The grid is 15 units wide and 19 units high. The horizontal axis is labeled with numbers 0 through 15, and the vertical axis is labeled with numbers 0 through 19. In the bottom-left corner, there is an illustration of a pirate ship with a skull and crossbones on its flag. In the bottom-right corner, there is an illustration of a pirate character wearing a hat and a red skirt, holding a telescope. The grid is set against a light blue background.

Coordinate Cards

(1,1) (1,2) (4,1) (4,2)	(5,1) (5,4) (7,1) (7,4)
(8,2) (8,6) (12,2) (12,6)	(6,16) (6,19) (9,16) (9,19)
(11,0) (11,1) (15,0) (15,1)	(8,8) (8,9) (13,8) (13,9)
(13,2) (13,5) (15,2) (15,5)	(0,5) (0,7) (4,5) (4,7)
(2,9) (2,11) (4,9) (4,11)	(8,11) (8,12) (9,11) (9,12)
(1,16) (1,18) (4,16) (4,18)	(11,10) (11,12) (14,10) (14,12)
(1,3) (1,4) (3,3) (3,4)	(11,16) (11,17) (12,16) (12,17)
(13,15) (13,18) (14,15) (14,18)	(9,13) (9,15) (12,13) (12,15)
(1,13) (1,15) (7,13) (7,15)	(5,8) (5,12) (7,8) (7,12)

The Mystery of the Easter Bunny Costume

Members of the local Women's Institute have an annual Easter bunny egg hunt. Fred, the groundsman, always dresses up as the Easter bunny, and hops through the village hiding eggs for the children at Sunny Days Nursery, to find. It is always a wonderful occasion and the children look forward to it very much.



However, there is a problem this year. Fred has gone to the cupboard where the costume is stored, and to his horror, he has discovered it has been cut up into pieces!

Your task is to solve the five clues and use the character descriptions of all the people who have a connection with the Women's Institute to work out who wrecked the costume!

Good luck!



Character Descriptions

Name	M/F	Age	Hair colour	Favourite crisps	Owens a dog
Kim Hadley	F	61	black	spicy beef	yes
George Mears	M	57	grey	smoky bacon	yes
Brenda Thornhill	F	61	black	ready salted	yes
Connie Cornforth	F	56	grey	salt/vinegar	no
Matt Jones	M	28	black	Worcester sauce	yes
Kath Ecclestone	F	33	blonde	cheese/onion	yes
Graham Tone	M	49	black	ready salted	no
Lindsay Cramp	F	69	black	cheese and onion	yes
Summer Twell	F	22	brown	cheese/onion	no
Dawid Gierak	M	62	grey	pickled onion	yes
Paul Grimes	M	44	brown	spicy beef	no
Wen Li	F	60	grey	ready salted	yes
Hannah Belling	F	38	blonde	cheese/onion	no
Trish Plimsoll	F	61	grey	cheese/ onion	no
Enid Gardner	F	78	white	smoky bacon	yes
Usman Hussain	M	66	black	pickled onion	no
Doris Clubb	F	69	black	prawn cocktail	yes
Monika Kilmczak	F	37	blonde	ready salted	yes
Derrick Stanley	M	81	bald	spicy beef	no
Sue Guest	F	63	grey	ready salted	yes
Chris Bates	F	70	grey	prawn cocktail	yes
Fenella Hope	F	65	black	cheese/onion	yes
Steph Hawes	F	47	blonde	pickled onion	yes
Helena Wickers	F	39	black	smoky bacon	no
Sharon Day	F	43	brown	spicy beef	yes
Jessica Mathers	F	32	red	Worcester sauce	no
Zoe Hall	F	38	black	cheese/onion	yes
Tina Flame	F	46	black	salt/ vinegar	yes
John Nuttall	M	69	grey	salt/vinegar	no
Belinda Havers	F	72	black	cheese/onion	yes

