

Coventry Counts Year 3 workbook





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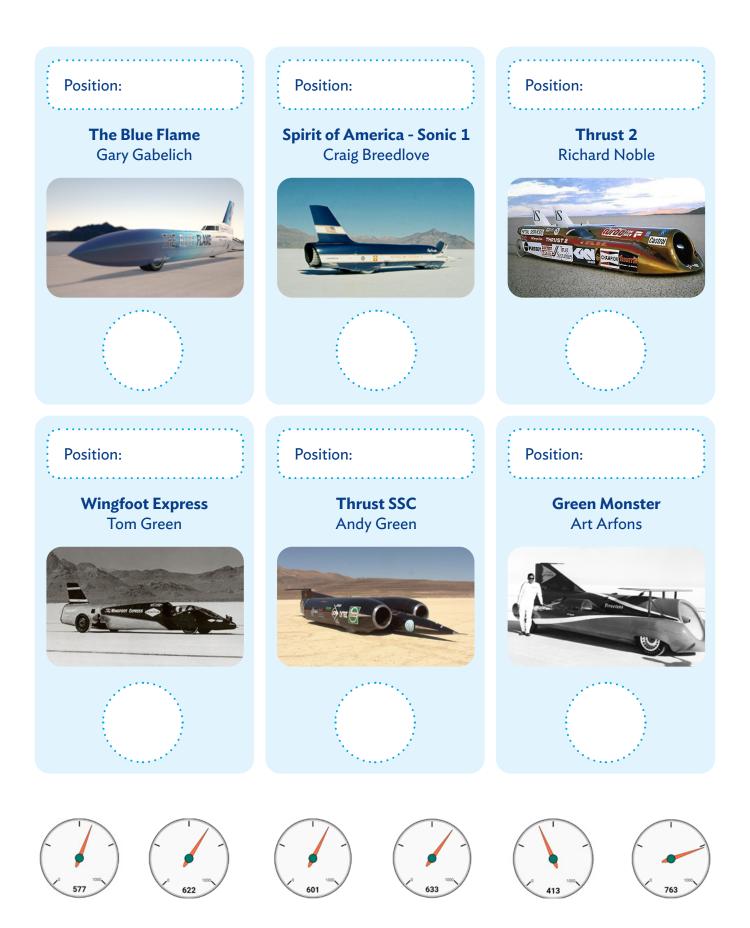
Year 3 - Place value Record speed

You're part of the marketing team that work at the Coventry Transport Museum. Your team has been asked to create a poster which will display the last 6 people to have broken the land speed record. There are 6 cards below to help you create this poster. Fill in the cards by completing the following tasks.





Place value





Place value

Task 1

Cut out the 6 cards which display the people who have broken the land speed record. Then, cut out the 6 speed dials that display the speeds each driver achieved. Below is a list of 5 clues about the speed each person achieved when breaking the land speed record. Use the clues to match the speed dials to the correct person. Then stick the correct speed dial on each card.

 The speed of Art Arfons in Green Monster had a speed which has a 5 in the hundreds place. The speed of Andy Green in Thrust SSC had a hundreds digit 1 more than its tens digit. The speed of Gary Gabelich in The Blue Flame had a 2 in both the tens and one place. The speed of Tom Green in Wingfoot Express had a 1 in the tens place. 	1. The speed of Richard Noble in Thrust 2 had a 3 in the ones place.
4. The speed of Gary Gabelich in The Blue Flame had a 2 in both the tens and one place.	2. The speed of Art Arfons in Green Monster had a speed which has a 5 in the hundreds place.
	3. The speed of Andy Green in Thrust SSC had a hundreds digit 1 more than its tens digit.
5. The speed of Tom Green in Wingfoot Express had a 1 in the tens place.	4. The speed of Gary Gabelich in The Blue Flame had a 2 in both the tens and one place.
•	5. The speed of Tom Green in Wingfoot Express had a 1 in the tens place.

Task 2

Write the speed for each person in words below.	
Gary Gabelich:	
Craig Breedlove:	
Richard Noble:	
Tom Green:	
Andy Green:	
Art Arfons:	



Task 3

Share the cards out amongst team members and take it in turns to put one card down on the table ordering them on speed from fastest to slowest. Once you have done this write the order of each card with 1 being the fastest and 6 being the slowest.

.....

Task 4

Create a poster on a piece of card by sticking the pictures on the card in the order found in task 3.

Task 5

Below are problems when solved will give 3 facts about land speed records. Can you answer these? Enter these facts on your poster.

1. The first land speed record to be recorded was by Gaston de Chasseloup-Laubat in 1898. His record was 10 more miles per hour than the speed limit in a built-up area today, which is 30 miles per hour. What was his speed?

2. The current women's four-wheel land speed class record was set in 2019 by Jess Combs. This record was 10 more miles per hour than the previous record set of 513 miles per hour. What speed did she achieve?

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3. Louis Rigolly was the first person to set a record over 100 miles per hour in 1904, which was 104 mph. It took until 1927 for Henry Seagrave to achieve 100 more miles per hour, what was his speed?



Place value

	<section-header>Optional extension activity Investigate rail, sea and aircraft records and answer the following questions.</section-header>
1.	The fastest recorded rail speed vehicle was recorded in the Rocket Sled category and was called the Super Roadrunner. What was its speed and when was the record set?
2.	What is the record for the fastest helicopter? When was the record set, what was the vehicle called and who was the pilot?
3.	Who set the water speed record? What was the vehicle and when was the record set?



Place value



Year 3 - Calculations, addition and subtraction

Gem treasure hunt

You're to imagine you're an archaeologist working in a team who has found a note from a long time ago. It states some valuable gems have been buried in a room somewhere in 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 puzzle 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.

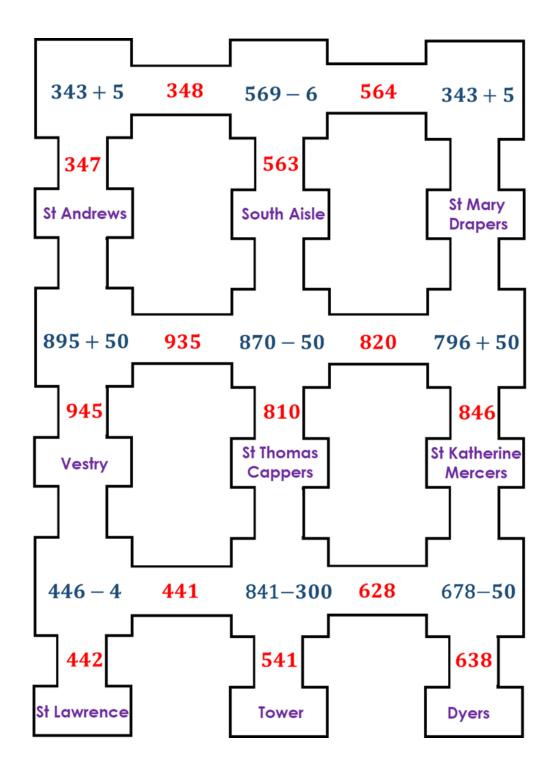
Good luck!

Calculations, addition and subtraction



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 3 rooms to cross off in total.



