



Coventry Counts

Year 5 workbook

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Year 5 - Place value

Britain's favourite car

You're part of the marketing team who works at the Coventry Transport Museum. Your team has been asked to create a poster which is to be displayed in the museum which shows the top 5 selling car brands in the UK in 2019. There are 5 cards below to help you create this poster. Fill in the cards by completing the following tasks.

Position:

BMW

Year established:



Number sold: 169,753

Position:

Ford

Year established:



Number sold: 236,137

Position:

Mercedes-Benz

Year established:



Mercedes-Benz

Number sold: 171,823

Position:

Vauxhall

Year established:




VAUXHALL

Number sold: 159,830

Position:

Volkswagen

Year established:

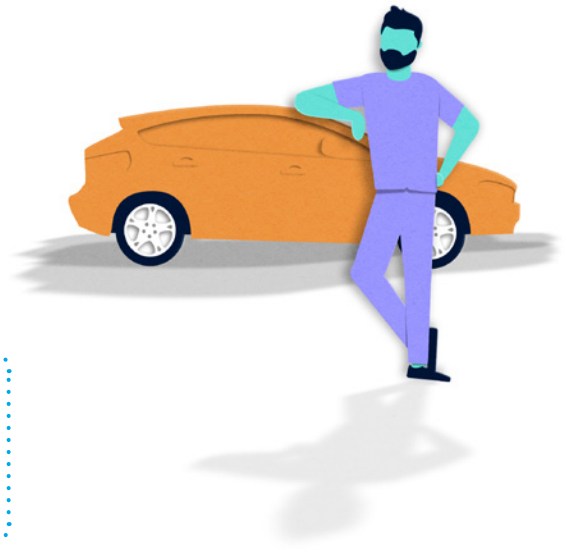


Volkswagen

Number sold: 200,771

Task 1

Cut out the 5 cards which display the top 5 selling car brands in the UK. Each card says how many cars were sold in 2019. Write the number of cars sold in words below.



BMW

Number sold: 169,753

[Dotted box for writing the number of cars sold in words]

Ford

Number sold: 236,137

[Dotted box for writing the number of cars sold in words]

Mercedes-Benz

Number sold: 171,823

[Dotted box for writing the number of cars sold in words]

Vauxhall

Number sold: 159,830

[Dotted box for writing the number of cars sold in words]

Volkswagen

Number sold: 200,771

[Dotted box for writing the number of cars sold in words]

Task 2

Share the cards out amongst team members and take it in turns to put one card down on the table ordering them on the number sold from highest to lowest. Once you've done this write the position on the card with 1 being the highest and 5 being the lowest.

Task 3

The table below shows each car brand and the year established in Roman numerals. Can you convert them to a number? Enter these on each card.

Car brand	Year established (in Roman numerals)	Year established
BMW	MCMXVI	
Ford	MCMIII	
Mercedes-Benz	MCMXXVI	
Vauxhall	MDCCCLVII	
Volkswagen	MCMXXXVII	

Task 4

The manager needs the number of cars sold rounded to the nearest 100,000, 10,000 and 1,000. Complete the table below.

Car brand	Number Sold	Number sold to nearest 100,000	Number sold to nearest 10,000	Number sold to nearest 1,000
BMW	169,753			
Ford	236,137			
Mercedes-Benz	171,823			
Vauxhall	159,830			
Volkswagen	200,771			

Optional extension activity

Investigate car sales in other European countries, for example Germany.

- Are the top 5 the same as the UK?
- Are there brands in the top 5 in other countries that are not in the top 5 in the UK?
- Looking at the car brand which has sold the most cars. Is it the same brand as the UK? What's the difference between the number sold compared to the UK?

A large, empty rectangular area with a dotted border, intended for students to write their investigation findings.



Year 5 - Calculations, addition and subtraction

Gem treasure hunt

You're to imagine you're an archaeologist working in a team which has found a note from a long time ago that states some valuable gems have been buried in a room somewhere under the old St Michael's church. The note contains addition and subtraction problems which when solved correctly will tell you in which room the gems are buried. Will you get to the gems before anyone else?

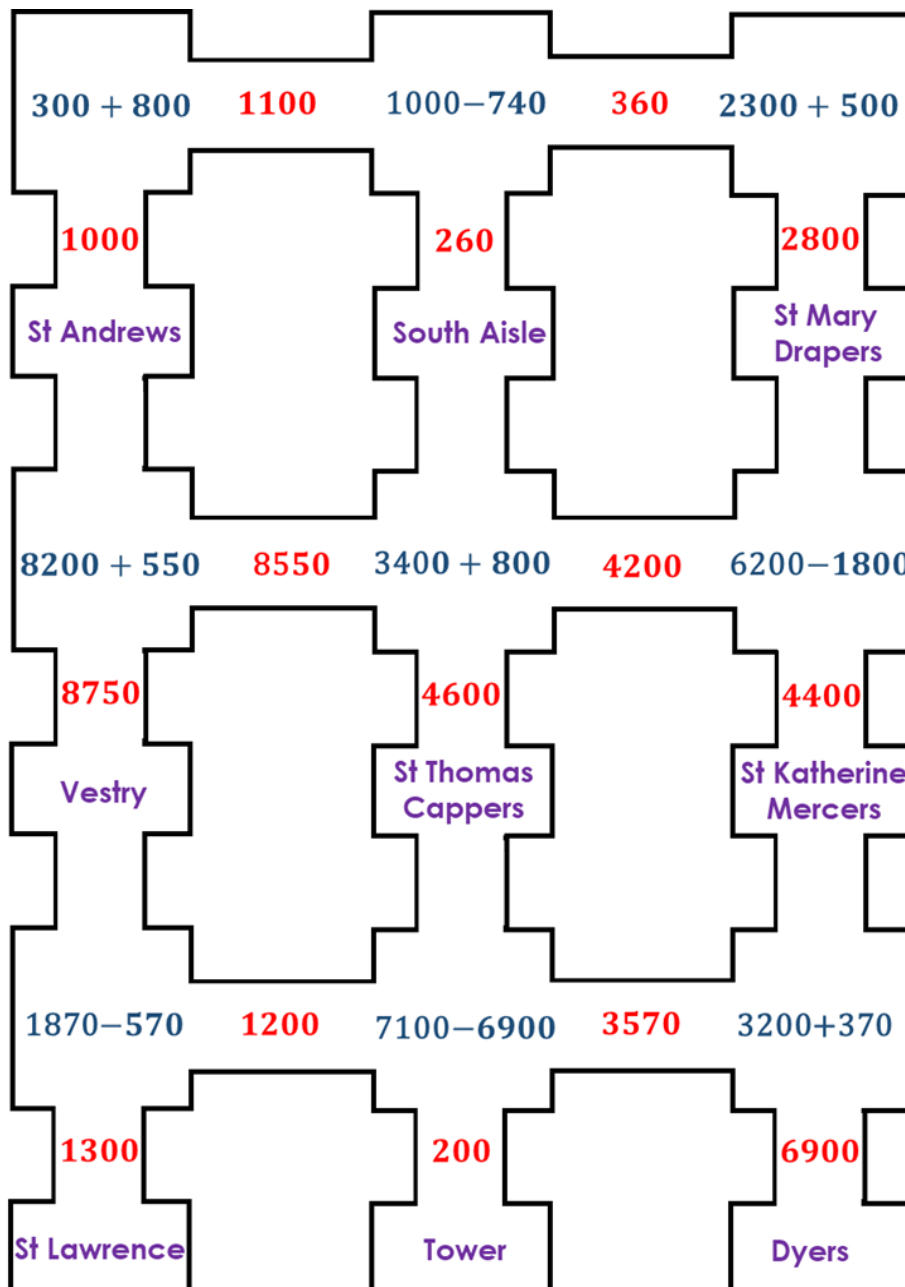
Dear friend

I fear someone is planning to steal my precious gems, so I've buried them under one of the rooms of the church. If you can solve the puzzles below the gems are yours. There are 3 puzzles which involve answering addition and subtraction problems. When you solve the problems, you'll be given a room to cross off on the floor plan. The one that is not crossed off at the end is the room where the gems are buried.

Good luck!

Puzzle 1

Start at the top left-hand corner and work your way through the maze answering the questions. If you go through a room, the treasure is not buried in this room, cross this off on the floor plan. There are three rooms to cross off in total.



Puzzle 2

Solve the 6 addition and subtraction sums below. For each answer find the digit sum. This means adding together all the digits in your answer. If your new answer is not a one-digit answer, then add these two digits again and so on until you get a one-digit number. 2 answers appear twice, cross these numbers off on the floor plan.

$$1) 24,310 + 3186 =$$

$$2) 84,214 - 78,462 =$$

$$3) 145,672 + 41,377 =$$

$$4) 62,223 - 5,177 =$$

$$5) 24,602 + 4,788 + 432 =$$

$$6) 62,463 - 4,408 =$$

Puzzle 3

Solve the 3 addition and subtraction problems below. For each answer find the number in the hundreds place, this is the room number to be crossed off on the floor plan.