Clue 1: Egg-citing Numbers

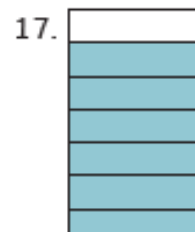
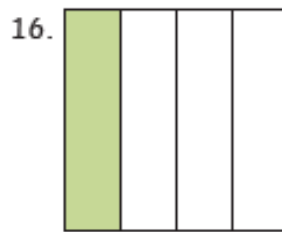
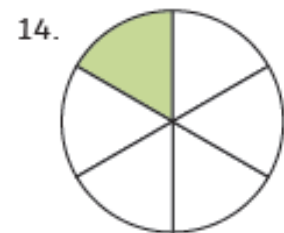
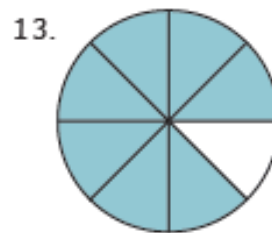
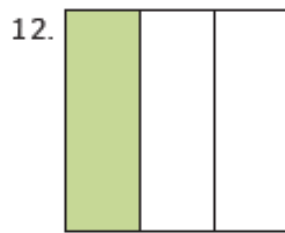
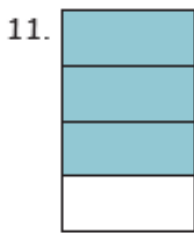
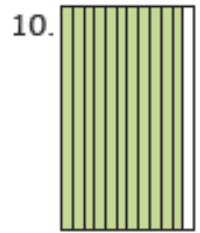
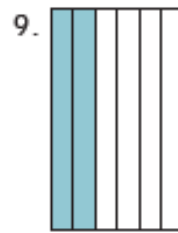
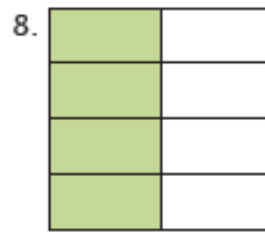
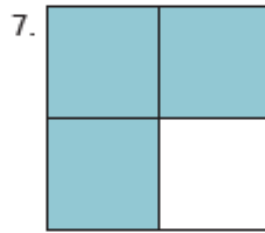
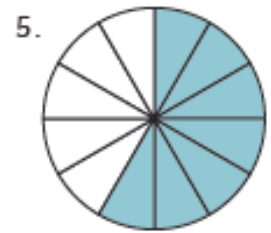
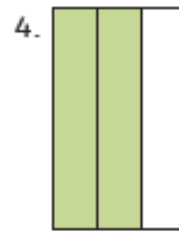
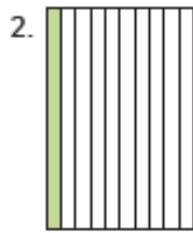
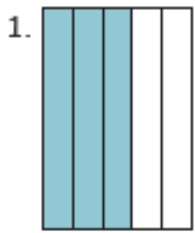
Work out which of these number statements are correct. If there are more correct than incorrect answers, the costume wrecker is female.



Clue 1: M / F

Clue 2: Hop to It!

Help the Easter bunny work out these fractions. Use your answers and the table of letters to discover an important clue about the crime scene.



A	B	C	D	E	F	G	H	I	J	K	L	M
$\frac{3}{4}$	$\frac{3}{5}$	$\frac{2}{3}$	$\frac{6}{7}$	$\frac{9}{12}$	$\frac{7}{8}$	$\frac{2}{5}$	$\frac{3}{9}$	$\frac{4}{8}$	$\frac{2}{4}$	$\frac{7}{12}$	$\frac{1}{10}$	$\frac{8}{12}$

N	O	P	Q	R	S	T	U	V	W
$\frac{1}{4}$	$\frac{1}{6}$	$\frac{3}{8}$	$\frac{1}{5}$	$\frac{2}{6}$	$\frac{1}{3}$	$\frac{2}{14}$	$\frac{3}{10}$	$\frac{8}{9}$	$\frac{11}{12}$

Clue 2: _____

Clue 4: What's the Time?

Read these times and find the digital equivalent in the box below. Rearrange the words below your answers to reveal another clue.

- twenty to seven
- quarter past six
- ten to eight
- twenty-five past eleven
- quarter to three
- five past twelve
- twenty past one
- ten past ten

18.15	12.30	11.25	19.50
a	not	lead	found
2.45	7.20	12.05	6.40
was	next	dog	on
15.15	13.20	5.12	10.10
to	the	costume	floor



Clue 4: _____

Clue 5: What's the Flavour?

A crisp wrapper was found near the costume cupboard. Work out the answers to the calculations below, then rearrange the letters to identify the flavour of crisps and solve the last clue!

A	B	C	D	E	F	G	H	I	J	K	L	M
10	12	24	400	16	32	100	8	45	20	40	6	35

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
240	9	64	28	36	60	50	2	11	90	3	18	0



1. $3 \times \square = 30$

2. $160 \div 4 = \square$

3. $\square \div 4 = 9$

4. $5 \times 9 = \square$

5. $54 \div 6 = \square$

6. $\square \times 3 = 150$

7. $6 \times 4 = \square$

8. $100 \div 10 = \square$

9. $80 \times 3 = \square$

10. $8 \times 8 = \square$

11. $180 \div 2 = \square$

12. $36 \div 6 = \square$

13. $2 \times \square = 48$

Clue 5: _____

Have you solved the mystery?

