YEAR 5

HOME LEARNING

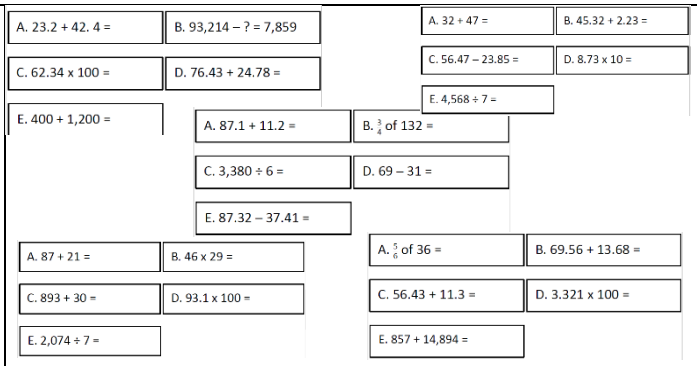
Oldbury Park PRIMARY RSA ACADEMY

Hi Year 5! We hope you have had a good week. It has been lovely talking to you and finding out about what you have been doing. We have loved hearing about who you based your biographies on and about the art, music and drama you have done. Some very creative ideas out there!
This week continues on from last week's work, building on your persuasive techniques in a different format and focussing on the design process. Enjoy!
Thank you again to all those who sent in tie designs. In the resources below, you will find pictures of those that have been shortlisted and details on how to vote for your favourite.

Mr Williams Mrs Tudge Miss Wilkinson Mr Burnage Ms Carter

EVERY DAY

Daily Maths lessons - https://whiterosemaths.com/homelearning/
Watch the video and then complete the written task (these could be printed out or you could just write the answers in the book we sent home). This is 30-40 minutes work.
This week is multi-step problems and line graphs (Week 8 of the summer term videos and activities, however you need to click the 'Already covered this content' box and follow the videos from here.)
Answers now saved as a separate document on the school website.
Mathletics – 15-20 minutes (more if you wish).
We have also included the Fluency in 5 resources for arithmetic practice.
Read for at least 15 minutes



Additional tasks for this week (29/6/20)

English

Monday – Reading Find out about the famous inventor Thomas Edison and answer the questions.
https://www.twinkl.co.uk/resource/t-t-253630-thomas-edison-differentiated-reading-comprehension-activity
Tuesday – Analyse the advert Last week, you familiarised yourself with some persuasive techniques. This week we will be building towards writing your own radio advert. First, listen to these examples…
https://www.youtube.com/watch?v=RLvBRCyNHJs&list=PL9ZAH7g2F0UVQmdLMf4syFk2nsWraJUiD
https://www.youtube.com/watch?v=e1Kb4w8wSnE&list=PL9ZAH7g2F0UVQmdLMf4syFk2nsWraJUiD&index=2
https://www.youtube.com/watch?v=iUnlB6Ontfw&list=PLdb2VaO4d-cRUkibgB2M06tLKN4Lom98S&index=2
Which one is your favourite and why? How have they tried to be persuasive? Have a look at the couple of written radio advert examples below and annotate one of them identifying any structural or language features. How have they been persuasive? Are they effective? There is a list of possible persuasive techniques that you could look for.
Wednesday – Plan your own advert Have a look at the poster advert for the Vestibag. Your task is to plan and write your own radio advert for this product. You can use the examples we looked at yesterday to help with structure and language features. Use today to plan some ideas. Can you think of a rhetorical question to use? Could you use a group of three to describe it? How will you make your reader believe that they can't live without it?
Thursday – Write your advert Use your plan from yesterday and the examples to write your own advert. Think about each sentence carefully as you build up your text.
Friday – Finish writing your advert.
Extra challenge – If you have finished your writing and would like another activity, could you plan a TV advert for the product? Use the storyboard to map out what would happen in your advert and anything that would be said.