Calculations, addition and subtraction

Puzzle 2

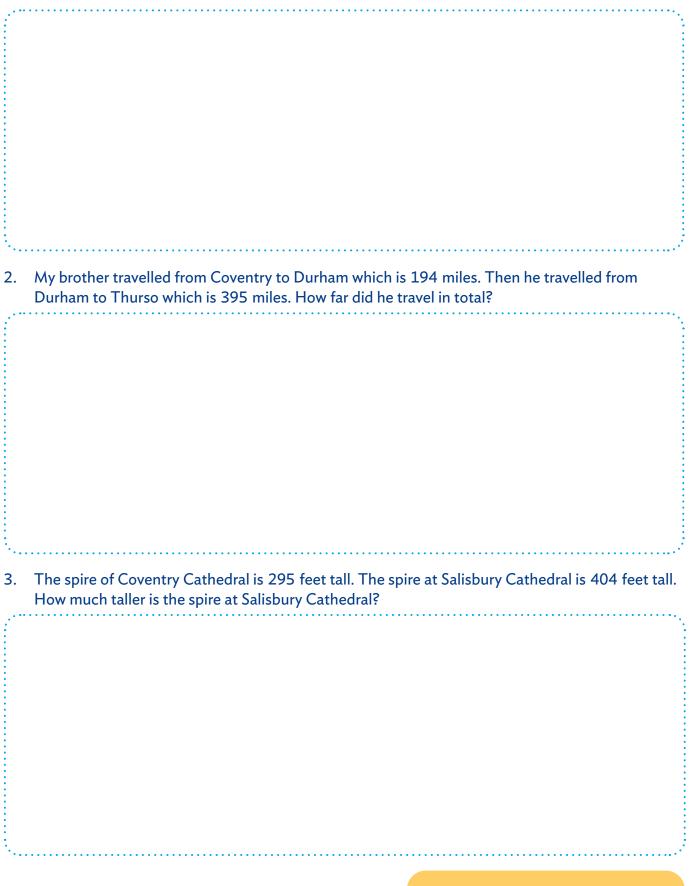
Solve the 6 addition and subtraction problems below. For each answer find the digit sum. This means adding together all the digits in your answer. If your new answer is not a one-digit answer, then add these two digits again and so on until you get a one digit number. Two answers appear twice, cross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

1 040-001	2 450 226
1. 243+331=	2. 458-236=
: :	: : : : : : : : : : : : : : : : : : : :
:	
:	
:	
:	
	· · · · · · · · · · · · · · · · · · ·
3. 348+413=	4. 692-217=
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/ · · · · · · · · · · · · · · · · · · ·	4
5. 246+478=	6. 801-275=
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·*····································	· *•*
	Calculations, addition
10	and subtraction
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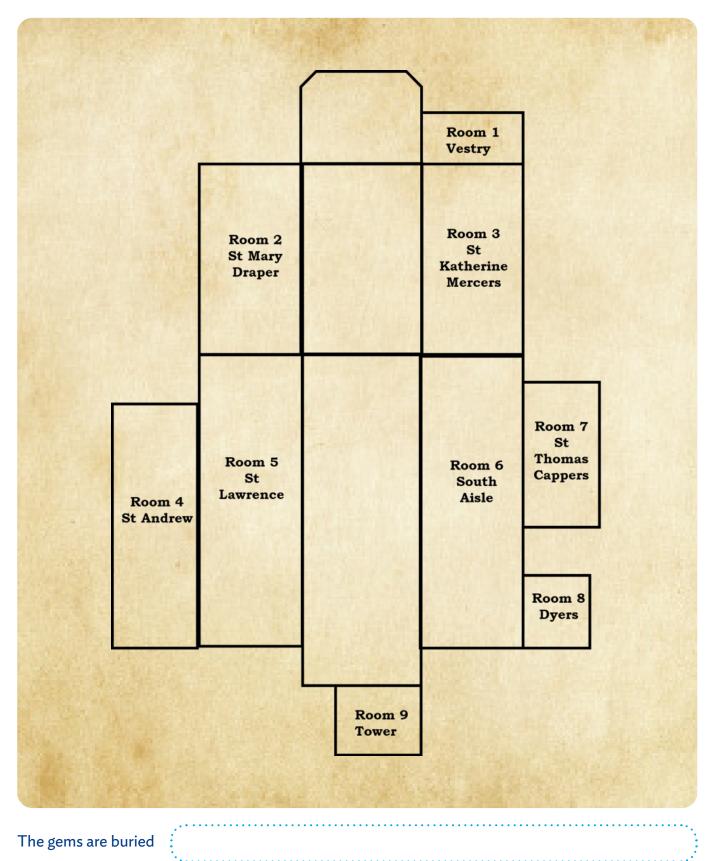
Puzzle 3

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. This Sunday there were 356 people at the church service. This was 89 more than the previous Sunday. How people were at the church service last Sunday?



Floor plan

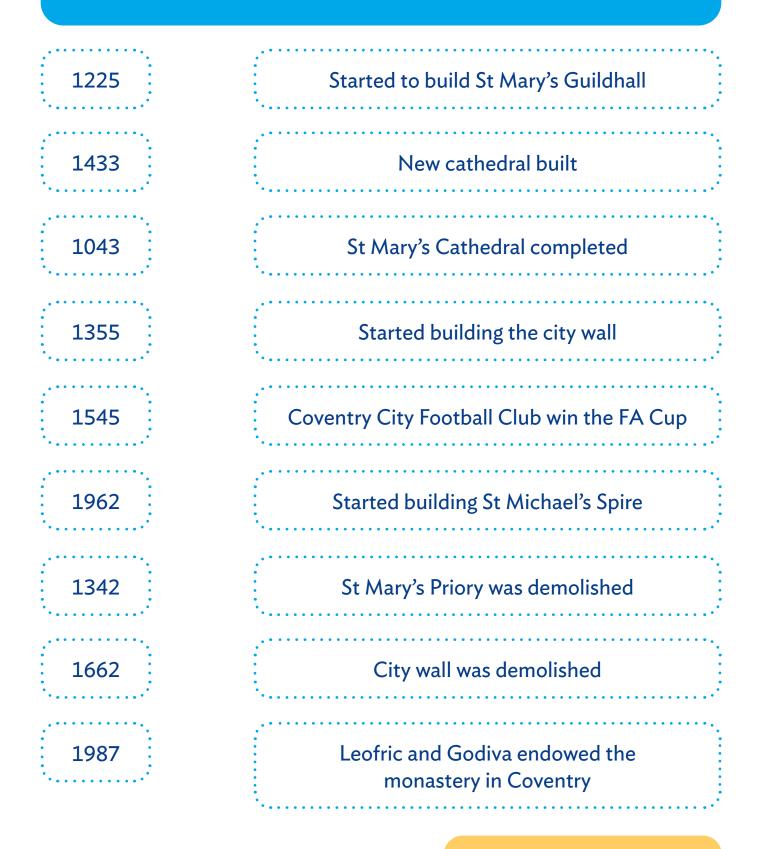


Calculations, addition and subtraction



Optional extension activity

Use the internet to research the history of Coventry. Below are some important events in the history of Coventry. Can you match the years below to the event and create a time line of when each important event occurred?



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Calculations, addition and subtraction



Year 3 - Calculations, multiplication and division

War time secret agents

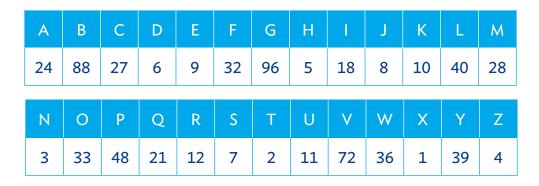
It's 1940 and you're working as a secret agent for the British. You've been informed that the Germans are planning to bomb Coventry. Your mission is to crack their message by solving 3 clues which will tell you the day, the month and the time the bombing is planned for. Can you crack the code before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



Calculations, multiplication and divison

Clue 1

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



Problem	3x7	33÷3	3x8	3x4	6÷3	3x3	36÷3
Answer							
Letter							

Problem	8x6	8x3	56÷8	16÷8
Answer				
Letter				

Problem	8x =72	÷3=6	÷8=12	3x =15	x8=16
Answer					
Letter					

What time will the Germans bomb Coventry?





Calculations, multiplication and divison

Clue 2

Answer the following multiplications and divisions below. Then add the digits of your answer together to get a new answer. Which answer appears more than once? This is the day in the month the bombing will occur.

a. 49×8=	b. 17×4
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
407	
c. 40×7=	d. 30×8=
······································	······································
e. 42÷3=	f. 72÷4=
e. 42÷3=	f. 72÷4=

What day in the month will the Germans bomb Coventry?

Calculations, multiplication and divison

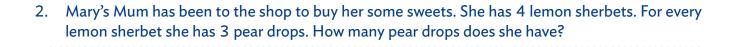


Clue 3

Answer the 4 problems below. Look for the answer which appears twice and use the table below to help you convert this number into the month of the bombing.