- 1) Currently the population of Coventry is 48,120. 50 years ago, it was only 21,853. Make an approximation of the difference to find out which one of the following is the difference in population from 50 years ago.
- a) 26,267
 - b) 36,267
 - c) 16,267

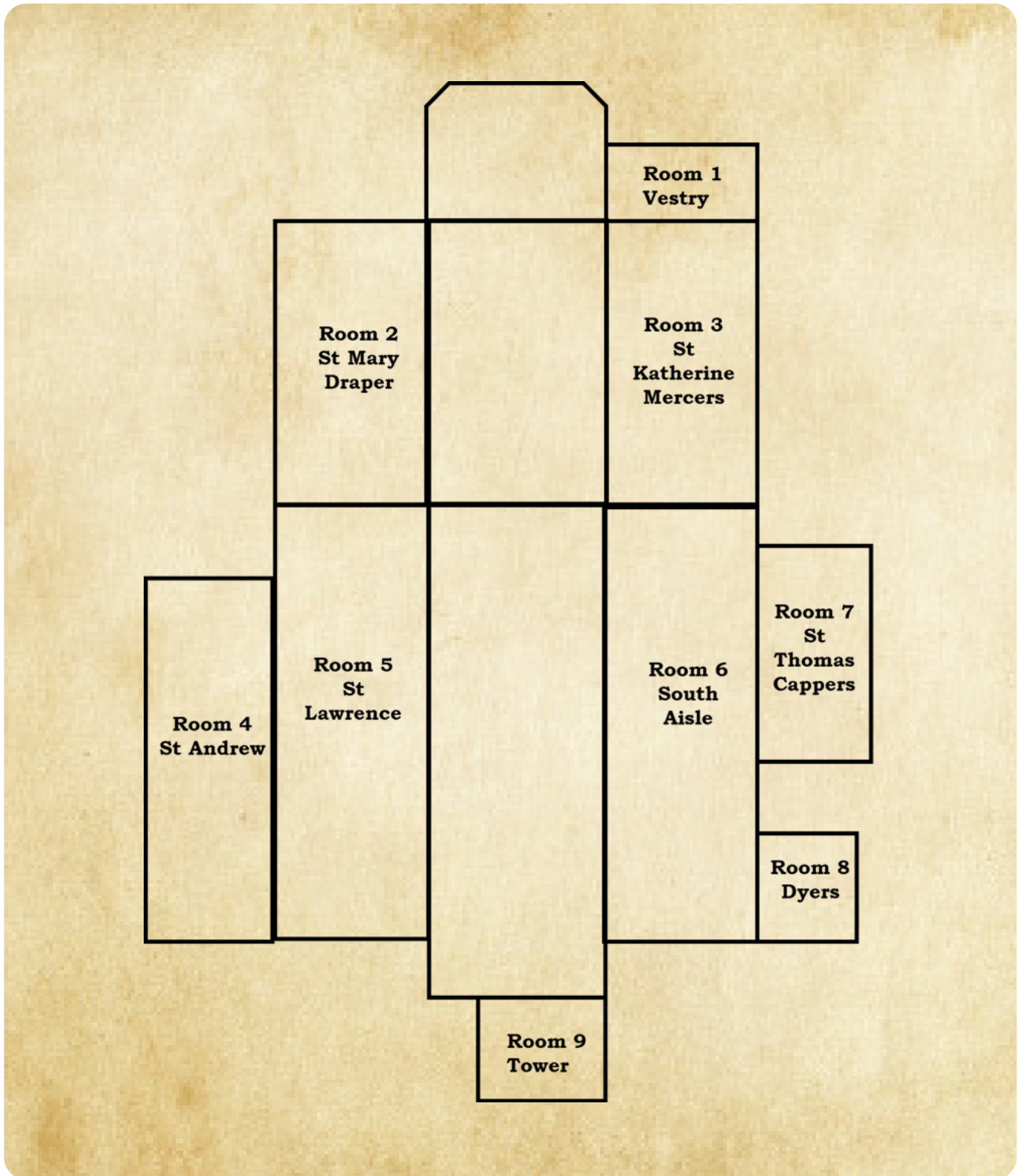
The table below shows the number of visitors to a theatre for the first 3 weeks of June.

Week	Visitors
Week 1	12,034
Week 2	10,843
Week 3	9,721

- 2) The theatre has a target of 40,000 visitors every 4 weeks. How many visitors do they need in week 4 to meet their target?

- 3) In week 4 there were 595 less people than in week 3. How many visitors were there in the first 4 weeks of June?

Floor plan



The gems are buried

Optional extension activity

Use the internet to research the history of Coventry. Then create a timeline of when each important event occurred. Below are some events you could include in your time line.

- St Mary's cathedral was built
- The new cathedral was built
- Coventry City Football Club won the FA cup.

A large, empty rectangular area with a dotted blue border, intended for students to create a timeline of events.



Year 5 - Calculations, multiplication and division

War time secret agents

It's 1940 and you're working as a secret agent for the British. You've been informed that the Germans are planning to bomb Coventry. Your mission is to crack their message by solving 3 clues which will tell you the day, the month and the time the bombing is planned for. Can you crack the code before the Germans bomb Coventry?

Clue 1

Solve the following multiplication and division problems and use the code to determine the time the Germans will bomb Coventry.

A	B	C	D	E	F	G	H	I	J	K	L	M
9	32,000	36	5.8	16	81	4.367	23.4	730	16,000	5.076	5,600	240

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
43.367	1,600	24,000	49	64	56,000	8	125	2.34	320	25	2,400	3,200

Problem	7^2	5^3	3^2	8^2	2^3	4^2	4^3
Answer							
Letter							

Problem	400×60	$7,200 \div 800$	$70 \times 20 \times 40$	$64,000 \div 8,000$
Answer				
Letter				

Problem	1.6×10	7.3×100	$4367 \div 1000$	$234 \div 10$	0.8×10
Answer					
Letter					

What time will the Germans bomb Coventry?

Clue 2

Work out the following multiplication questions. Then add each digit in the answer together to get a new answer. If the answer is above 12 then add them again. Then cross off your answer in the table at the bottom of the page.

a)

$$\begin{array}{r} 2635 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

b)

$$\begin{array}{r} 3736 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$$

c)

$$\begin{array}{r} 326 \\ \times \quad 24 \\ \hline \\ \hline \end{array}$$

d)

$$\begin{array}{r} 458 \\ \times \quad 37 \\ \hline \\ \hline \end{array}$$

For the division questions take the remainder and cross it off in the table below.

e) $368 \div 6$

f) $1,265 \div 9$

The answer which has not be crossed off is the number of the month the bombing will occur.

9	11	5	4	8	2	3
---	----	---	---	---	---	---

Clue 3

A popular war time treat was bread pudding. Sam is planning to make this for 24 people. Below shows the recipe.

Bread pudding - serves 8

500g wholemeal bread	2 large eggs
500g mixed dried fruit	600ml milk
85g of mixed peel	Zest 1 lemon
1½ tbsp of mixed spice	100g butter
140g light muscovado sugar	2 tbsp demerara sugar

He needs to buy the following ingredients from the supermarket - mixed dried fruit, mixed peel, butter and eggs. The prices for each of the ingredients are as follows:

Supermarket prices

250g butter - £1.50
180g of mixed peel - £1.00
6 large eggs - £1.50
500g mixed dried fruit - £1.00

Calculate the cost of buying the ingredients to make bread pudding for 24 people. Then add together all the digits in the answer. Your answer is the day in the month the bombing will occur.

Dear Prime Minister,

12 October 1940

Urgent message from secret agents.

The Germans will bomb Coventry on the

of at .

Optional extension activity

Use the internet to find out about the Morse code. Can you use Morse code to translate the message below?

••• •— ———	••—• •—• ——— ———

——•—• ——— ———•••— • —• — —•—• —•———

•• •••	•—	••• •—•—• —•———



Year 5 - Fractions, decimals and percentages

Anyone for pizza!

It's a busy lunch time and you're working as a chef in the café at Coombe Abbey . There are some very hungry customers in the restaurant who are looking forward to a tasty lunch. You need to complete the following tasks so that the customers get good quality food, get what they've ordered and pay the right price. Will the customers be happy after their lunch?

At the bottom of this sheet are 2 pizza templates. On these draw 2 pizzas: 1 meat pizza and 1 vegetarian pizza. Then divide the meat pizza into 4 slices and the vegetarian pizza into 8 slices.

Two families have ordered some slices of pizza. Cut out and stick the correct number of pizza slices of each type of pizza on the plates below.

- The Jones family want 1 slice of meat pizza and 3 slices of vegetarian pizza. Complete the sum below and put the correct slices of pizza on the plate.

$$\frac{1}{4} + \frac{3}{8} = \boxed{}$$

- The Jones family are full and have left 2 slices of the vegetarian pizza uneaten. Complete the sum below to show the fraction of a pizza eaten.

$$\boxed{}/8 - \frac{2}{8} = \boxed{}$$

- The Baker family want 2 slices of meat pizza and 5 slices of vegetarian pizza. Complete the sum below, write your answer as a mixed number. Then put the correct pizza slices on the plate.

$$\frac{2}{4} + \frac{5}{8} = \boxed{}$$



- There is some meat pizza left after the Jones and Baker family have been given their pizza. Fill in the table below to show how much is left as a fraction, decimal and percentage.

Pizza	Fraction	Decimal	Percentage
Meat			

Task 2

Mr De Niro orders pizza which cost £8.00. He has two vouchers: one which is for 50% off the cost of the pizza, the other is for $\frac{2}{5}$ off the cost of a pizza. Work out how much the pizza will be using each voucher. Which voucher should he use? Show your working.

Task 3

The staff are entitled to free pizza for lunch. All pizzas are the same size. The manager wants to know who is eating the most pizza. The table below shows the fraction of a pizza each member of staff had this lunch time. Can you order the staff from who had the least amount of pizza to the most?