Topic

This week our focus will be DT. We would like you to work through all of the design stages: product analysis, designing, making and evaluating. We want you have the opportunity to follow your own interests here and work with the resources you have available to you. Your product could be a new version of something, it could solve a problem or it could replicate an everyday item.
Some ideas: a toy, a container, a gadget, a phone case, a pencil case, a purse, a door stop, a vehicle, a food item – I'm sure you will come up with lots more!
You could use card, paper, wood, recycled items, fabric.
There is no set way to record this work, but here are some things to think about…
Product analysis: What is already out there? What are the positives and negatives of these products? How could you improve it? Ask others what improvements they would suggest? What do others want from this product?
Design: Try lots of mini sketches of what your product could look like or be made out of. Annotate your drawings. Create a final design in colour with labels. Maybe you could make a prototype. Try out some of the skills you might need in the making part. Write a set of steps to consider what you will need to do and in what order.
Make: Use the necessary materials and tools to make your product. Adapt your design should you need to.
Evaluate: How successful is your product? What went well? Did you have to overcome any problems? How did you do this? What could be improved if you were to make it again?
Science - Fireworks in a Glass Experiment
You will need: oil, a tall glass, water and food colouring. The instructions for the investigation are below. Think about the density of the materials that you are using and try to predict whether they will mix or not. Don't forget to write a conclusion based on what you've found out!
French – Tell us what you had for breakfast in French.
Below are some breakfast food suggestions and the French translations. Have a go at writing a sentence in French telling us what you had today. There is an example for you to modify.
PE – Invasion games skills to practise at home using readily available equipment. See below for details.

TIE DESIGNS

Thank you for all your designs. These are the five shortlisted ties. Please choose your favourite and then vote by sending an email to Y5entries@oldburypark.worcs.sch.uk stating the number of your chosen tie. Votes to be in by Friday 3rd July please. Thank you.

Spellings

Converting nouns or verbs into adjectives using the suffix -ive

attractive

creative

addictive

assertive

abusive

co-operative

exhaustive

appreciative

offensive

expressive

Can you think of any other words that could be on this list?

For an extra challenge, choose 3-5 words from your reading book that are new to you, are words that you know you often get wrong, or are words that you just fancy learning!

Multi-step addition and subtraction problems

1 Eva is reading a book before bedtime.

On Monday she reads 38 pages.

On Tuesday she reads 6 pages more than she did on Monday.

a) How many pages does she read on Tuesday?

b) How many pages does she read altogether on Monday and Tuesday?

c) There are 123 pages in the book altogether.

How many pages does Eva have left to read?

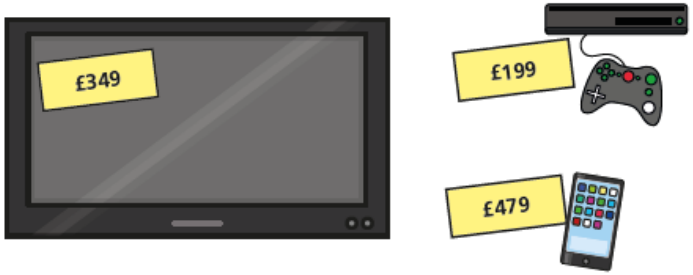
2 Here are two number cards.

800	?

The sum of the two cards is 2,900

What is the difference between the two cards?

3 Mo has £1,000 to spend. He buys a TV and a games console.



Does Mo have enough money left to buy the phone? _____

Explain your answer.

4 Two families each have £1,800

The table shows how much they need to spend.

	The Websters	The Changs
Housing	£465	£550
Food	£420	£380
Bills	£120	£135

Which family has the most money left?

How much more money do they have?

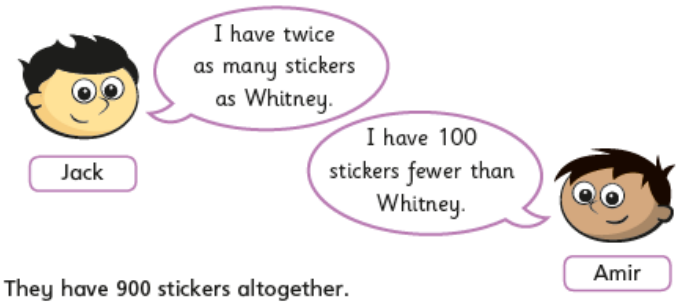
5 There are 15,600 people at a concert.