The Easter bunny costume wrecker is: _____

Easter Multiplication Mosaic

Multiplication 3×, 4×, 6×, 7×, 9×, 11×, 12× (including division)

Solve the maths problems to reveal the hidden picture. Each answer has a special colour:

3, 4, 7, 12, 16, 18, 27, 36, 44, 56, 108, 132 = yellow

8, 9, 14, 21, 33, 48, 54 = pink

11, 28, 42, 45, 72, 88 = purple

6, 30, 32, 60, 63, 121 = blue

$15 \div 5$	$27 \div 9$	$16 \div 4$	$21 \div 3$	$40 \div 5$	4×2	3×4	6×2	4×4	$64 \div 4$
3×6	2×9	3×9	$55 \div 5$	$132 \div 12$	4×7	14×3	9×3	3×12	12×3
6×6	11×4	$32 \div 4$	7×2	$36 \div 4$	2×7	$18 \div 2$	7×2	7×8	12×9
$44 \div 11$	12×11	$36 \div 6$	$72 \div 12$	$42 \div 7$	3×10	6×5	4×8	4×11	6×2
$15 \div 5$	$72 \div 8$	7×3	11×3	4×2	4×12	$18 \div 2$	$32 \div 4$	4×2	4×3
$21 \div 3$	6×7	9×8	7×4	12×6	$132 \div 12$	9×8	3×14	6×12	4×4
9×3	4×2	$72 \div 8$	12×4	$40 \div 5$	9×6	6×9	3×7	$40 \div 5$	$64 \div 4$
2×6	10×6	11×11	10×3	5×6	8×4	11×11	30×1	6×10	$27 \div 9$
$15 \div 5$	$27 \div 9$	$8 \div 1$	9×6	3×11	2×4	6×9	4×2	8×7	4×3
9×3	6×6	$16 \div 4$	12×6	$132 \div 12$	14×3	7×6	$64 \div 4$	3×12	3×9

Easter Multiplication Mosaic

Multiplying and dividing by 10, 100 and 1,000

Solve the maths problems to reveal the hidden picture. Each answer has a special colour:

0.07, 0.08, 0.2, 0.6, 7, 8, 16, 400, 850, 2000, 7500 = blue

0.03, 0.09, 0.4, 0.7, 3, 9, 14, 90, 300, 6250 = grey

0.02, 0.04, 0.5, 4, 17, 70 = pink

0.06, 0.8, 6 = white

28, 800 = black

$7 \div 100$	$0.7 \div 10$	$8 \div 100$	$0.3 \div 10$	$3 \div 100$	75×100	$9 \div 100$	0.009×10	$4 \div 10$	$0.8 \div 10$
$2 \div 10$	$1,600 \div 100$	$60 \div 100$	$0.2 \div 10$	$0.9 \div 10$	$20 \div 100$	0.9×10	$2 \div 100$	$700 \div 1,000$	$6 \div 10$
$40,000 \div 100$	0.008×10	0.16×100	0.002×10	$3000 \div 1,000$	0.007×10	$70 \div 100$	$20 \div 1,000$	0.3×10	$200 \div 1,000$
1.6×10	0.07×100	$7,000 \div 1,000$	$4 \div 100$	$90 \div 10$	0.06×10	$400 \div 1,000$	1.7×10	$300 \div 100$	0.7×10
8.5×100	$600 \div 1,000$	3×1	0.09×100	0.7×1	$90 \div 10$	0.14×100	$30 \div 1,000$	$1400 \div 100$	0.8×10
$0.4 \times 1,000$	$600 \div 100$	0.28×100	$140 \div 10$	1.4×10	$0.6 \div 10$	$8,000 \div 10$	$0.09 \times 1,000$	0.14×100	$160 \div 10$
$800 \div 100$	$6,000 \div 1,000$	0.6×10	$0.3 \times 1,000$	$900 \div 100$	$8 \div 10$	$60 \div 10$	3×100	$90 \div 1,000$	0.08×100
0.04×10	$7 \div 10$	0.9×100	$40 \div 100$	62.5×100	$6.25 \times 1,000$	0.003×10	$3000 \div 10$	$62,500 \div 10$	85×10
$30,000 \div 100$	$40 \div 10$	$5 \div 10$	0.7×100	$900 \div 100$	$4 \div 10$	$9,000 \div 100$	$700 \div 1,000$	0.009×10	200×10
$0.014 \times 1,000$	$0.3 \div 10$	$7,000 \div 100$	$9 \div 100$	62.5×100	0.07×10	1×3	1.4×10	$6.25 \times 1,000$	$75,000 \div 10$

Andean Nations

The countries on the west coast of South America share the **Andes** mountain range. From north to south it's an enormous 7200 km (4500 miles) long.