Month number	Month	Month number	Month
1	January	7	July
2	February	8	August
3	March	9	September
4	April	10	October
5	May	11	November
6	June	12	December

1. There are 55 people who have been wounded in a bombing. There are 5 hospital wards, if you divide them equally between the wards how many are in each ward?



3. There are 88 women building engines for World War Two spitfire planes. 8 women work on each engine. How many engines are being built?



Calculations, multiplication and divison 4. A shopkeeper in World War Two sells tins of spam in packets of 4 and packets of 8 in his shop. The shopkeeper has 6 packs with 4 tins of spam in. He has 2 packs with 8 tins in. How many tins of spam does he have altogether?

What month will the Germans bomb Coventry? Dear Prime Minster, 12 October 1940 Urgent message from secret agents.	:		
Dear Prime Minster, 12 October 1940			
Dear Prime Minster, 12 October 1940			
Dear Prime Minster, 12 October 1940			
Dear Prime Minster, 12 October 1940			
	What month will the Germans be	omb Coventry?	••••••
			•••••••••••••••••••••••••••••••••••••••
Urgent message from secret agents.			
	Dear Prime Minster,		12 October 1940
The Germans will bomb Coventry on the		nts.	12 October 1940
of at .	Urgent message from secret age		12 October 1940
	Urgent message from secret age The Germans will bomb Covent	ry on the	12 October 1940

Optional extension activity

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

••• •	•• •••	•—	••• ••



Calculations, multiplication and divison



Year 3 - Fractions Serving up a treat

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

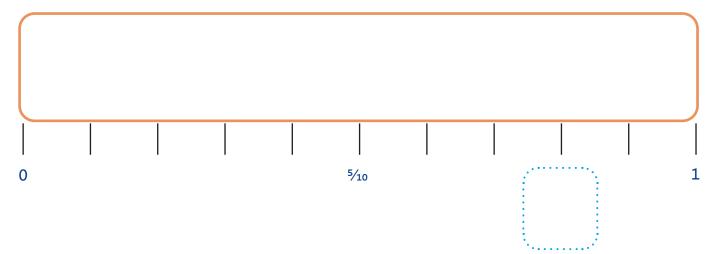


Starters

In the restaurant each ciabatta bread is cut into 10 equal pieces. Your first task is to cut the ciabatta. Below is a template of a ciabatta.

1. Divide this into 10 pieces. A couple has been given $\frac{4}{10}$ of the ciabatta. Colour this fraction in on the ciabatta template below.

2. Another table has been given a fraction of the ciabatta. Fill in the missing fraction on the number line in the box below, which is the fraction of the ciabatta they received.



3. Another family had $\frac{5}{10}$ of the ciabatta, write a fraction equivalent to this.







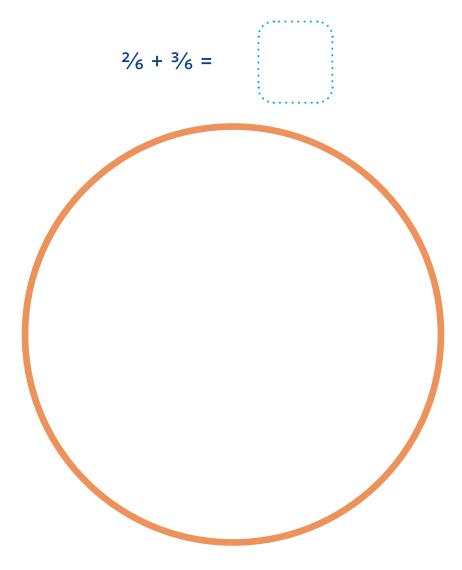


Mains

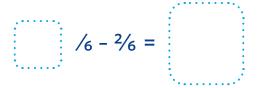
Now you need to create some pizzas. At the bottom of this sheet are two pizza templates. On these draw two pizzas: one meat pizza and one vegetarian pizza. Then divide each pizza into 6 slices.

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

1. The Jones family want 2 slices of meat pizza and 3 slices of vegetarian pizza. Complete the sum below and put the correct slices of pizza on the plate.



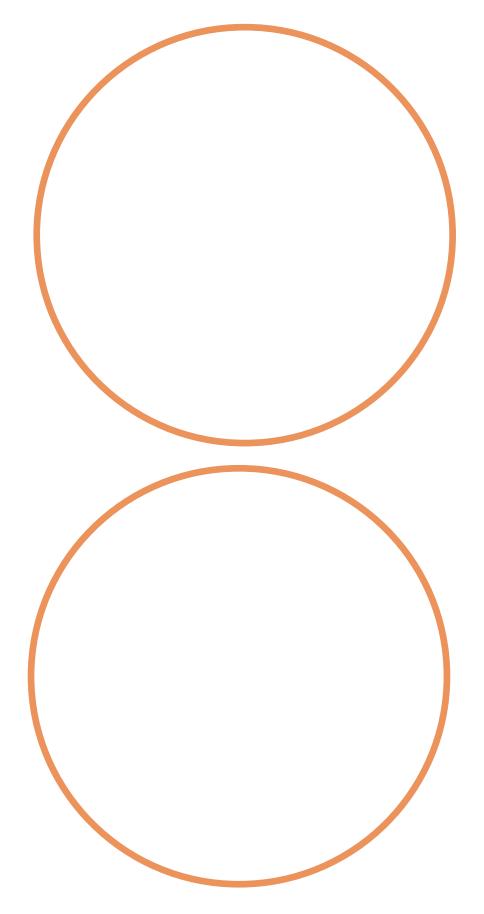
2. The Jones family are full and have left 2 slices of pizza uneaten. Complete the sum to show the fraction of a pizza eaten.





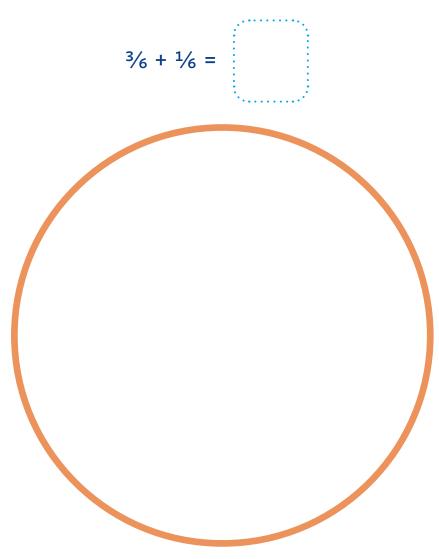


Pizza templates





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



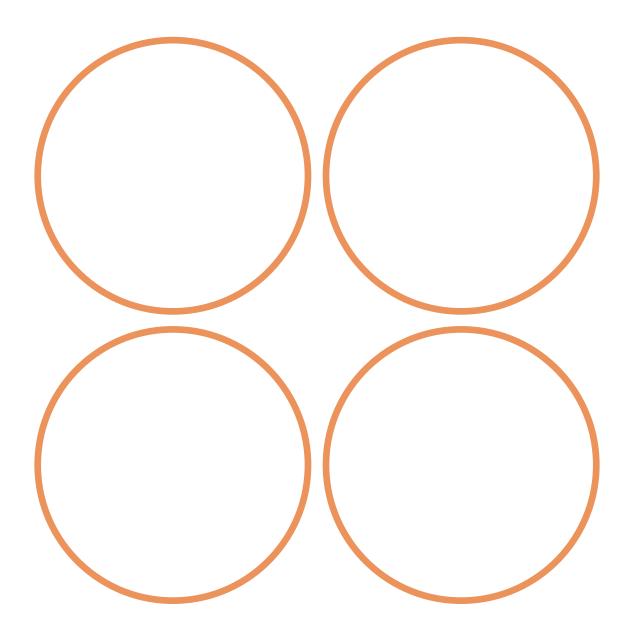
4. Fill in the table below to show the fraction of each pizza left after the Jones and Baker family have been given their pizza.

Pizza	Fraction
Meat	
Vegetarian	



Desserts

Below are 4 different cakes. At the end of dinner time there are $1\frac{3}{4}$ cakes left. Colour in what is left over. You can decorate the left-over cake.