There are 9,050 adults.

The rest are children.

How many more adults than children are there?

6 Jack, Whitney and Amir are counting their sticker collections.



They have 900 stickers altogether.

How many stickers do they each have?

Jack has ☐ stickers.

Amir has ☐ stickers.

Whitney has ☐ stickers.

7 Two numbers have a difference of 1,200 and a total of 6,484

What are the two numbers?

☐ and ☐

8 Three 4-digit numbers add together to make 10,000

One of the numbers is 2,560

Complete the sentences to describe the other numbers.

The total of the two numbers must be ☐

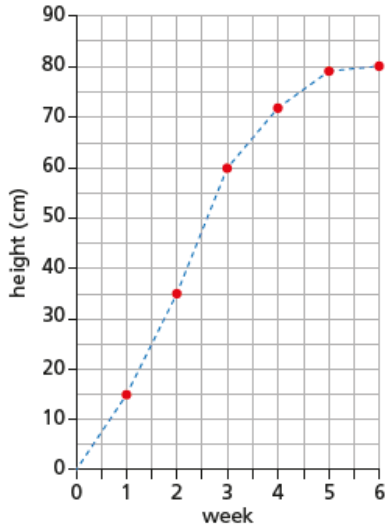
The two numbers could be ☐ and ☐

One of the numbers cannot be greater than ☐

Write your own problem like this for a partner to solve.

Read and interpret line graphs

1 The graph shows the height of a sunflower on the first day of each week for 6 weeks.



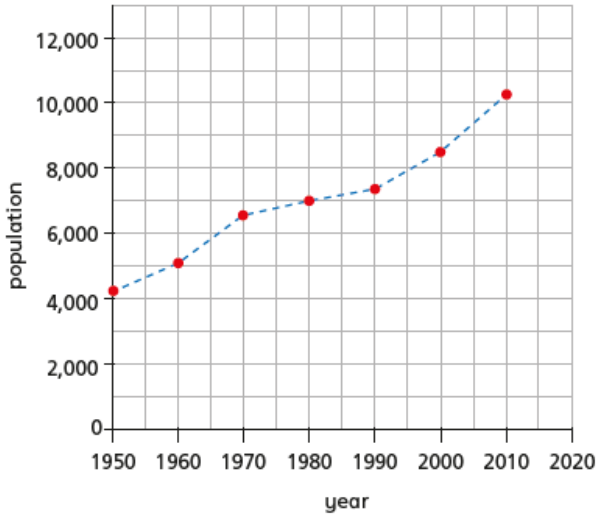
a) What is the height of the sunflower at the start of week 3?

b) What is the height of the sunflower at the start of week 2?

c) Eva thinks the height of the sunflower at the start of week 4 is 75 cm. Explain why Eva is wrong.

d) By how much does the sunflower grow from the start of week 3 to the start of week 6?

2 The graph shows the population of a town at the end of each decade from 1950 to 2000



a) What was the population at the end of 1980?

b) What was the population at the end of 2000?

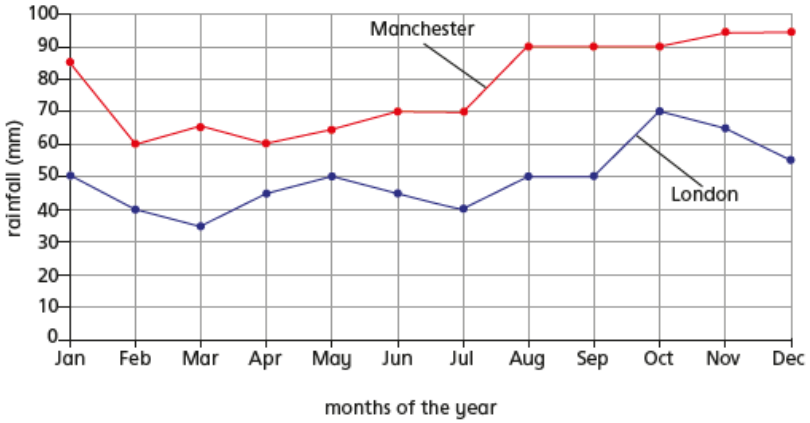
c) Can you accurately tell the population in 1991? Why?

d) Which decade had the least population increase?

e) Predict the population at the end of 2020

Compare answers with a partner.