Member of Staff	Fraction
Jane	$\frac{1}{4}$
Mylo	$\frac{5}{16}$
Hugo	$\frac{5}{12}$
Emily	$\frac{11}{20}$
Yasmin	$\frac{1}{8}$

Pizza templates for task 1



Optional extension activity

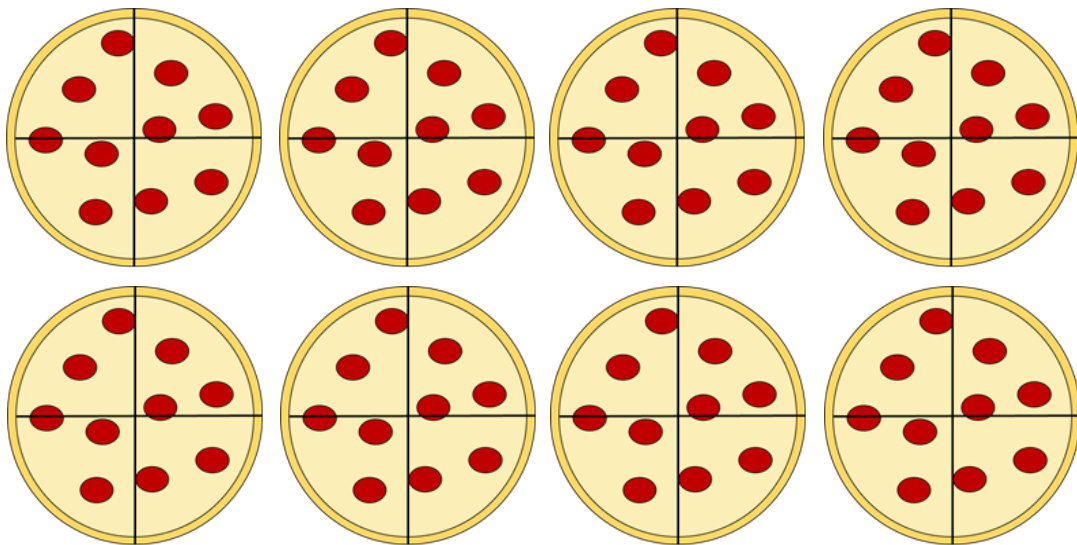
1. There are 5 people in the Smith family. They each order $\frac{3}{4}$ of a pepperoni pizza. How much pizza have they ordered altogether? Use the pizza templates at the bottom of the worksheet to calculate this and answer below. Once you've done this complete the sum. Can you give your answer as a mixed fraction and improper fraction?

$$\frac{3}{4} \times 5 =$$

2. There are 3 people in the Patel family. They each order $1\frac{1}{4}$ of a pepperoni pizza. How much pizza have they ordered altogether? Use the pizza templates at the bottom of the worksheet to calculate this and answer below. Once you've done this complete the sum. Can you give your answer as a mixed fraction and improper fraction?

$$1\frac{1}{4} \times 3 =$$

Pizza templates for extension activity



Year 5 - Converting units

Shopping with Mum

You're in the town centre with Mum. You start off in Coventry Building Society where you choose a savings account which will give you the most money back after a year (this is called interest). Then you go to several shops where you'll solve measurement problems. You'll also have time to have some lunch. Work together to solve the problems. Can you purchase the correct quantities of all the items your Mum needs?



1. You and your Mum go to Coventry Building Society to open an account. The table below shows 4 accounts and the amount of money you would get back after a year of saving in each of these accounts.

Savings Accounts	
Cash ISA	£51.78
Easy Access ISA	£45.32
Online Saver	£42.97
Instant Access	£41.63

Your mum says that she would earn over £10.00 more if she had the Cash ISA compared to the Instant Access. Work it out, is she correct?

2. You and your Mum are to bake some cakes and you need to buy 4 of the ingredients from the supermarket. To make 12 cakes you'll need the ingredients shown to the right.

a) If you buy 1200g of flour how many cakes can you make?

b) Work out the amount you would need for the other 2 ingredients if you were to make cakes using 1200g of flour. Enter the values in the table below.

c) The supermarket has the quantities you need to buy in a different measuring units to those show above. Can you convert these in the table below?

Ingredient	Unit	Conversion
Flour	1200g	kg
Vegetable oil		l
Sugar		kg

d) You decide to put chocolate chips in the cakes. You need 100g of chocolate chips for 12 cakes. The supermarket sells them in 200g bags. How many bags would you need if you make 36 cakes?

e) Mum also needs 4 pints of milk, but the supermarket sells milk in litres. How many litres of milk do you need? Note 1 pint = 570ml.

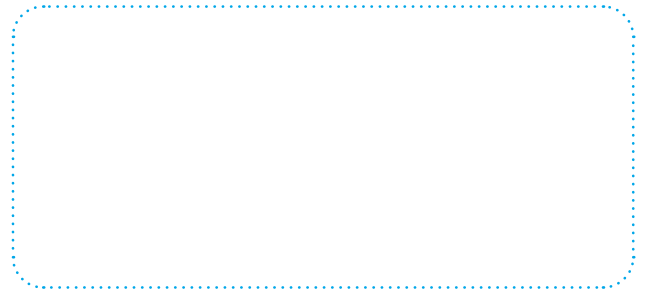
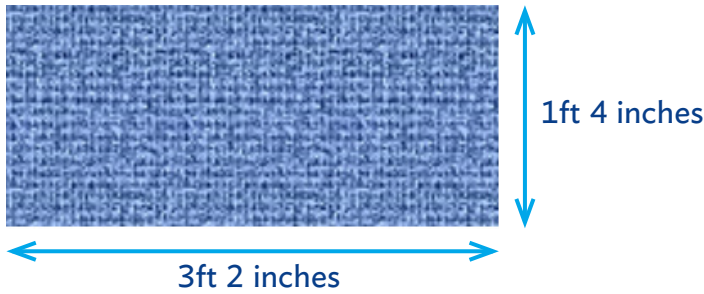
Ingredients
(quantity for 12 cakes)

- Flour 400g
- Vegetable oil 125ml
- Sugar 250g

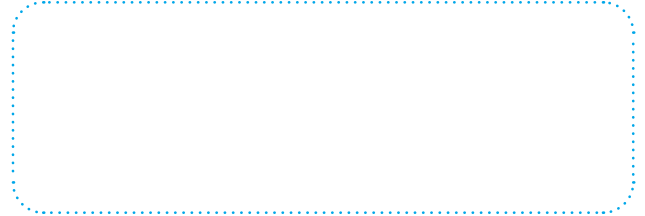
3. Next you and your Mum go to the fabric shop to buy a few items.

- a) First, your Mum buys some material to make a demin dress which has a width of 1 feet 4 inches and a length of 3 feet 2 inches. The shop keeper sells material in metres. Can you covert these measurements into metres.

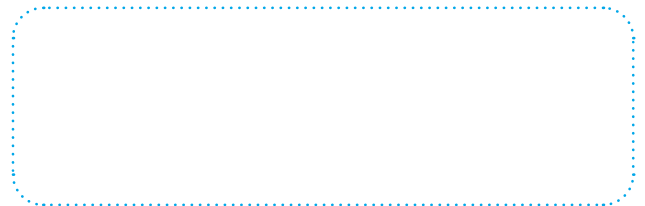
You know that 1 inch is approximately 2.5 cm and there are 12 inches in a foot.



- b) You also need 304cm of ribbon. Can you tell the shop keeper what you want in metres?



- c) Finally, Mum wants some lace which is sold in lengths of 50cm. She wants 3 metres of lace. How many pieces of lace does your Mum need to buy?



4. You and Mum then go to the café for lunch.
- a) You order a tomato pizza and chocolate cake. Your Mum orders tomato pasta and carrot cake. You both order lemonade. How much did your meal cost?

- b) You pay the waitress £30.00. How much change do you get?



5. Next, you go to the computer shop where there is a sale on. Some of the computer games are £19.99. You've £80.00 of birthday money to spend. How many computer games can you buy with your £80.00?

SALE

Games for £19.99

6. You and your Mum have finished shopping and it's now 1.45pm. You arrived in the city centre at 10.30am. You stopped for lunch at 12.15pm and spent 50 minutes having lunch. Then you finished your shopping. How long were you shopping for?

7. You and your Mum now go to Birmingham International train station. Look at the train timetable below.

a) How much quicker is the second train than the first train?

b) Train 3 runs 20 minutes after train 1 and takes the same amount of time and stops at all stations. Fill in the times in the table below.

Stops	Train 1	Train 2	Train 3
Coventry	13:49	14:02	
Canley	13:52		
Tile Hill	13:56		
Berkswell	13:59		
Hampton-in-Arden	14:03		
Birmingham International	14:06	14:11	

c) You and your Mum need to get to Birmingham International by 2.30pm. Can you catch train 3?

Optional extension activity

Use the internet to find the distances in miles between Coventry and 5 other nearby towns and cities. 1 mile = 1.6 km. Enter the distances in the table below to the nearest mile.

Then convert this into km and enter in the table below.

Which town or city is closest to Coventry?

Which is the furthest away?