Every night over **Lake Maracaibo** in Venezuela, the **Catatumbo lightning** occurs. These are intense thunderstorms caused by the steady humidity and heat.

Andes Falls is the world's tallest waterfall. It is 979 metres high.

One of the largest industries in this region is **mining**. Peru is the second largest producer of **copper** and **silver** in the world. This is great for the economy but damages the **environment**.

Lake Titicaca is the world's highest large lake. It's the second biggest lake in South America — it even has man-made **islands** floating in it.

Which Andean nation would you most like to visit?

Life in the clouds or life in the city?

People's lives high in the Peruvian Andes are very different to those who live in urban (built-up) areas like Lima. The **climate** and **terrain** (landscape) are big influences on how people live and make money.

IDEAL

The Peruvian Andes

The land in the Andes is **rocky** and **steep** and the weather can be cold and dry. Despite the tough landscape, around 9 million people live in the Andes in Peru. Many of these people are farmers. They grow crops like potatoes and corn wherever they can — even on the sides of the mountains. They use **llamas** to transport goods across the rough land. Many people in the Andes live simple lives and can **grow** or **make** most of the things that they need.



USUAL

Lima

Down in the city, the weather is **warmer**. It's easier to get around as people can use cars and bicycles on the **flatter** land. There are **shops** to buy food and clothes, and jobs in **manufacturing**, banking and other businesses.

Not everyone can get a well-paid job though, and there are big differences between the rich and the poor in Lima. There are **slums** (very poor and over-crowded areas) in the city, with high levels of **crime** and **disease**.

Mixing cultures in the city...

In the mountains in Peru, many people are descended from the Incas and have quite a traditional culture. In contrast, in Lima, all the people moving to the city from other places bring their own cultures which creates a mixture of traditions.

Section Four – South America

Andean Nations

Read pages 26 and 27 of the Study Book about the countries that the Andes mountains run through, then answer these questions.

1. Write two statements about the Andean nations using the words **highest** and **tallest**.

1)

2)

2. Draw lines to match each name below with the right fact.

Lake Titicaca	is the second largest producer of copper and silver in the world.
Peru	is in Venezuela.
The Andes	is the capital city of Colombia.
Lake Maracaibo	is caused by humidity and heat.
Angel Falls	are 7200 km long.
Catatumbo lightning	is the second biggest of its kind in South America.
Bogotá	is 979 metres high.

3. Read page 27 of the Study Book, then complete the speech bubbles to show how **different** life is in the mountains and in the city.



Where I live is



Where I live is

4. Read the statements below about **mining**. Decide whether they are good points or bad points. Colour the good points in **green**, and the bad in **red**.

Mines are used to get tin, copper, iron and other useful metals.	Mining can release toxic chemicals into the environment.
Sometimes rocks fall and gases explode in mines.	Mining helps people in poor areas to earn money.
Mines produce coal, oil and gas, which we use for heating and transport.	

"I can name and locate the northern Andean countries and describe some of their interesting features."

Brazil and the Guianas

The Amazon rainforest covers a lot of the north-east side of South America. The countries in this area are all trying to balance industries like logging and mining with protecting the forest.

Guyana, Suriname and French Guiana have lots of **intact rainforest** (see p.6) — but it's threatened by **gold mining**.

Suriname used to be ruled by the **Netherlands**. French Guiana is still a part of **France**.

Logging and **cattle farming** are two of the biggest causes of **deforestation** in Brazil. Large areas of rainforest in Brazil have been destroyed.

The **Pantanal** is the world's biggest **wetland**. It is a low-lying area of rivers, lakes and marshes which fill with water every rainy season. It's an important **habitat** for animals like **jaguars** and **pink river otters**.

Most of Brazil's population lives along the **south-east coast**. This is also where most of the **industry** is located.

Tribes in trouble

Tribes have lived in the forests of South America for thousands of years, but growing numbers of **farms** and **mines** are threatening their ways of life. Some tribes are holding on, but there are groups of people that have already been forced to **leave** their land for good.