3 This graph shows the average rainfall in London and Manchester to the nearest 5 mm.



a) How many millimetres of rain falls in London in May?

b) Which months are the driest in Manchester?

c) Which is the wettest month in London? _____

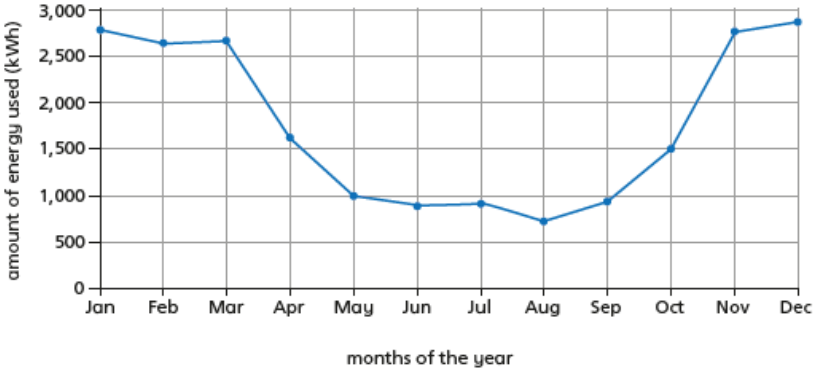
d) In January, how much more rainfall is there in Manchester than London?

e) How many months does it rain more than 50 mm in London and Manchester?

f) How much more rainfall is there in Manchester than London in December?

4 Energy is measured in kWh (kilowatt hours).

This graph shows the amount of energy being used at different times of the year in one household.



Describe three things that you know from looking at the graph.

Describe three things that you could find out from the graph.