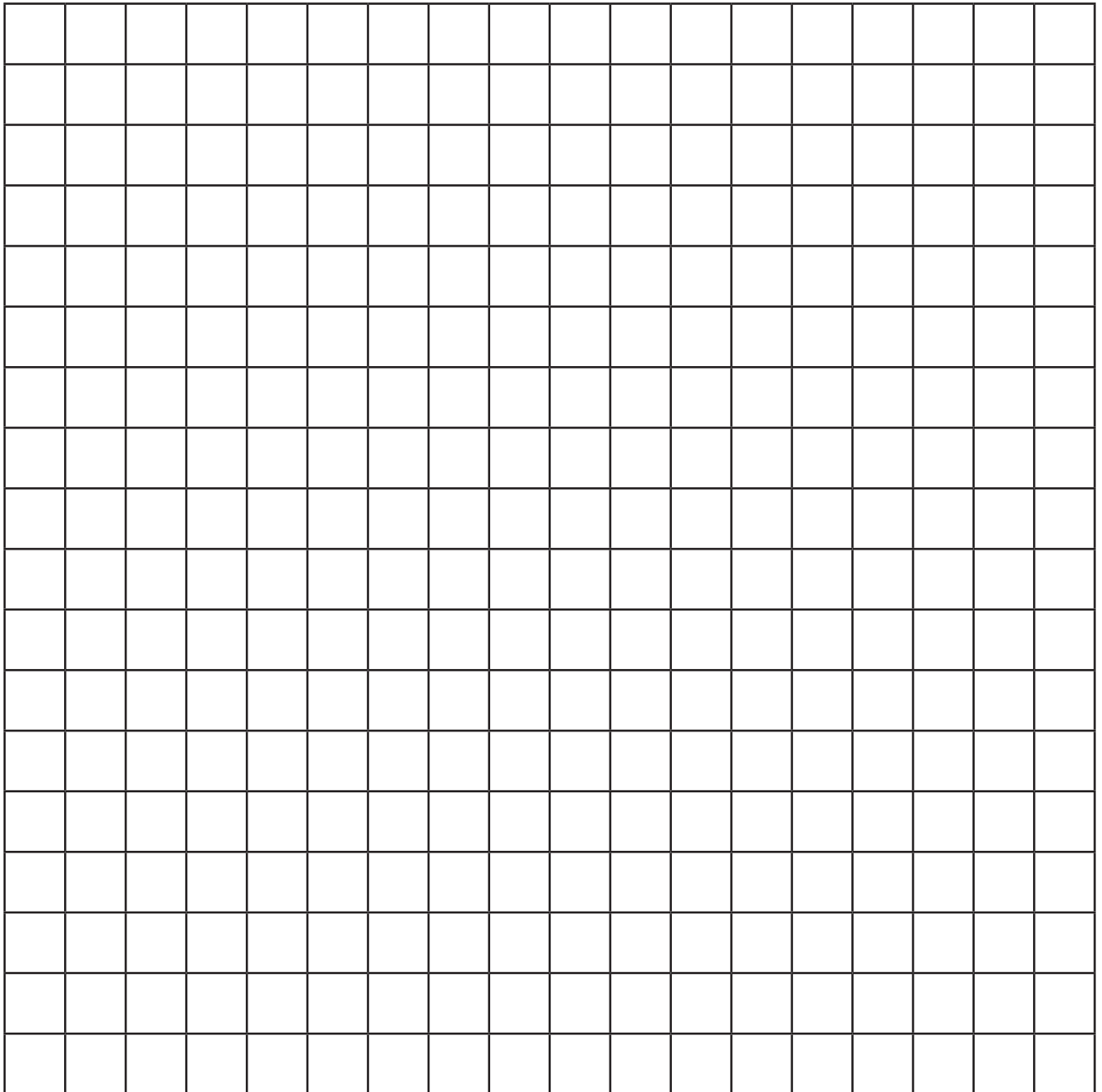
Town/City	Miles away	Km away
Birmingham		
Leicester		
Nuneaton		
Rugby		
Warwick		

Year 5 - Perimeter and area

Quiz sheet							
	Guess the longest perimeter?		Same	Calculate the perimeter		Correct?	
1	Tennis court	Volleyball court		Tennis court	Volleyball court		
2	Pool	Gym	Same	Pool	Gym		
3	Moonlight restaurant	Sunshine cafe	Same	Moonlight restaurant	Sunshine cafe		
4	Wasps	Spiders	Same	Wasps	Spiders		
	Guess the largest		Same	What is the area?		Correct?	
5	Frank Whittle room	Lady Godiva room		Frank Whittle room	Lady Godiva room		
6	Sunshine bar	Moonlight bar	Same	Sunshine bar	Moonlight bar		
7	East car park	West car park	Same	East car park	West car park		
	Guess the order on area?			What is the area?			Correct?
8	Deluxe room	Superior room	Luxurious room	Deluxe room	Superior room	Luxurious room	

Optional extension activity

On squares below create the word Arena. What is the area of each letter? What is the area of the whole word? Assume each square is 1cm^2 .



Year 5 - Volume and capacity

The supermarket experience

You and your partner have a day's work experience at a supermarket. Throughout the day you'll need to solve problems which involve estimating volume and capacity.

Snacks

You're first asked to work in the snacks aisle where you're to complete 2 tasks, which are listed below.

1. A manufacturer sells 2 of its snacks in the supermarket, which are a cuboid shape. They're both the same price and the manager wants to know which one is the best value for money. The dimensions of each snack are shown below. Use 1cm cubes to calculate the volume of 1 of the 2 snacks and your partner uses the 1cm cubes to calculate the volume of the other snack. Which snack has the greatest volume?

Nibbles: 4cm long, 2cm wide and 7cm tall

Snack bite: 4cm long, 3cm wide and 6cm tall

2. The manufacturer wants to create a new snack called 'Break time' which has a volume of 24cm^3 and a width, length and height of at least 2cm. The manufacturer has asked your manager to design this new snack. What could be the length, width and height of the snack? Use 1cm cubes to work this out and write the width length and height below.

Estimate the volume

Your manager now wants you to estimate the volume of 3 supermarket items. You know the size of the large packets and you've been given 3 stickers for the smaller packets. Look at the stickers and match the correct sticker to the smaller packet.

1. The large packet of Super washing has a volume of $8,200\text{cm}^3$. Estimate the volume of the small packet.



4,100cm³

6,000cm³

2,900cm³

2. The large packet of Cornflakes has a volume of $6,000\text{cm}^3$. Estimate the volume of the small packet.

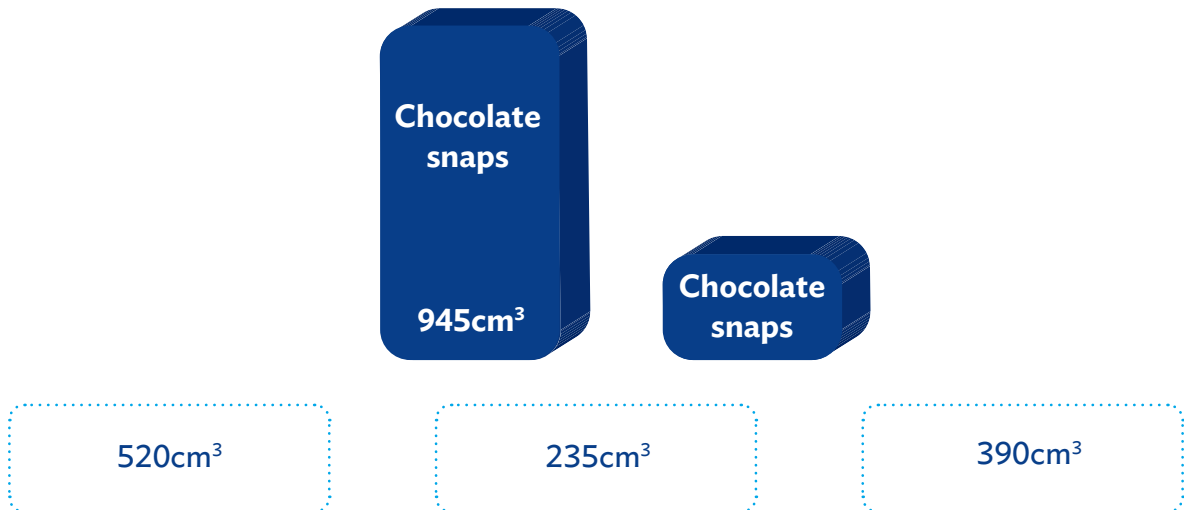


5,500cm³

3,500cm³

4,500cm³

3. A packet of Chocolate snaps has a volume of 945cm^3 . Estimate the volume of the small packet.



Fruity snacks

Below shows the length, width and height of 3 packs of fruit snacks. However, there is some missing information. You've been given the following information about the volume.

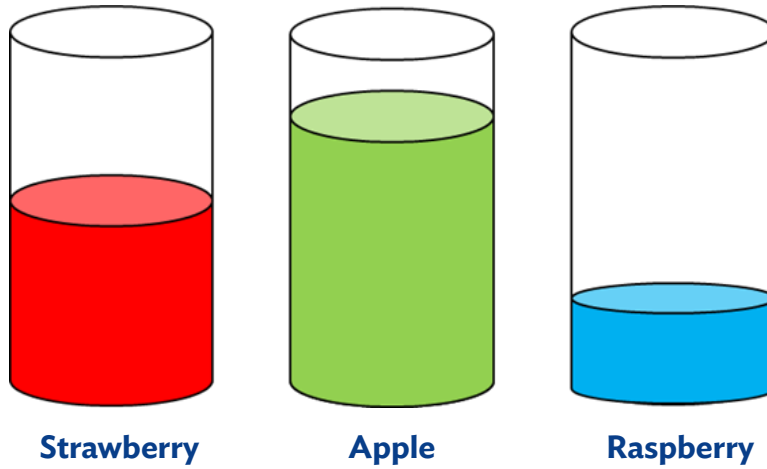
- The volume of the pineapple slices is 160cm^3 , which is twice the volume of the fruit laces.
- The volume of the sunny raisins is 50cm^3 less than the fruit laces.
- The width, length and height of all snacks is greater than 1cm.

Complete the table below.

Fruity snack	Length	Width	Height	Volume
Sunny raisins			5	
Fruit laces			8	
Pineapple slices	8		10	160

Slush drinks

You've been asked to help out at the slush drinks store. The supermarket sells slush drinks as shown below. You've been set two tasks to complete.