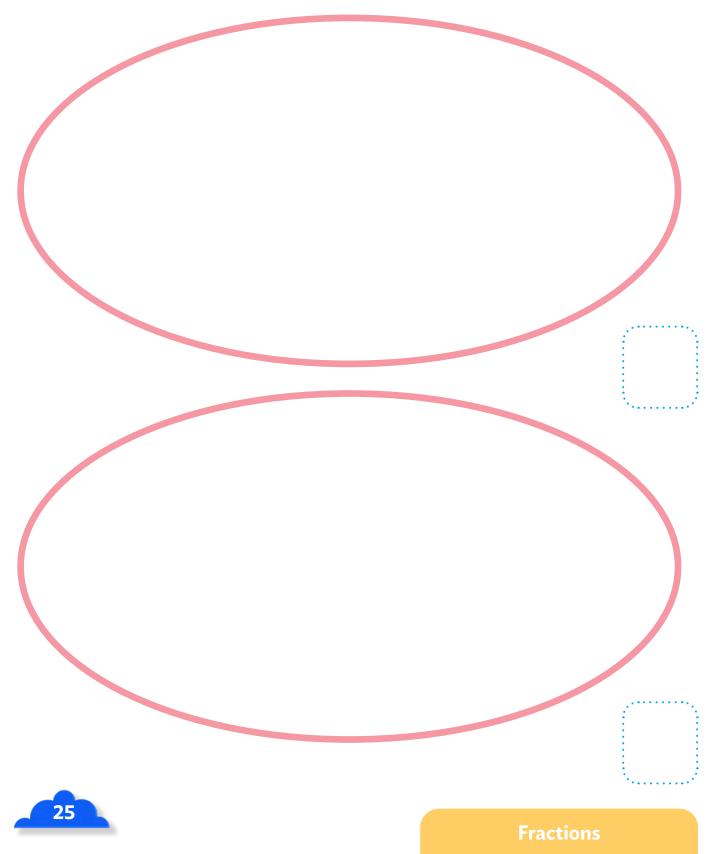




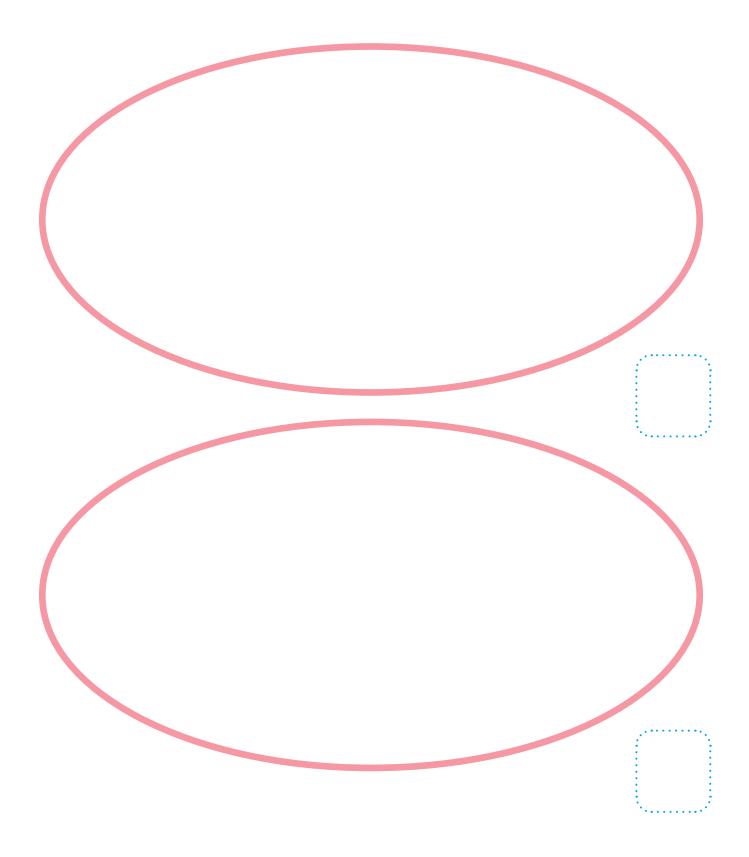
Optional extension activity

There is a birthday party today and you're providing sandwiches. At the bottom of this sheet are 24 meat sandwiches and 20 vegetarian sandwiches. Your task is to divide them up on to the plates.

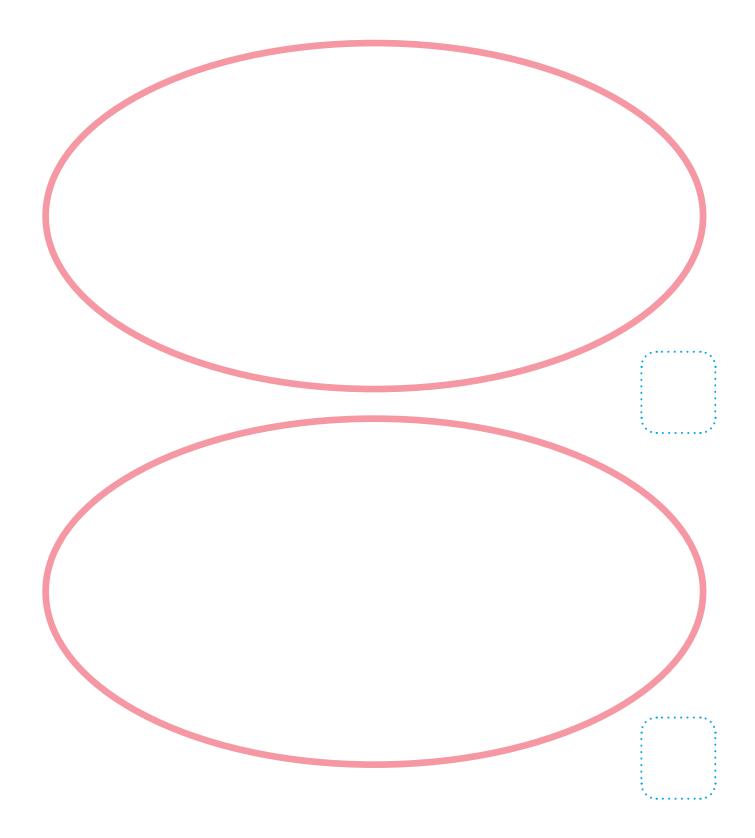
1. Put ²/₅ of the vegetarian sandwiches on one plate and the rest on another plate. How many sandwiches are on each plate?



2. Put ¹/₄ of the meat sandwiches on each of the remaining 4 plates. How many are on each plate?

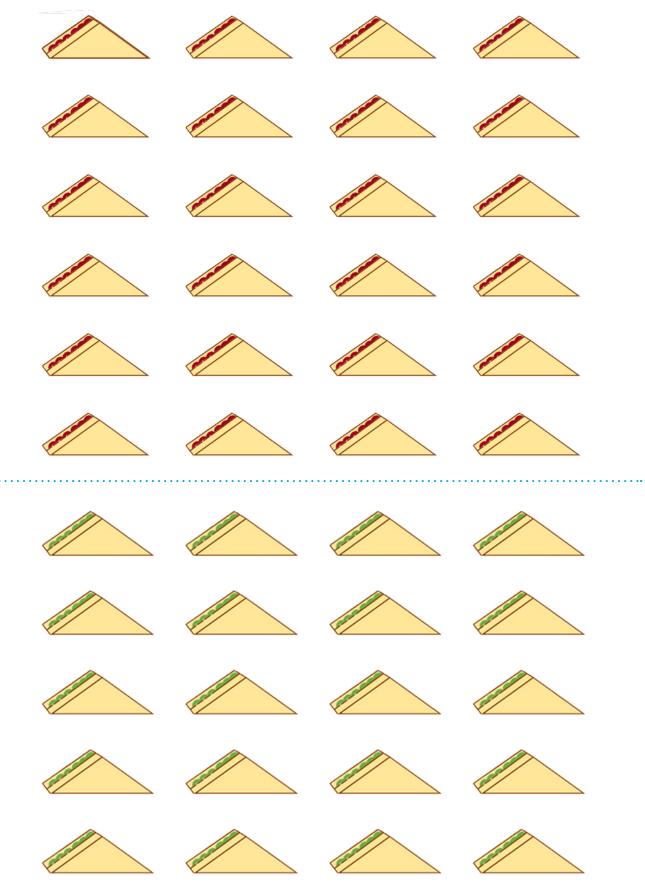








Sandwiches





Year 3 - Money Shopping with Mum

You're in the town centre with Mum. You start off in Coventry Building Society where you help your Mum choose a savings account which will give her the most money. Then you need to go to several shops to buy certain items on Mum's list. Working in pairs answer question 1 together. For the remaining questions answer each one using the money provided, taking it in turns to be the person giving the money to the shop keeper and the shop keeper giving the change.