TRIBE 1

The Yanomami

The Yanomami are a tribe of 35,000 people. They live in a large area stretching across northern **Brazil** and southern **Venezuela**. The Yanomami live in large round houses called **yanoms** with up to 400 people inside. The men **hunt** for animals, and the women grow **peas** and harvest **bananas**. **Illegal mining** is the main threat to the tribe, as miners cut down the forest they rely on. People coming from outside the area have also brought in **diseases** which have harmed the Yanomami people.



TRIBE 2

The Guarani

Over 40,000 Guarani people living in **Brazil**. Over the last few decades, the Guarani have lost a lot of their traditional lands to **settle farmers**. With less land it can be difficult for them to grow enough **food**. Some groups of Guarani people have lost all of their land — many of the people that this has happened to end up living in **tenets** by the roadside. Some people have to leave their communities for long periods of time to work on **sugar plantations** in poor conditions for very little money.

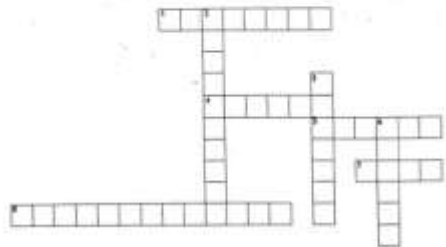
Home sweet home...

Brazil has laws to protect the rights of the tribes that live there, including their right to live on their traditional lands. But it can be difficult to make sure that everyone follows these laws. And when people don't follow them, it can make life very difficult for the tribes.

Brazil and the Guianas

Read pages 28 and 29 of the Study Book, then answer these questions.

1. Complete this crossword.



- | | |
|--|---|
| Across | Down |
| 1 This country was once ruled by the Netherlands. | 2 A tropical jungle in South America is called a _____. |
| 4 French Guiana is still a part of here. | 3 The Pantanal is the world's largest _____. |
| 5 The Yanomami and Guarani are two _____. | 6 The largest South American country. |
| 7 Brazil has these to help protect the rights of the tribes. | |
| 8 Cutting down large areas of trees. | |

2. Tropical rainforest covers a large part of Brazil and the Guianas. Name three human activities that **endanger** the rainforest.
- 1) _____
- 2) _____
- 3) _____

3. The Yanomami people depend on the forest to **live**. The survival of their **culture** depends on continuing to live in these traditional ways. Imagine you're a member of the Yanomami tribe and you're trying to persuade the miners not to cut down the forest where you live. What would you say? Use page 29 of the Study Book to help you write a short speech.



4. Read the facts below about deforestation in the rainforest to find out **why** it happens. Do you think deforestation should be stopped? Why or why not?

Rainforest and Deforestation Facts

- Every minute, an area of forest the size of 20 football fields is cut down.
- Rainforests are home to about half of the plant and animal species in the world.
- Trees are needed to harvest timber to make paper, furniture and houses.
- Land that is cleared by deforestation can be used for farming.
- The land that is cleared is only good for farming for a short time.
- The plants and trees of the rainforest produce oxygen, which we need to breathe.

I think deforestation should / shouldn't be stopped, because _____

"I can find Brazil and the Guianas on a map and I know about some of the issues affecting people there."

The Southern Cone

The Southern Cone is another name for the countries at the very bottom of South America. They have the Andes mountains to the west, plus enormous plains, deserts and cities.

Most people in these countries speak Spanish. Why do you think this is?

The Atacama desert is a huge, flat area of land at the base of the Andes mountains. It's quite cool even in summer. It's also the driest desert in the world.



The west coast of Chile lies on a tectonic plate boundary (where two plates meet). Lots of earthquakes and volcanic eruptions happen in this area. The most powerful earthquake ever recorded occurred in Chile in 1960.

Ushuaia is the most southerly city in the world. It's part of Argentina and is on the island of Tierra del Fuego. The city has over 70,000 residents and is the closest town to the Antarctic.

The Pampas is a big plain that covers a large area of Southern Argentina. South American cowboys called gauchos have kept cows on the plains since the 1800s. Some crops like corn and wheat are grown here too.

Life in the city

Buenos Aires is the capital city of Argentina, and is the biggest city in the Southern Cone. Its large economy attracts lots of people to move there looking for better lives. But there are big divides between the city's rich and poor.



The Rich

The north of the city is the home of some of the richest residents. They own businesses, or work in the busy financial sector of the city, and make lots of money. The rich live in modern apartment blocks or mansions which have gates and guards around them to separate them from the rest of the city. Children from rich families often attend private schools and university, so they can also get well-paid jobs.