1. The capacity of each container is 10 litres. Estimate how much is left in each container.

Strawberry slush:

Apple slush:

Raspberry slush:

2. The slush drinks are served in 100ml cups. Estimate how many drinks can be served from the volume of each slush remaining.

Strawberry slush:

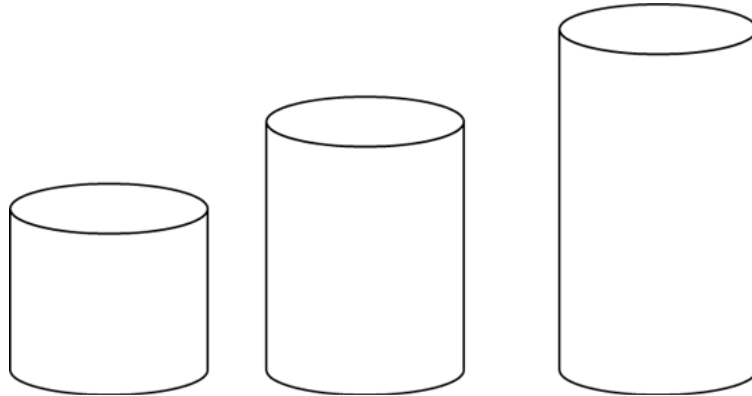
Apple slush:

Raspberry slush:

Anyone for tea

Your last job of the day is to work on the tea counter. Tea is sold in 3 different sizes, but you don't know how much liquid each cup holds. You've been asked to estimate the capacity of each cup. Use your see-through container to estimate the capacity of all 3 paper cups as follows:

1. Take the smallest cup and fill it to the top with water.
2. Then pour it into the see-through container.
3. Estimate the capacity of the cup by looking how full your container is.
4. Record your results below and repeat for the other 2 cups.



Optional extension activity

Find some boxes which are cube and cuboid shape and create a 3D model town with buildings. Assume that every 1cm is equivalent to 1m and calculate the volume of each building.

A large, empty rectangular area enclosed by a dotted blue border, intended for students to draw their 3D model town and record calculations.



Year 5 - Statistics

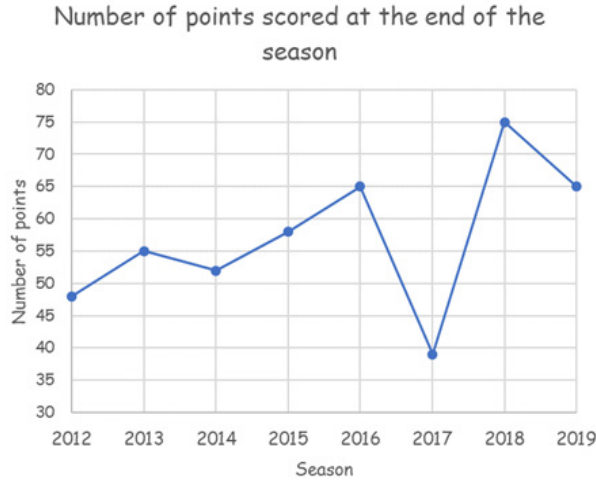
Breaking news

You're a roving news reporter with The Coventry Evening Telegraph and the Coventry City Football Club team are about to play their final game of the season. Your task is to investigate their performance over the last few seasons and determine their final position in the league if they win, draw or lose their final game. Important final matches will be televised you'll also need to determine when they will be played. Once you've interpreted the information you'll create a news report about your findings.

Task 1

Before creating the news report you need to interpret the information you've been given. Look at the line graph and timetable below and answer the following questions.

1. The line graph below shows the number of points scored by Coventry City Football Club at the end of the season for the last 8 seasons.



- a) In which season did they score the least amount of points?
- b) Estimate the number of points scored in the season where they scored the least amount of points?
- c) Between which years did they score between 45 and 60 points?

2. Two important games will decide the winner of the league, both these games will be on the television. Below shows the television timetable for the afternoon when the important games will be played.

Channel	1pm	2pm	3pm	4pm	5pm
BBC 1	The news	Football: CCFC v Sunderland		Toy Story 2	Pointless
BBC 2	A place in the sun	Homes under the hammer	Wanted down under	Football: Rotherham United v Portsmouth	Dad's Army

- a) You're playing a game of tennis which finishes at 12.40pm. It takes 40 minutes for you to get home, will you be back before the Coventry City Football Club game starts on the television?

- b) The game starts 20 minutes after the programme starts on the television. What time does the game start?

- c) The Coventry match finishes at 3.35pm. How long do you need to wait before the Rotherham match begins on the television?

Task 2

Complete the table on the newspaper report template which shows games played, won, drawn and lost, and the number of points scored for the top 5 teams before Coventry City Football Club play their final game. Then answer the questions below.

Hint: Total points scored is calculated by adding the number of points obtained from a win to the number of points obtained from a draw. You score 3 points for a win and 1 point for a draw.

1. If Coventry City Football Club win their final game how many points will they score?

2. If Coventry City Football Club draw their final game and Rotherham win their final game, will Rotherham score more points than Coventry City?

3. If Coventry City Football Club lose their match and Rotherham United win their final match how many points will Rotherham United win the league by?

Task 3

Complete the newspaper report by creating a headline and use the relevant answers to questions answered in tasks 1 and 2 to create a summary of Coventry City Football Club's performance over the last few seasons, and what their final position in the league will be if they win, draw or lose their final game. You also need to discuss what time important games will be played.

An example of a sentence you could write in your report could be:

'Coventry City Football Club had a bad year in _____.'

'If Coventry City Football Club win their final game of the season they'll be _____ in the league.'

'Television coverage of Coventry City Football Club's final game will be at _____.'

Optional extension activity

The table below shows the goals scored, goals conceded and the goal difference at the end of the season for another set of teams in the league. Looking at the goal difference for these teams can you answer the problems below.

Team	Goals scored	Goals conceded	Goal difference
Gillingham	46	44	2
Ipswich Town	50	50	0
Bristol Rovers	44	45	-1
Blackpool	43	47	-4
Shrewsbury Town	40	46	-6

1. Which is the only team in the table to have scored more goals than conceded goals?

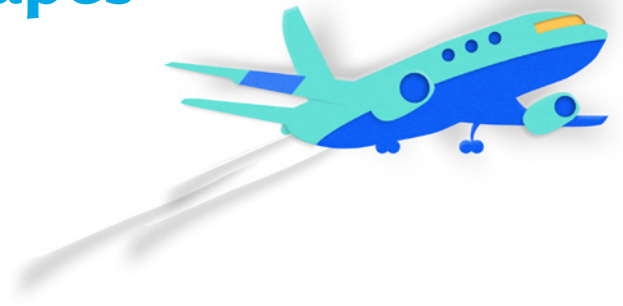
2. What is the difference in goal difference between Gillingham and Shrewsbury Town?

3. Doncaster Rovers goal difference was 5 higher than Bristol Rovers. What is Doncaster Rovers goal difference?

Year 5 - Properties of shapes

Shapes at the airport

You've a day's work experience at Coventry Airport. During the day you'll need to help out at different parts of the airport by solving some shape related puzzles.



Air traffic control

6 planes are taking off from Coventry Airport this morning. Once they take off all 5 planes turn in the direction of their destination. Below states the angle between the take-off direction and the planes destination. Using a ruler and protractor draw the angles for each destination.

Angles between the take-off direction and the planes destination:

1. London 90°
2. Paris 50°
3. Copenhagen 35°
4. Dublin 108°
5. Cork 151°



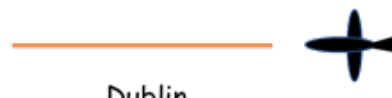
London



Paris



Copenhagen



Dublin

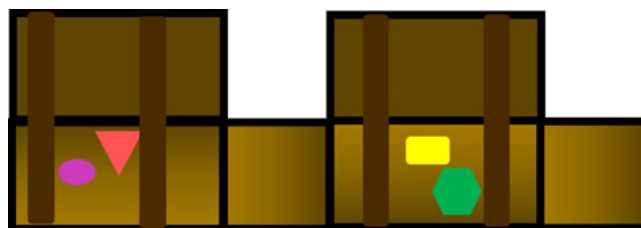
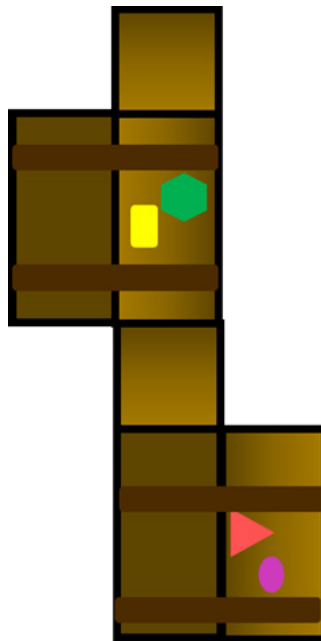
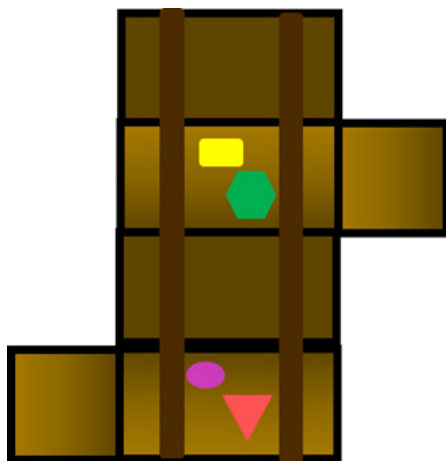
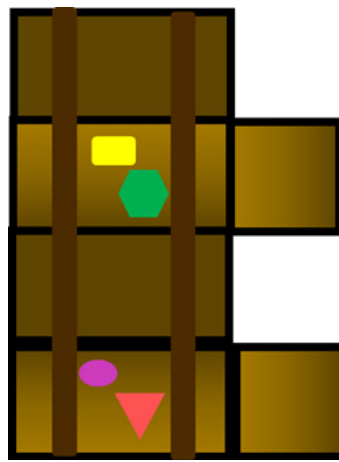
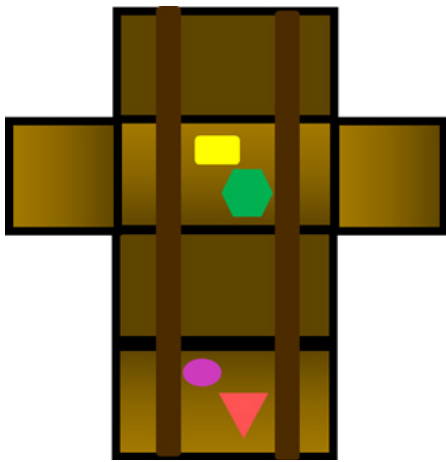