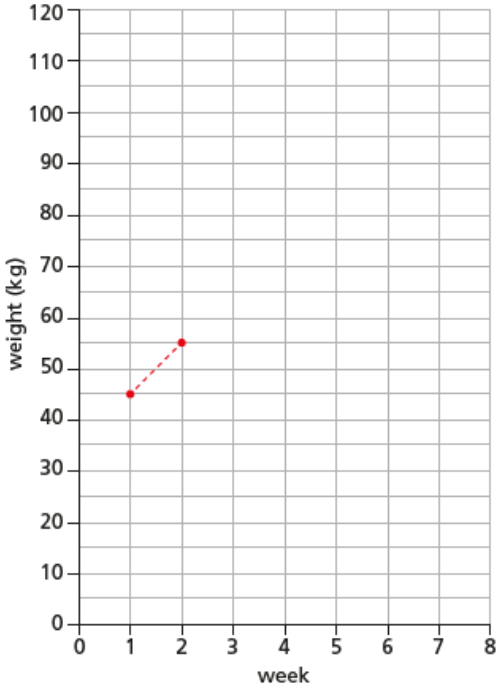
Draw line graphs

1 The table shows the weight of a horse at the end of each week for 8 weeks.

Week	1	2	3	4	5	6	7	8
Weight (kg)	45	55	70	80	95	100	100	120

Plot this information on the line graph

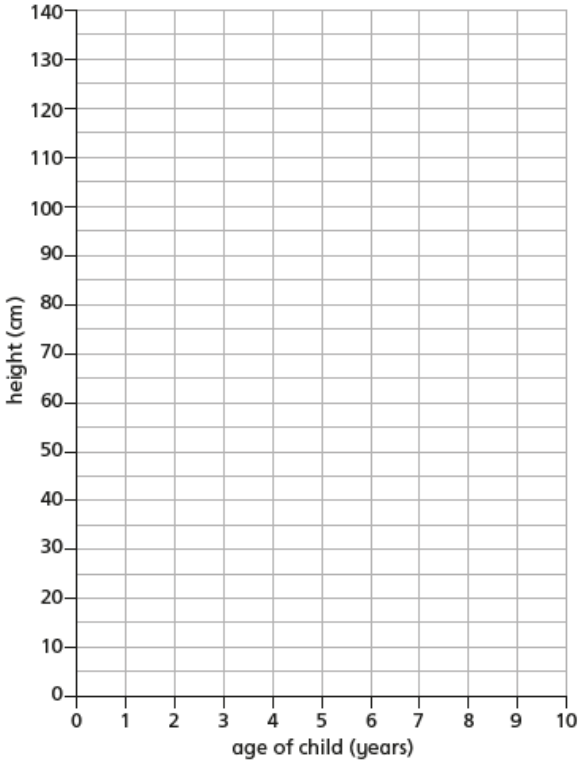
The first two points have been plotted for you.



2 The table shows the height of a child from 0 to 10 years of age.

Age of child	0	1	2	3	4	5	6	7	8	9	10
Height of child (cm)	50	76	86	95	102	110	115	122	128	133	138

a) Draw a line graph to represent this data.



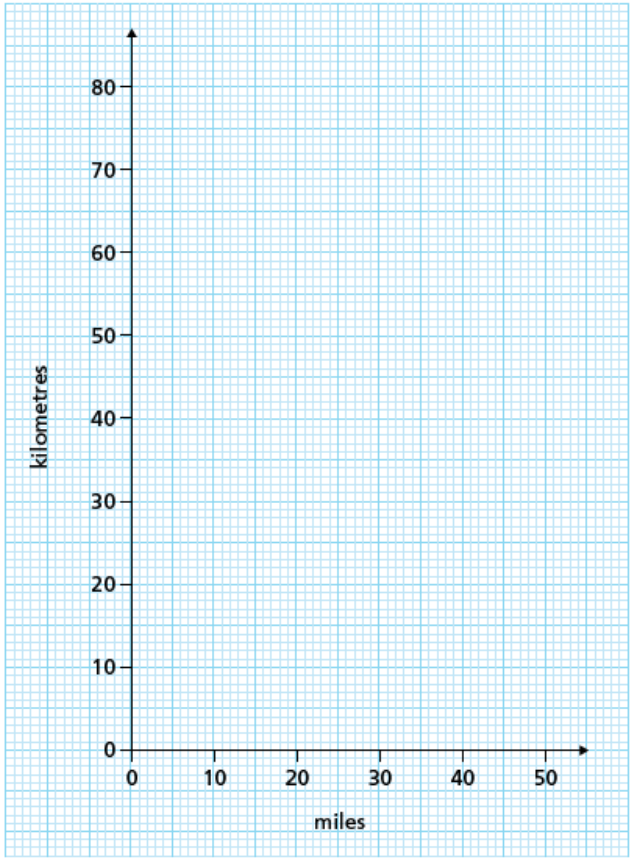
b) Estimate the height of the child at 7-and-a-half years old.

Explain your estimate.

3 This table shows the conversion between miles and kilometres.

Miles	0	5	10	20	50
Kilometres	0	8	16	32	80

a) Plot this data as a line graph.



b) How many kilometres is 15 miles?