 Your Mum wants to save some money in a savings account with Coventry Building Society. She is offered
 accounts. Below shows how much money she will get after 1 year, if she puts her money in each account.

Online Saver	£104
Regular Saver	£86



How much more money will she get if she puts it in the Online Saver compared to the Regular Saver?





Below is Mum's shopping list:

Shopping list

- 2 stamps
- Birthday card
- 2 apples
- 3 bananas
- 2. First, you both go to the Post Office to buy 2 stamps.

a. How much will 2 stamps cost?





b. How much change do you get from a £2.00 coin?

c. You're given the change in the least amount of coins possible. What coins do you receive?



Money

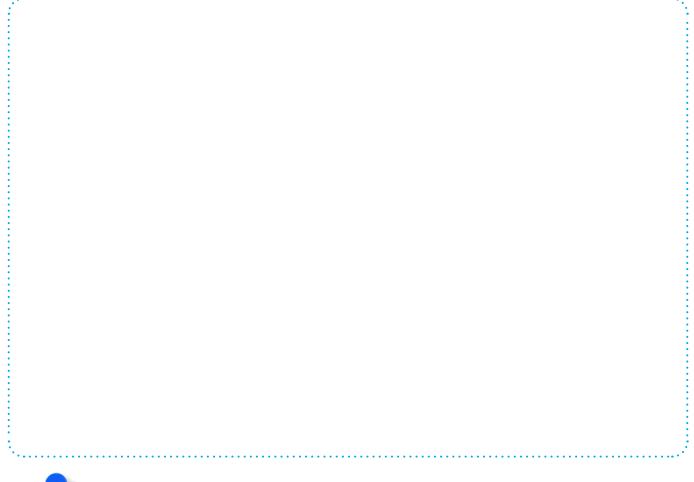
3. Then you both go to the card shop to buy a birthday card for your cousin.



4. You then both go to the café for a drink. Your Mum decides to have a tea and you have a lemonade.



You give the shop keeper £3.00. How much change do you get?





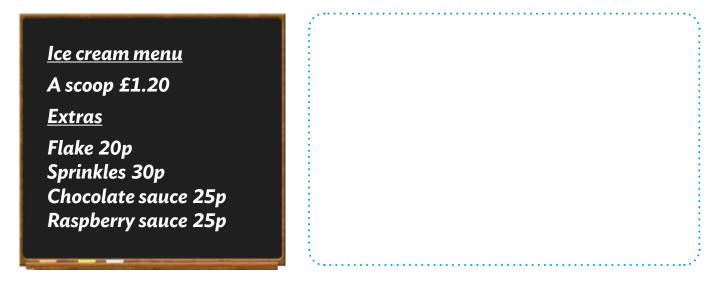
5. You and your Mum go to the toy shop to spend the money your granny gave you for your birthday. She gave you £10.



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6. It's a warm day and you fancy an ice cream. You choose to have two scoops with a flake. You pay the shopkeeper £5.00 How much change do you get?



7. The last shop is the fruit and vegetable shop. You buy 3 apples and 4 bananas.

Apples 25p each	Bananas 20p each	
a. How much do they cost	altogether?	•
b. You give the shop keepe	r £2.00, how much chang	e do you receive?
	······	·····

33

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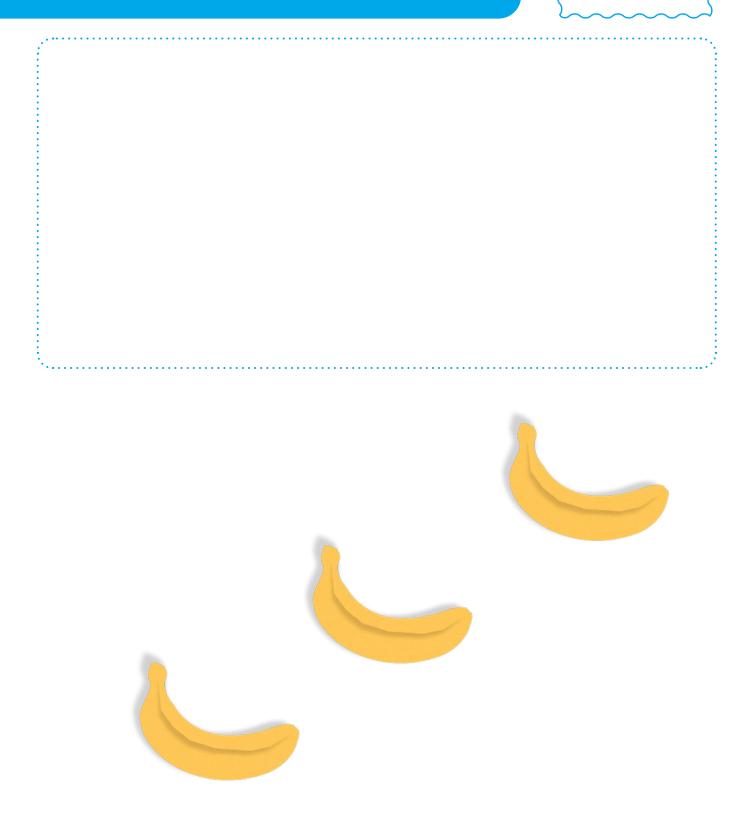
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Optional extension activity

Workout how much her Mum spent altogether on the items on her shopping list.

Shopping list

- 2 stamps
- Birthday card
- 2 apples
- 3 bananas





Year 3 - Length and perimeter

Quiz sheet								
	Guess which is longest?		Actual length		Correct?			
1	Frank Whittle room	Lady Godiva room	Frank Whittle room	Lady Godiva room				
				609 cm				
2	Pencil	Exercise book	Pencil	Exercise book				
				21 cm				
	Guess the longest perimeter?		Measure the perimeter		Correct?			
3	Soap	Shower cap	Soap	Shower cap				
4	Hotel room key card	Gym pass	Hotel room key card	Gym pass				
5	Chocolate biscuit	Jammy triangle	Chocolate biscuit	Jammy triangle				
	Guess the longest perimeter?		Calculate the perimeter		Correct?			
6	Moonlight Restaurant	Sunshine Cafe	Moonlight Restaurant	Sunshine Cafe				
7	Deluxe room	Luxurious room	Deluxe room	Luxurious room				



Length and perimeter

Shapes sheet

(page to be printed at 100%)

Coventry Building Society Arena soap



CBS Arena chocolate biscuit Coventry Building Society Arena shower cap



CBS Arena jammy triangle



Length and perimeter

Optional extension activity

Use the internet to find out the length, width and perimeter of these 5 sports courts. Which one has the longest perimeter?

- Tennis court
- Squash court
- Volleyball court
- Netball court
- Badminton court



Length and perimeter

Year 3 - Mass and capacity Rocky road cakes

You and your team are to create 12 rocky road cakes. Read the recipe below to create them, then answer the questions on mass below.

Ingredients

- 200g digestive biscuits
- 135g butter
- 200g dark chocolate
- 100g mini marshmallows
- 2 tablespoons of golden syrup

Method

- 1. Grease and line an 18cm square tin with baking parchment.
- 2. Place the digestive biscuits in a food bag and break them into small pieces, the size of 10p pieces.
- 3. Place the chocolate in a bowl and ask and adult to melt it in the microwave, leave to cool slightly. It should take around 2 to 3 minutes to melt.
- 4. Making sure the bowl is not too hot, add the butter and golden syrup to the bowl of melted chocolate and stir until mixed in. Make sure the butter is cut into pieces and is at room temperature before adding it to the bowl.
- 5. Place the biscuits and marshmallows in the chocolate mixture and mix until covered.
- 6. Spread the mixture in the baking tin and put in the fridge for 2 hours.
- 7. Take out of the fridge and ask and adult to cut into 12 pieces.