Cork

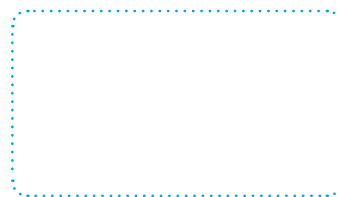
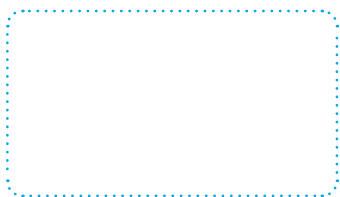
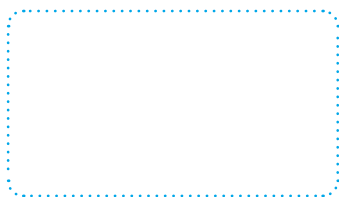
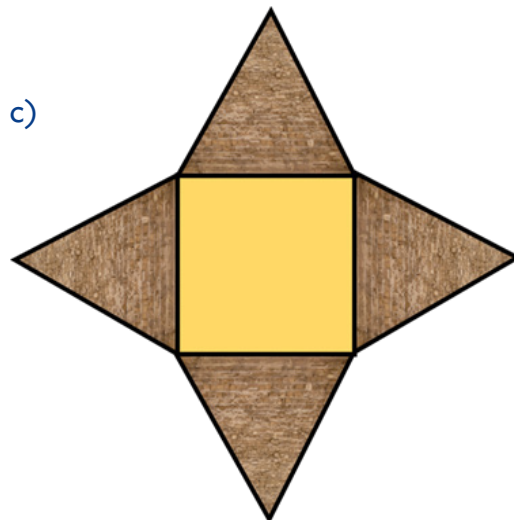
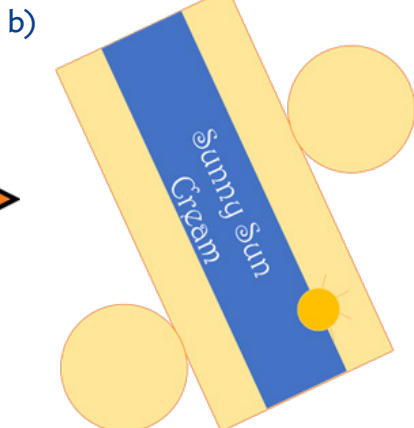
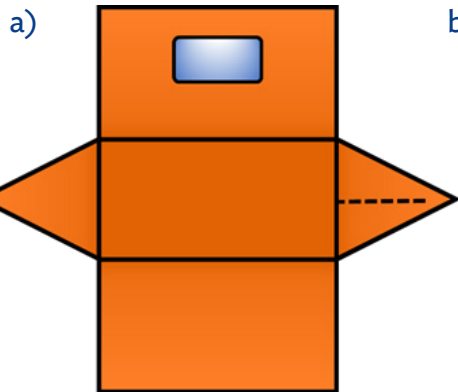
Exhibition display

You've been given some cardboard nets of items which when created are to be displayed in the airport. These are items you would take or find on holiday.

1. Below are different nets, some can be made into a cuboid, tick the ones that can be?

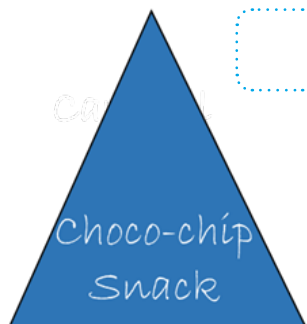
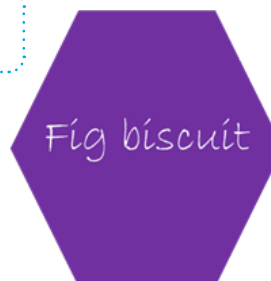
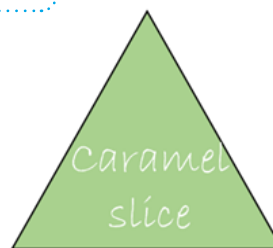


2. What 3D shapes do the 3 items below make?



Café biscuits

There's a selection of biscuits in airport café. Some are regular polygons, tick those that are regular polygons.

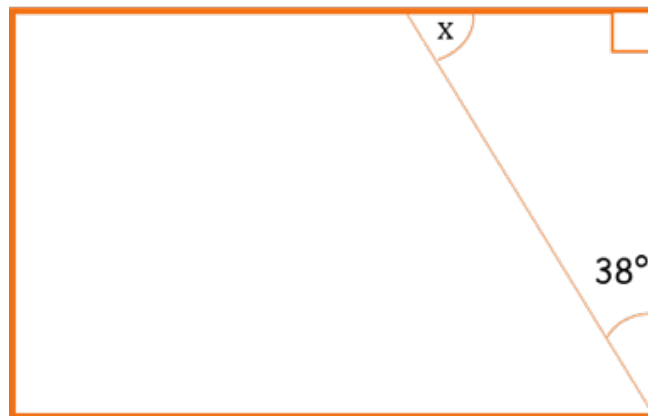


New terminal

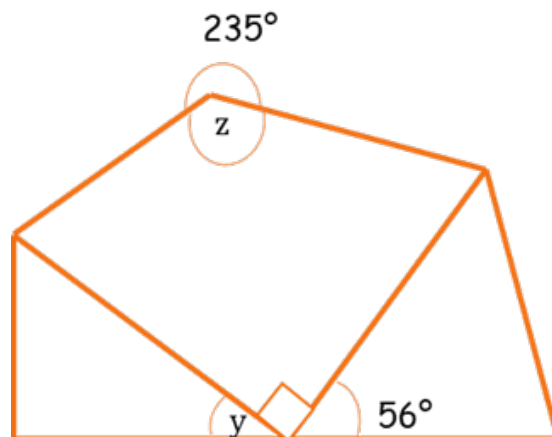
The airport wants to make the passenger terminal larger. 2 parts of the floor plan of the new passenger terminal is shown below. The builder has asked the following questions.

1. What is the missing angle x on the floor plan?

2. The area of the building is 40m^2 and the perimeter is 26m . What is the width and length of this part of the new terminal below?



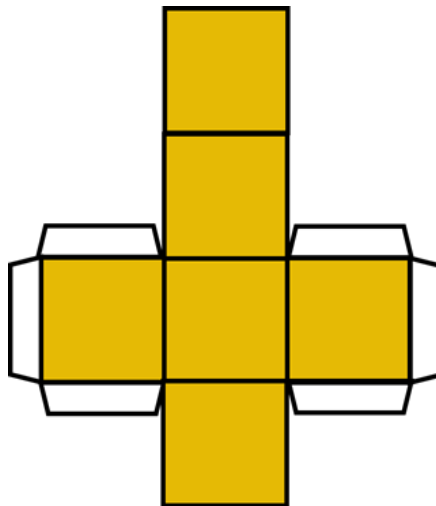
3. What are the missing angles y and z in the floor plan below?



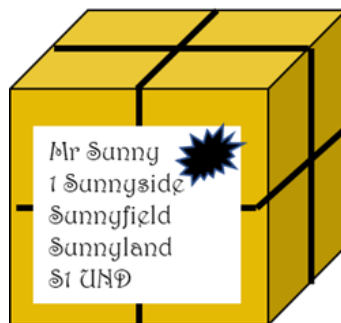
Optional extension activity

Your task is to create a parcel which is shaped like a cube. Follow the instructions below.