The Poor

Some of the poorest people in Buenos Aires live in the south of the city. Some of them are migrants who moved there from rural areas. Many can't find work, or have low-paid jobs in factories. They often don't make enough money for food, clothes or good quality housing. They live in slums called 'villas miserias', which have badly built houses that are cramped and falling apart. Children can't afford to go to private school or university. Crime can be a big problem.



Not enough money to live on...

In Argentina, 20% of people have about £1.50 a day to live on. This means that around 9 million people only have that much money to buy everything they need to survive.

The Southern Cone

Read pages 30 and 31 of the Study Book, then answer these questions about the countries at the bottom of the South American continent.

1. Circle the countries and oceans that each country borders.

Chile borders Paraguay / Argentina / Uruguay / Atlantic Ocean / Pacific Ocean

Argentina borders Uruguay / Paraguay / Chile / Atlantic Ocean / Pacific Ocean

Paraguay borders Chile / Argentina / Uruguay / Atlantic Ocean / Pacific Ocean

Uruguay borders Argentina / Chile / Paraguay / Atlantic Ocean / Pacific Ocean

2. Which of the following words would not be used to describe the Atacama desert? Circle two words.

dry boiling cool large hilly flat

3. Look at the following statements from people living in Buenos Aires. Tick the correct box to show whether you think they are rich or poor.

	Rich	Poor
I own a financial business in the city.	<input type="checkbox"/>	<input type="checkbox"/>
When I grow up, I'll go to university.	<input type="checkbox"/>	<input type="checkbox"/>
I work in a factory in the city.	<input type="checkbox"/>	<input type="checkbox"/>
The apartment I live in is carefully guarded.	<input type="checkbox"/>	<input type="checkbox"/>
I live in the same house as many other people.	<input type="checkbox"/>	<input type="checkbox"/>

On the right is a picture of the Pampas in Argentina.



4. Draw lines to match each word to its definition.

Pampas	A large area of flat land.
Gauchos	A large plain covering an area of South America.
Plain	South American cowboys.

4. Describe the climate of the Pampas.

Look at the map on pages 6 and 7 of the Study Book if you need help.

5. Using pages 30 and 31 of the Study Book for help, use the following numbers to write four facts about the Southern Cone.

9 million 70,000 1960 1800

- 1)
- 2)
- 3)
- 4)

"I can name and locate the countries in the Southern Cone and describe some things they're known for."



The Southern Islands

The Falkland Islands and South Georgia and the South Sandwich Islands are British territories in the South Atlantic Ocean. The islands are cold and difficult to get to, so not many people live there.



This region is home to thousands of penguins. They're perfectly adapted for the cold. They have a thick layer of blubber (fat) under their skin to keep warm.



The Drake Passage is an 800 km stretch of water between Antarctica and South America. It's one of the most dangerous areas to sail through in the world.



There's a research base run by British scientists on South Georgia. People come here to study the environment and the wildlife.

South Sandwich Islands

Would you like to explore any of these islands? Why or why not?

The South Sandwich Islands are about 1000 km from Antarctica. They are actually a line of big volcanoes created at a tectonic plate boundary (where two plates meet). Some of them are still active today.

Towns at the end of the Earth

The extreme environments on these islands make them difficult places to live. Some have no settlements on them at all, with only colonies of penguins and other animals living there.



ISLAND 1

The Falkland Islands

The Falkland Islands are a group of islands covering about 12 000 square kilometres (4700 square miles). The weather is very windy and cool all year. The average temperature in winter is 12 °C and in summer it's only 8 °C. The islands are rocky and steep with cliffs at the coast. Around 3000 people live permanently on the islands. Over half of those live in the capital, Stanley. Fishing is the largest economic activity, with other industries including tourism and farming sheep for wool.



ISLAND 2

South Georgia and the South Sandwich Islands

On these islands, temperatures are cold all year round, with lots of snow. The strong winds create blizzards. The average summer temperature is just 4 °C. In winter it's -1.6 °C and the days are short, with very little daylight. In the past, some seal and whale hunters lived on the islands, but there are no permanent residents now. People do visit the islands though. Scientists come there to do research and tourists come to see the wildlife, like orcas and penguins.



Stormy weather...

Life can be really tough when you're living as close to the South Pole as the people on these islands are. If you live there, you do get to see some amazing wildlife though.

The Southern Islands

Read pages 32 and 33 of the Study Book, then answer these questions about the islands at the bottom of South America.