Mass questions

1. How many more grams of digestive biscuits do you need for the recipe compared to the mini marshmallows?

2. How many more grams of chocolate do you need for the recipe compared to the butter?

3. If you want to make 18 rocky road cakes you would need 202g of butter. You only have 135g, how much more butter do you need to make 18 rocky road cakes?

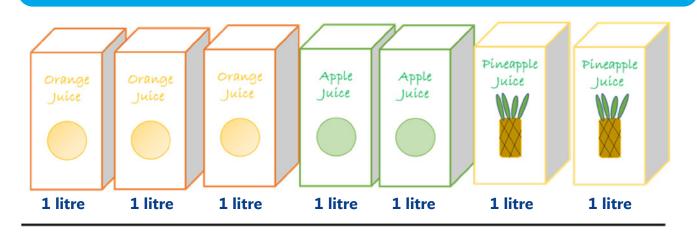
Mass and capacity

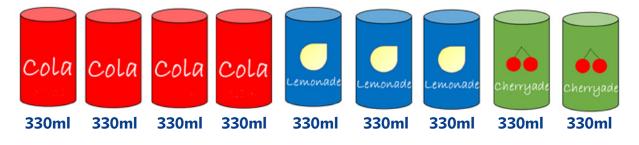




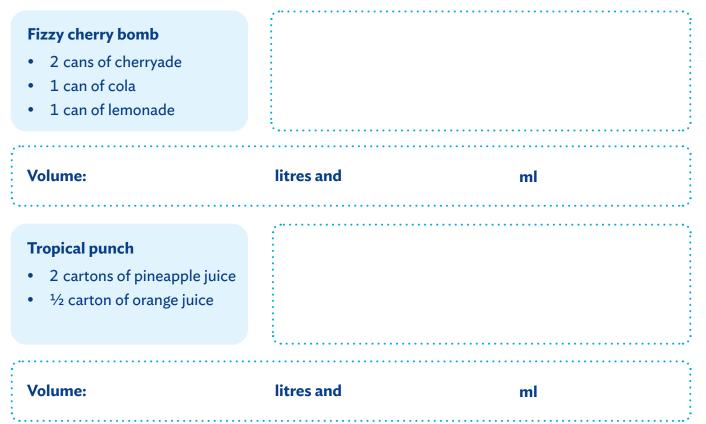
Optional extension activity

Jane is making some mocktails for a party. She goes to the supermarket and decides to make 4 mocktails from the following drinks below:





Can you work out the volume of each of these mocktails that she has created below.



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Mass and capacity

 Autumn fizz 2 cartons of apple juice 1 can of cherryade 1 can of lemonade 			
Volume:	litres and	ml	
 Tropical fizz 1 carton of pineapple juice 1/2 carton of orange juice 2 cans of lemonade 			
Volume:	litres and	ml	

Why not have a go at making a mocktail yourself!



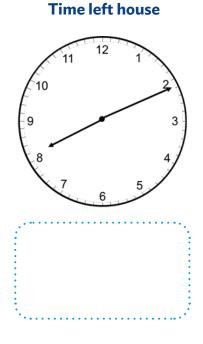
Mass and capacity

Year 3 - Time What time is it?

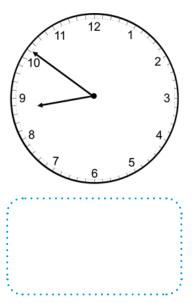
It's your first day working at the Coventry Watch Museum and you are keen to impress your manager. Your day will involve using time to solve problems. Can you solve all the problems and impress your manager?

Getting to work

The clocks below show the time you left your house and the time you got to work. Enter the times you left for work and arrived at work in the boxes.



Time arrived at work



How long did to take to get to work?



Room codes

You get to work and meet your new manager. To get into some rooms you need to enter a door code. Your boss gives you clues for each code.

Can you solve the clues below and workout the codes for each room?

The tea room:

- The first 2 numbers of the code are the number of days in December.
- The last 2 numbers in the code are the number of seconds in a minute.

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	•	•		
	•	•		
•	•			
 •				
	•	•		
•	•	•	• • • • • • • • • • • • • • • • • • •	
*	• • • • • • • • • • • • • • • • • • • •		*	

The watch repair room:

- The first 3 numbers of the code are the number of days in a non-leap year.
- The last 3 numbers of the code are the number of seconds in 2 minutes.

:		•	•	•	•	•	:
-							•
		•	•	•	•	•	:
	***************************************	•	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		•	
	••••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	••••••	

The toilet:

- The first 3 numbers in the code are the number of days in a leap year.
- The last 2 numbers in the code are the number of days in June.

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	***************************************	• • • • • • • • • • • • • • • • • • • •	:	•		•



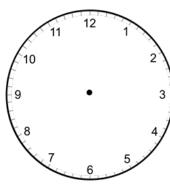
Breaks

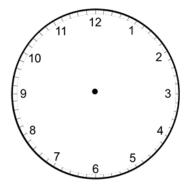
Your manager has written your break times down in 24 hour time. The clock you use to tell the time is in 12 hour time.

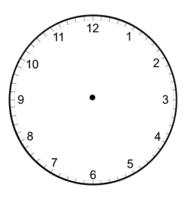
Break times

Morning break: 10:50 for 15 minutes Lunchtime: 13:10 for 1 hour Afternoon break: 15:35 for 10 minutes

1. Draw each of your break times on the three clocks below.







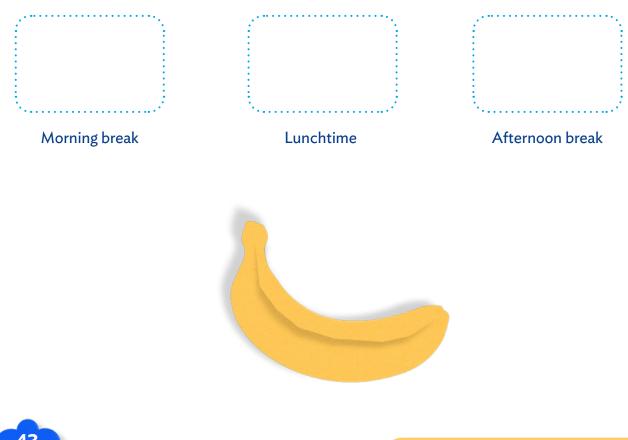
Morning break

Lunchtime

Afternoon break

Time

2. At what time does each of your breaks finish? Write your answer in 12 hour time.

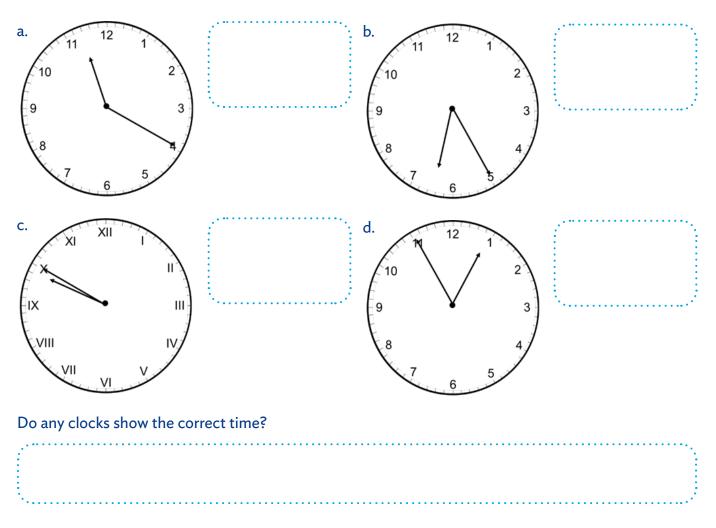




Repairing the clock

You bump into some of the clocks and knock 6 of them on the floor. Ooops! Can you find out which of these clocks are not showing the correct time so that you can send them for repair before your manager finds out? You phone a friend who tells you the time is 10 minutes to ten.