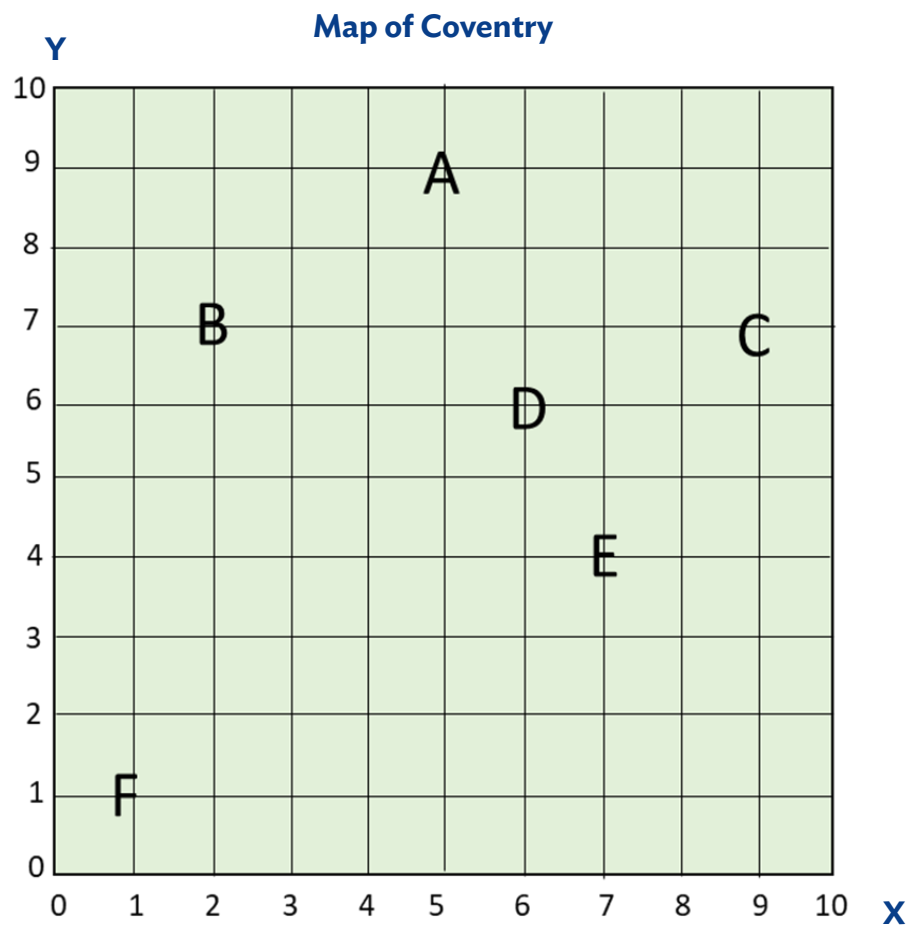
1. Draw the net of a cube. Include flaps so you can stick it with glue. The net should look like this.



2. Then, colour it in to make it look like a parcel.
3. Then cut it out and fold it to make it look like a parcel. As shown below.



Year 5 - Position and direction



The search for Lady Godiva worksheet

Task 1

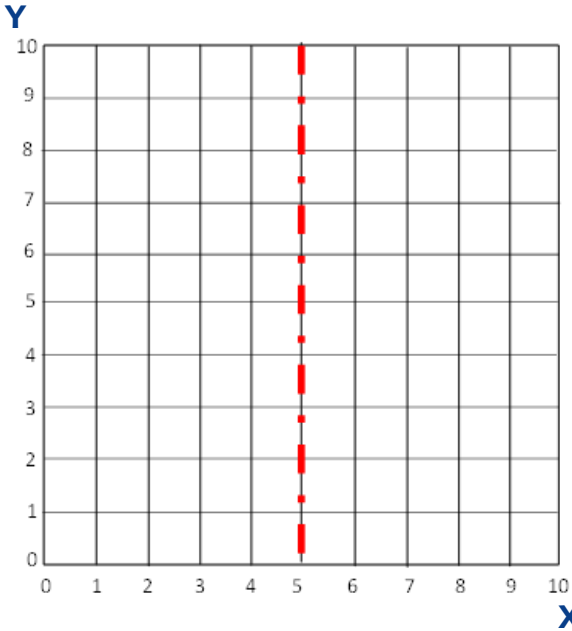
Finding your location

Letter	Coordinates	Place
A		
B		
C		
D		
E		
F		

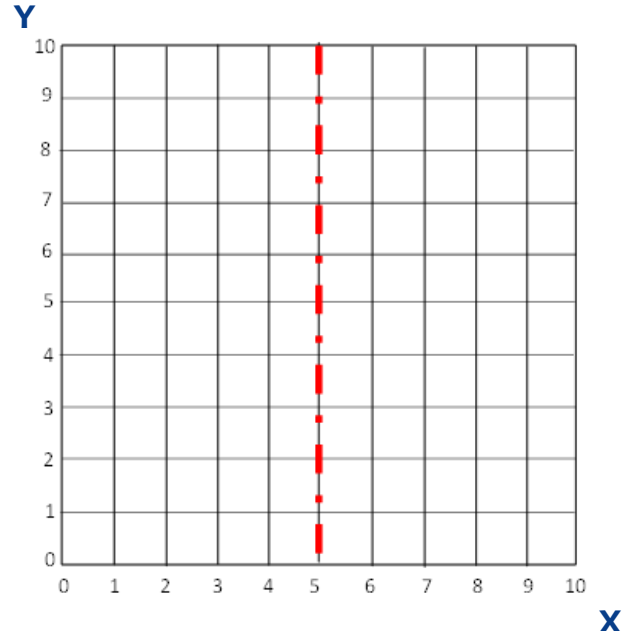
Task 2

Your friend's location

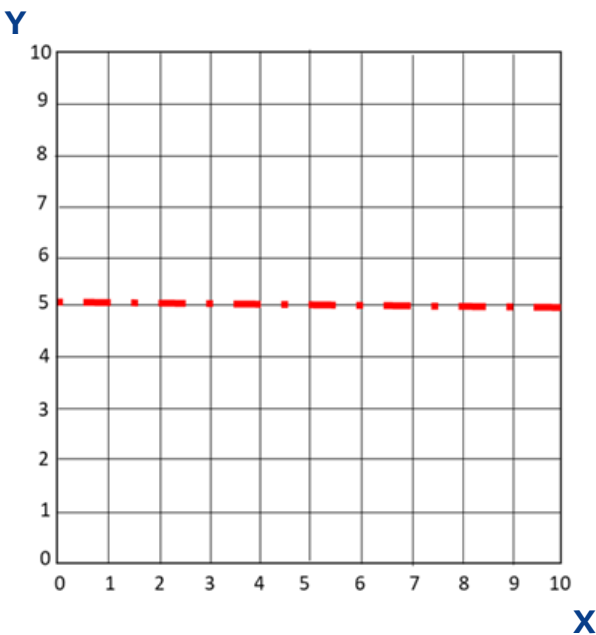
1. The coordinates of the vertices of a rectangle are $(1,1)$, $(3,1)$, $(3,4)$ and $(1,4)$. Plot the rectangle and work out the coordinates of the vertices for the rectangle reflected on the mirror line?



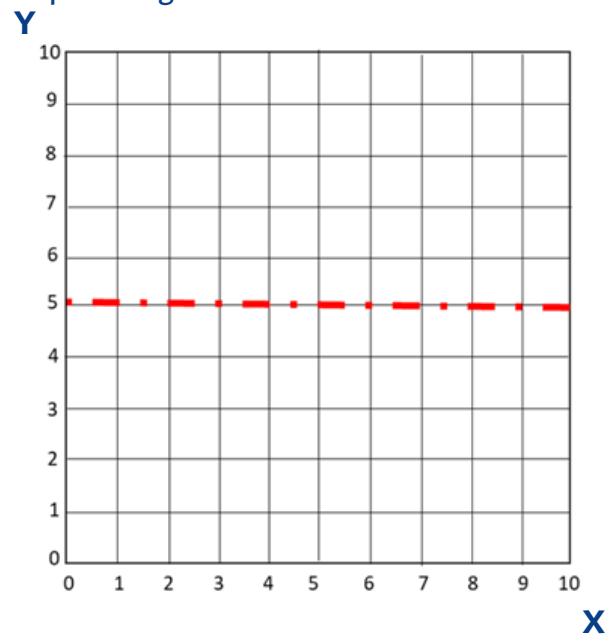
2. The coordinates of the vertices of a rectangle are $(9,5)$, $(6,5)$, $(9,2)$ and $(6,2)$. Plot the square and work out the coordinates of the vertices for the square reflected on the mirror line?



3. The coordinates of the vertices of a kite are $(3,4)$, $(2,3)$, $(3,1)$ and $(4,3)$. Plot the kite and work out the coordinates of the vertices for the kite reflected on the mirror line?



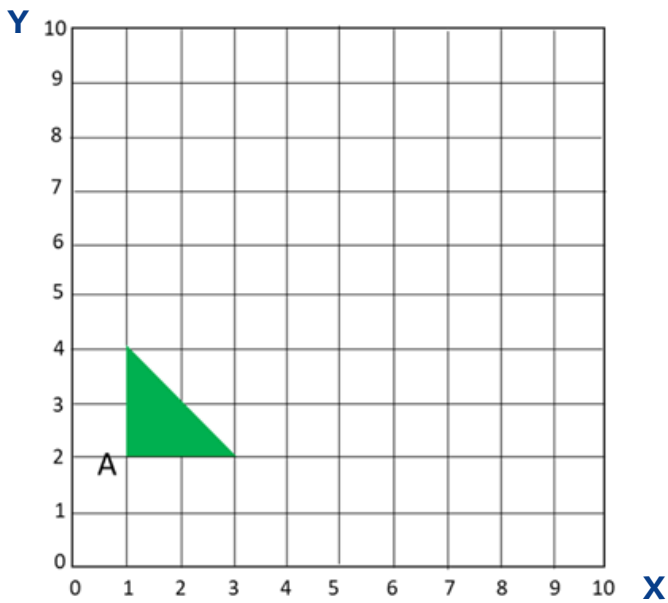
4. The coordinates of the vertices of a parallelogram are $(0,7)$, $(3,7)$, $(1,5)$ and $(4,5)$. Plot the parallelogram and work out the coordinates of the vertices for the parallelogram reflected on the mirror line?