1. Why don't many people live on the Southern Islands?

Not many people live on the Southern Islands because

2. Look at the image of the Drake Passage on page 32 of the Study Book. Why do you think it's so dangerous to sail across?

Hint: look at what's happening in the picture.



3. Read the statements and decide whether they are about the Falkland Islands (F), South Georgia and the South Sandwich Islands (S) or both. Tick the correct box for each statement.

People only visit these islands or stay for a few months; no one actually lives here permanently. F S Both

It's cold and windy here. F S Both

About 3000 people live here. F S Both

Fishing is the main industry here. F S Both

Penguins live here. F S Both

4. Label the features of this penguin using the words in the box. Explain why each part makes them well adapted to a cold climate.

waterproof feathers blubber strong claws



Waterproof feathers

Blubber

Strong claws

5. If you could visit either the Falkland Islands or South Georgia and the South Sandwich Islands, which one would you choose and why?

I would visit

because

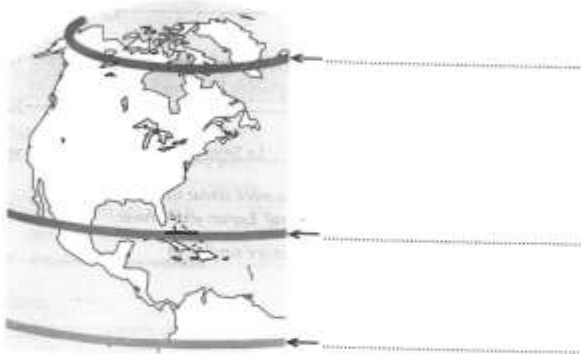
"I can locate the Falkland Islands and South Georgia and the South Sandwich Islands and describe how the climate affects life there."



World Zones 2

Read about the different climate zones on pages 34 and 35 of the Study Book.

- Colour in the map below to show the different climate zones in Central and North America. Fill in the key to show which colour represents which zone. Label the three lines.



KEY	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____

- Look at the information about climate zones on page 35 of the Study Book. Which climate zone would you like to live in, and why?

I would like to live in _____
because _____

- Join the descriptions of the climates with the right climate zones.

The Tropics	The summers are dry and winters are cold.
The Polar Regions	It is always hot.
The Temperate Zones	There are four seasons.
	It is always cold.
	This climate zone is closest to the equator.
	There are ice caps.

- Imagine you're on a journey from the North Pole to the Equator. Draw a picture of what you might see in each climate zone.

Don't forget to label each drawing with the name of the climate zone.

"I know about the three main climate zones on the Earth and what their climates are like."



The Americas on the Globe

World Zones

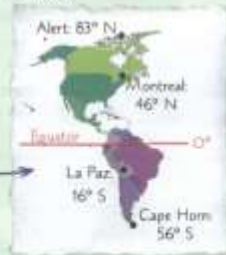
The continents of North and South America stretch from the north to the south of the globe. Each region's climate is linked to where on the globe it is located.

Circles on the Earth

There are five important imaginary lines around the Earth. They split the planet up into zones:



Each point on Earth has a **latitude** measured in degrees (°). This tells you how far north (N) or south (S) of the equator the point is. Some examples are shown on the right.



The Polar Regions

North of the Arctic Circle is a polar region. North America lies across the Arctic Circle, so it is partly in a polar region. There's another polar region south of the Antarctic Circle, but South America doesn't cross this line.

The polar regions are really cold and are covered with ice caps.

The Tropics

The area between the Tropic of Cancer and the Tropic of Capricorn is known as the 'tropics'. Almost everywhere in this region is always hot. Different climates and biomes are found here, such as desert, tropical rainforest and tropical grassland.

The Temperate Zones

The areas between the tropics and the polar regions have a temperate climate, which has cold winters and dry summers. The temperate zones have four seasons — spring, summer, autumn and winter.

Places in the temperate zones tend to be warmer the closer to the tropics they are. The parts of the temperate zones closest to the tropics are called the subtropics.

Which of these three zones do you think the UK is in?

The subtropics are hot enough to grow fruits such as oranges and guava.

It isn't all about latitude...

Temperature doesn't just depend on how far north or south you are. It's also affected by altitude, nearby ocean currents, and whether you're in the centre of a large land mass.

The Mystery of the Eggsplusive Easter Eggs Problem

Instructions

It's nearly Easter and an eggstraordinary event has occurred. All of the chocolate eggs on the shelves of the local supermarket have eggsploded! Why would someone do this to the Easter eggs? The culprit needs to be found and new eggs need to be made so that the celebrations can continue.