Can you write the times next to the clocks below?



How long do the visitors stop?

Your manager wants to know how long visitors are stopping in the museum. The table below shows 4 families and the time they entered the museum and time they left.

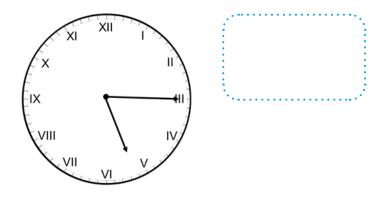
Can you calculate how long they were there for?

Family	Time arrived	Time left	How long?
Jones	10.10am	11.20am	
Smith	11.45am	12.25pm	
Green	1.50pm	2.25pm	
Black	2.15pm	2.40pm	



Home time

It's home time and it's raining. You ring your friend to come and pick you up. She says she'll be there in 10 minutes. You look at the clock, the time is shown below. What time should your friend arrive?



Optional extension activity

6 private jets are flying from Coventry Airport today, and the timetable is given below.

Can you complete the table below to fill in the missing departure times, arrival times and flight durations?

Destination	Time departs	Time arrives	Flight duration
Edinburgh	09:15	10:30	
Paris	10:05		1 hour 20 minutes
Brussels		12:25	1 hour 10 minutes
Southampton	11:55		30 minutes
London		13:35	25 minutes
Amsterdam	14:25	15:40	





Year 3 - Statistics Breaking news

You're a roving news reporter with The Coventry Evening Telegraph and Coventry City Football Club have currently played 20 games so far this season. Your task is to investigate Coventry City Football Club's performance this season and create a news report about your findings for their fans.



Statistics

Task 1

Before creating the news article, you need to investigate the data you've been given.

Look at the pictogram and table below and answer the following questions.

1. The pictogram below shows the number of games won, drawn and lost for the 20 games Coventry City Football Club have played so far this season.

Won

Image: Won

Image: Drawn

Lost

Number of games

a. How many games have they won this season so far?

b. How many more games have they won than lost this season so far?	

2. The table below shows the number of goals scored by the top 5 highest scoring players so far this season.

Score	Goals scored
Samuel Beckham	3
Harry Linker	11
Mohammed Maradonna	6
Ethan Mess	5
Dwayne Rooney	9



Pictogram to show the number of games won, drawn and lost

Statistics

a. The player who scores the most goals in the season gets the golden boot. Which player has scored the most goals in the season so far?

·_____

b. Mohammed Maradonna won the golden boot last season. How more goals has the leading goal scorer scored than Mohammed Maradonna so far this season?

c. Dwayne Rooney scored a hat trick in his last game (3 goals). If he scores a hat trick in his next game. How many goals would he have scored this season?

Task 2

Use the newspaper report template to create a bar chart showing the number of goals scored for the top 5 scoring players this season. Make sure you give your chart a title and label both axes.

Task 3

Complete the newspaper report by creating a catchy headline and use your answers in Task 1 to create a short summary of Coventry City Football Club's performance this season.

Here are ideas of sentences you could write in your report below:

Coventry City Football Club have had a tremendous start to the season winning _____ more games than losing.

Mohammed Maradonna won the golden boot last season. Will he win it again ? He is currently ______ behind the leading goal scorer.



Statistics

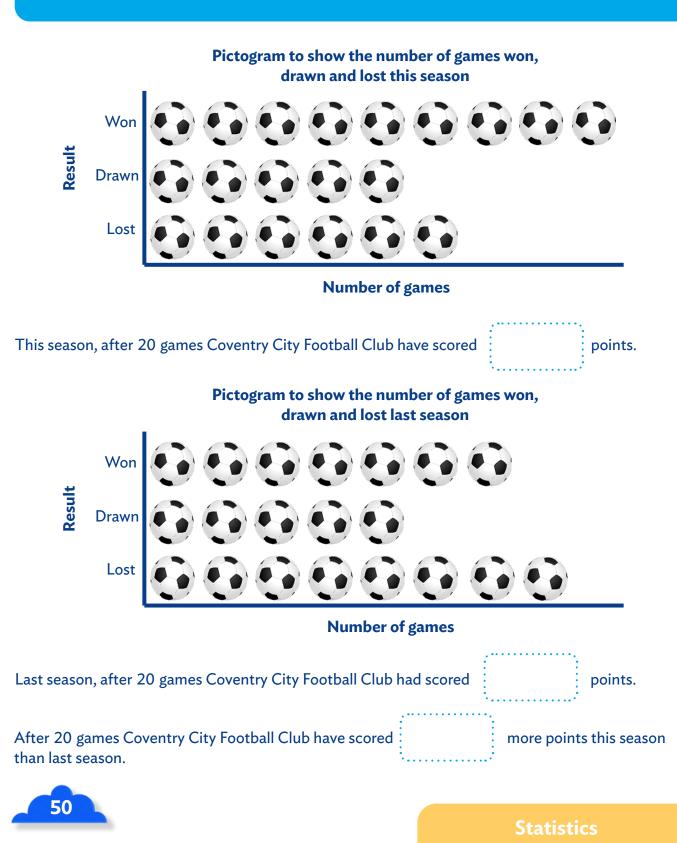
The Coventry Evening Telegraph

All about Coventry since 1884

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Optional extension activity

The 2 pictograms below show the number of games won, drawn and lost for Coventry City Football Club after 20 games for this season and last season. For a win they score 3 points, a draw they score 1 point and they get 0 points for a loss. Can you calculate the number of points they scored this season and last season after 20 games? How many more points did they score this season compared to last season?



Year 3 - Shapes Holiday shapes

You and your partner have the nets of four 3D shapes. Create two nets each by cutting them out and making these up. When built they will be items you may take or see on a holiday. Then work with your partner and fill in the worksheet where you will enter the properties of each of the four 3D shapes.

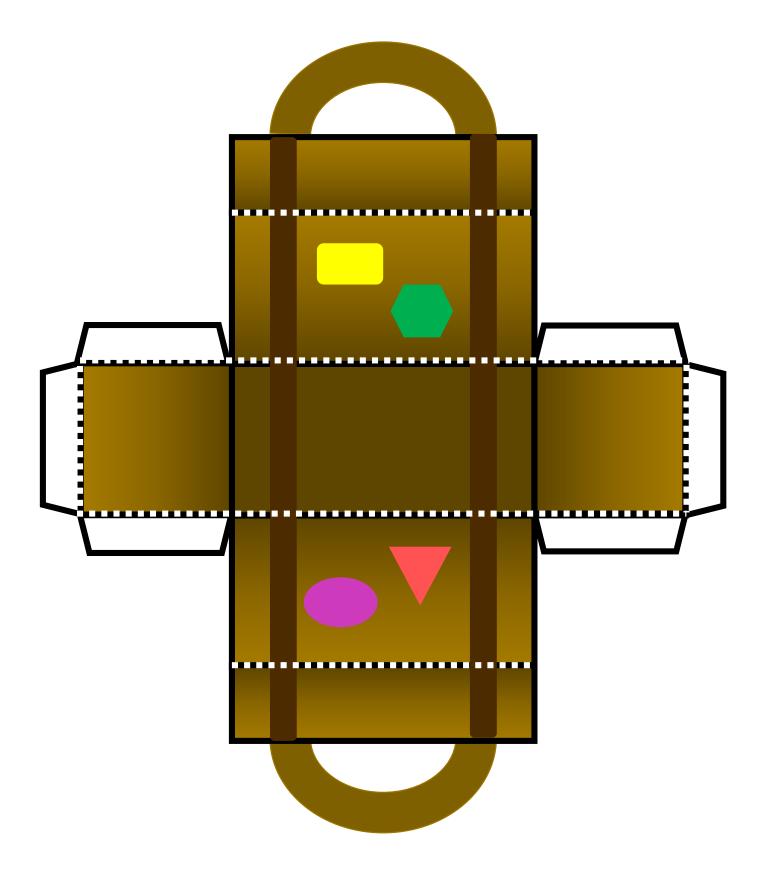
Instructions

- 1. Cut out net along the black lines.
- 2. Fold along the dotted lines.
- 3. Glue on the white tabs and stick.