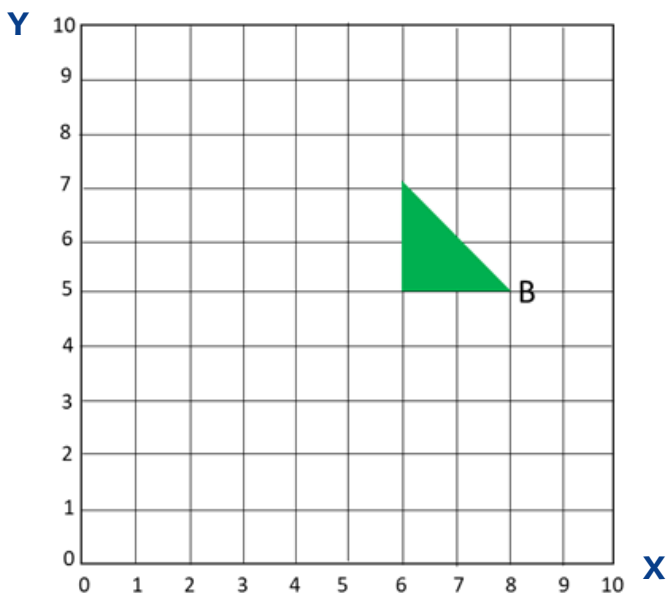
Task 3

Journey to Coventry Building Society

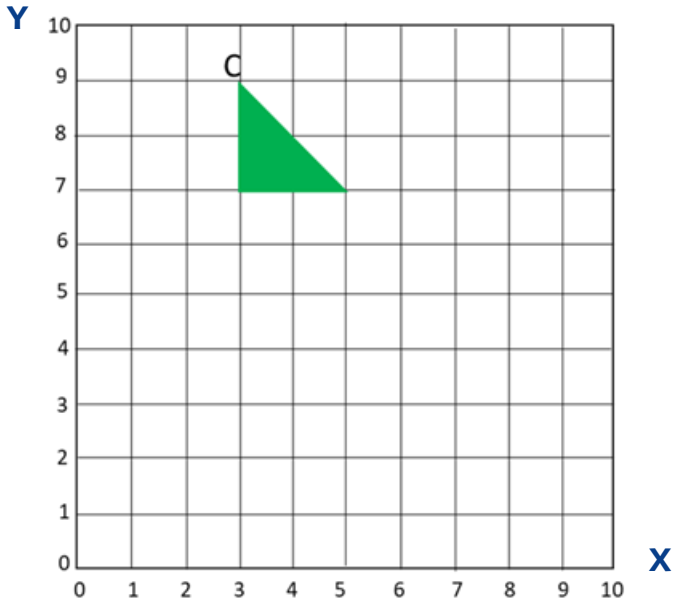
1. Translate the triangle so point A moves to (7,4). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



2. Translate the triangle so point B moves to (7,8). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



3. Translate the triangle so point C moves to (1,8). Draw the triangle on your work sheet, then describe the translation in the box under the grid.



A large empty rounded rectangle with a dotted blue border, intended for writing the translation description.

Task 4:

Direct your friend to Coventry Building Society

Describe the translation of friend's location to the building society?

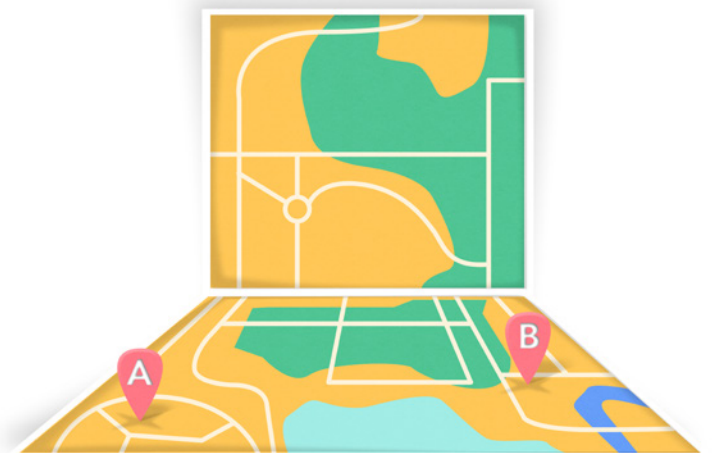
A large empty rounded rectangle with a dotted blue border, intended for writing the translation description.

Task 5:

Travel to Lady Godiva statue.

The coordinates for the Lady Godiva statue are

A large empty rounded rectangle with a dotted blue border, intended for writing the coordinates.

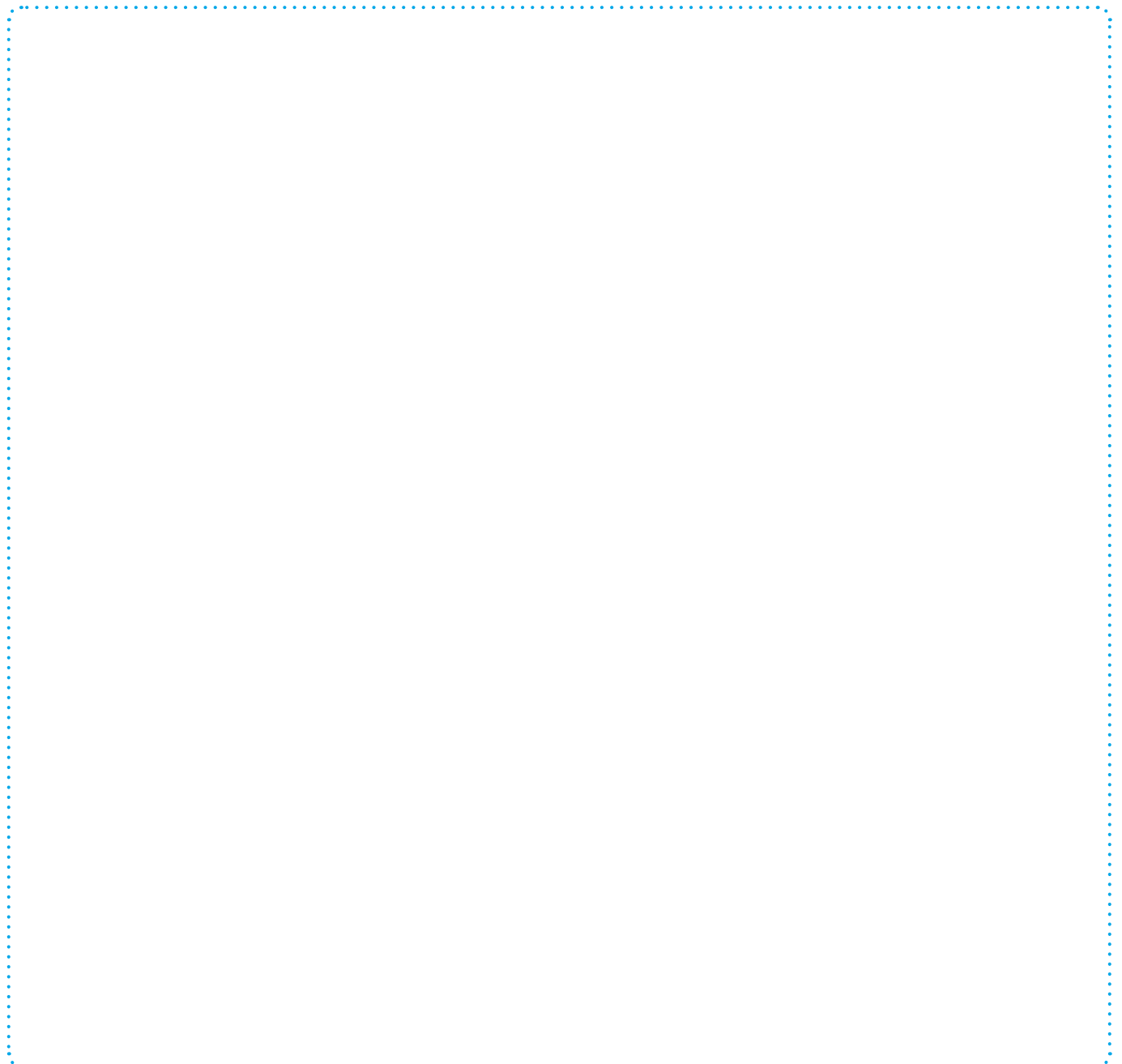


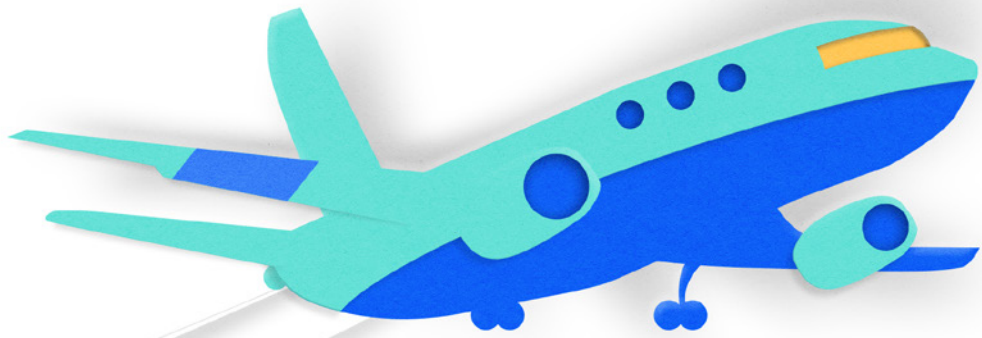
Optional extension activity

Draw your own map. This could be around the school or near where you live. Plot points of interest and write down the coordinates.

Then create a route on your map going through the points of interest and describe the translations between each point on you route.

An example could be a map of your local area including your house and different trees and a lake. You could then plot a route starting at your house, then you go to the large oak tree, then the lake, then the playground and back to your house.





Kindness changes lives

We're passionate about making a real difference to the lives of young people in and around Coventry. That's why we work with local schools to help support children's education.

All together, better