As the Detective Chief Inspector, it is your job to find out who eggsploded the eggs. Your officers have taken down the names and descriptions of the 30 people who were working in the supermarket today.

There are also five top secret clues that have been left. To crack the case, you will need to solve each clue and check the information with the list of names.

Good luck!

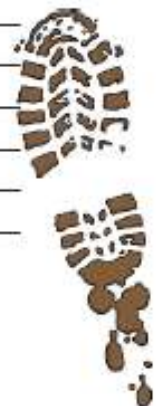


Clue 1

Formal or Informal Footprints?

Decide whether each word or phrase uses vocabulary typical of formal or informal writing and write it in the correct place. Whichever shoe has the most words or phrases will tell you the type of shoe print that was discovered in the sweet shop.





The culprit wore _____

Clue 2

Chocolate Bullet Points!

The following details were recorded by the police. These are in an awful mess with lots of mistakes. Can you check whether they have the correct punctuation?

If they are OK, give them a tick, but if they have incorrect or missing punctuation, give them a cross. If you have more ticks, then the culprit is female. If you have more crosses, then the culprit is male.

At the scene of the crime I noticed:

- chocolates everywhere;
- broken foil wrappers;
- a strong smell of smoke;
- confused looking staff;
- five children eating chocolate;

Exploded eggs included:

- all large boxed eggs
- half of the small wrapped eggs
- most of the medium boxed eggs

I spoke to:

- ◊ the supermarket manager;
- > all staff members;
- the members of public who were shopping;
- any people passing by the shop.

When I arrived at the supermarket, I observed:

- chocolate footprints out of the door;
- a large group of excited-looking children;
- worried-looking supermarket workers;
- panicked mothers.

Ruined items

- all chocolate eggs
- most boxes of chocolate;
- some sweets
- some biscuits
- most soft drinks

Questions to ask all workers

- How long have you worked here?
- Do you enjoy your job?
- Do you celebrate Easter?
- Do you like chocolate?

There are more _____, so the culprit is _____.



Clue 3

Prefix Packets

An empty snack packet was found at the scene of the crime. Match the words to the correct prefix to form a verb. The prefix with the most words will reveal which packet was found and therefore the culprit's favourite snack.

 cook	 rail	 obey	 throne	 respect
 read	 lead	 agree	 take	 behave
 perform	 allow	 laid	 like	 flate



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

The prefix with the most words is _____, so the culprit's favourite snack is _____.

Clue 4

Aisle Adverbials

This paragraph is split into statement sentences, which all include adverbials. But are they adverbials of time, place or number?

If there are more adverbials of **time**, then the culprit works in the freezer aisle.

If there are more adverbials of **place**, then the culprit works in the fruit and vegetable aisle.

If there are more adverbials of **number**, then the culprit works in the tinned food aisle.

Statement	Adverbial of time, place or number?
Firstly, as I looked around the crime scene, I thought I heard the sounds of someone giggling.	
I noticed one unexploded egg behind the biscuits.	
I knew we needed to close the shop straight away.	
Nearby, there was a huge pile of broken biscuits.	
We collected all of the witness statements in the manager's office.	
Meanwhile, the newspapers arrived to take photos and write a news story.	
We were finally able to head home and leave the supermarket workers with a big clean up job.	

There were more adverbials of _____,
so the culprit works in the _____ aisle.







Clue 5

Magical Maze!

Find your way through this maze of Y5/6 statutory spelling words. By following the path (vertically or horizontally) of correctly spelt words, you will find out whether the culprit wears glasses or not.

Start

bargain	thorough	excellent	suggest	harass	language	persuaid
forrtly	reccommend	resterant	temprature	forign	community	stumach
sholder	lightning	immediate	variety	available	accompany	vehical
comunicate	neighbour	yocht	programe	determind	system	parliment
frequently	prejudice	relevant	twelfth	cemetery	immature	necessary
pronunsiation	exagerate	garantee	corespond	secretery	identtity	symbol
acheive	rhythm	equipment	average	especially	hindrance	equipped
vegetable	profession	lesiure	equipp	comittee	disasterous	queeu
occupy	mucsl	individduel	desprate	recognise	suficient	rhime
apparent	privilege	criticise	signature	convenience	bruise	marvellous
consious	orkward	mischevious	sinsere	dicsionary	familliar	develop
anscient	curiosity	acording	sacrifise	consence	controvversy	explanation
aggressive 	embarrass	definite 	phisycal	nuisance 	enviroment	government 

The culprit wears/does not wear glasses. _____