Shape name	Picture	Number of flat faces	Number of curved faces	Number of sides	Number of vertices
Cuboid					
Triangular prism					
Cylinder	Sung Sun Critom				
Squared based pyramid					



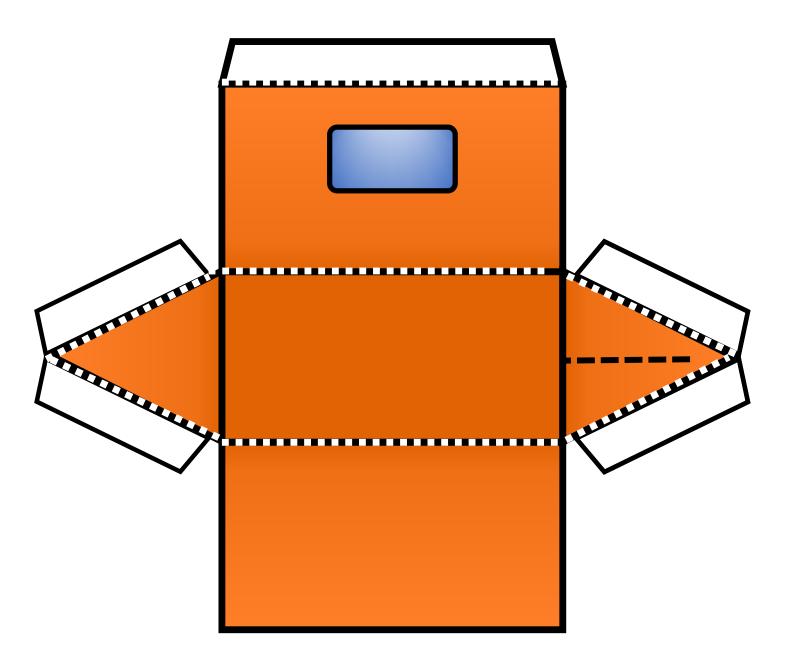
Net of a cuboid





Shapes

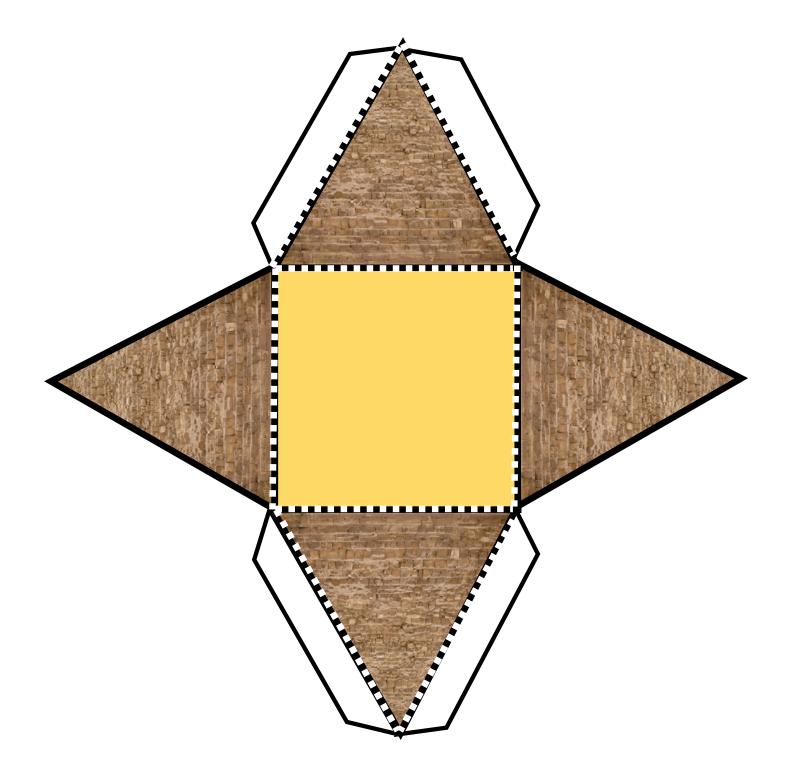
Net of a triangular prism





Shapes

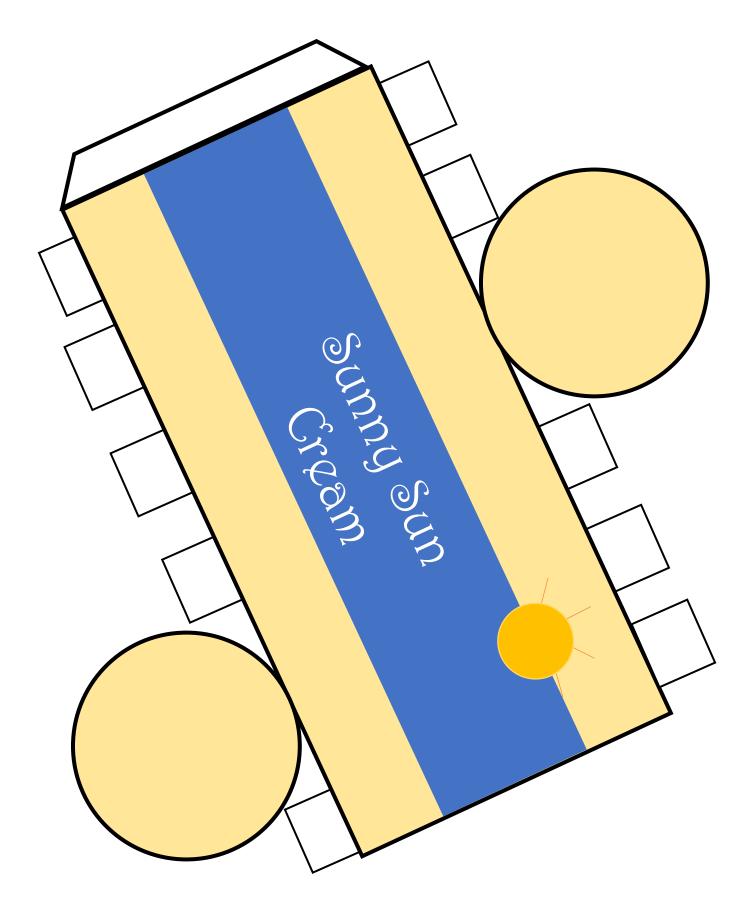
Net of a square based pyramid







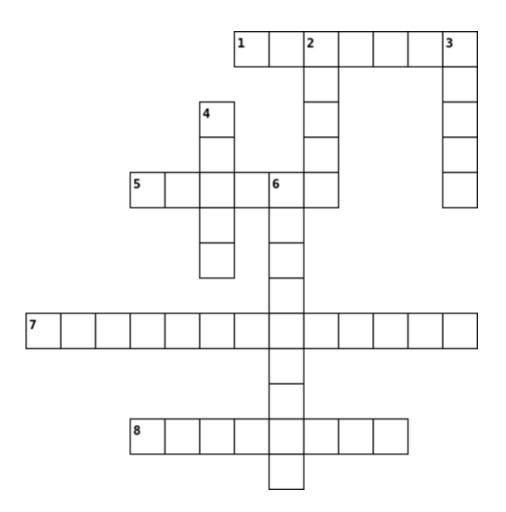
Net of a cyclinder



Shapes

Optional extension activity

Can you solve the clues to the crossword below? The clues relate to what you learnt in the property of shapes unit.



Across

- 1. A shape with 8 sides.
- 5. A 4-sided shape with 4 equal sides.
- 7. Shapes with four sides are called this.
- 8. Lines which never meet and are always the same distance apart are called this.

Down

- 2. The number of right angles in ³/₄ of a complete turn.
- 3. You start facing west. After a quarter turn in the clockwise direction you are facing this direction.
- 4. An angle less than a right angle is called this.
- 6. A 4-sided shape with 2 pairs of equal sides.



Shapes



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