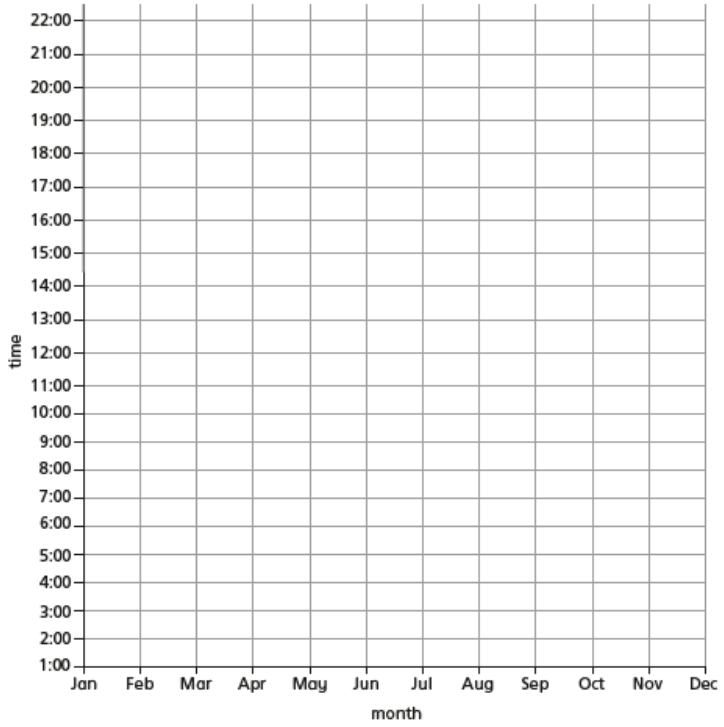
c) How many miles is 60 km?

4 This table shows the time for sunrise and sunset in a town on the first day of each month.

	Jan	Feb	Mar	Apr	May	Jun
Sunrise	8:00	7:30	6:30	6:00	5:30	5:00
Sunset	16:00	16:30	17:30	19:30	20:30	21:00

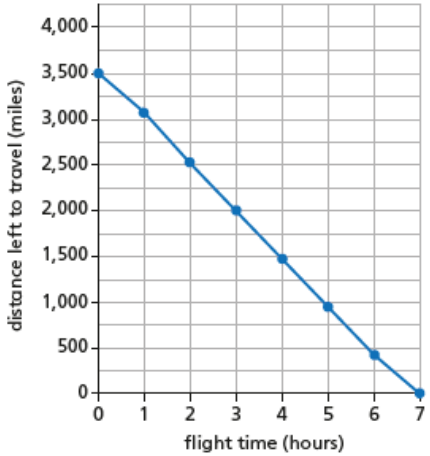
	Jul	Aug	Sep	Oct	Nov	Dec
Sunrise	4:30	5:00	6:00	7:00	7:00	7:30
Sunset	21:30	20:30	19:30	18:30	16:30	16:00

Plot the information into one line graph with two lines.



Use line graphs to solve problems

1 This graph shows how many miles an aeroplane has left to travel each hour on its journey from London to New York.



a) How many hours is the flight?

b) How many miles is the journey from London to New York?

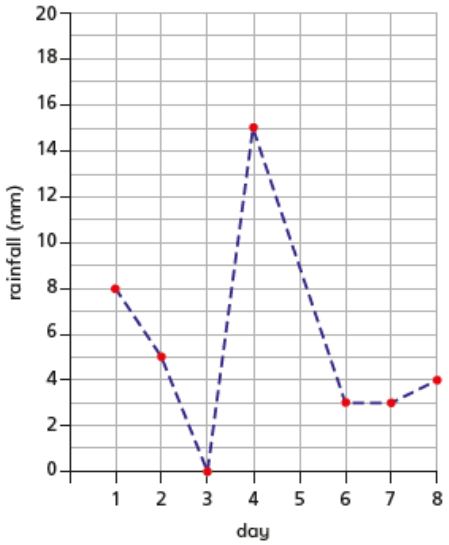
c) After 4 hours, how many more miles are left to travel?

d) How long does it take to fly the final 1,000 miles?

e) How many miles does the plane travel between 2 hours and 4 hours into the flight?

f) Estimate how far the plane has travelled after 3 hours and 30 minutes.

2 The graph shows the rainfall in the first 8 days in October.



a) How many millimetres of rain fell on the 7th October?

b) It rained every day in the first 8 days in October.

Is this statement correct? _____

Explain your answer.

_____

_____

c) The record amount of rainfall for October is 2.5 cm

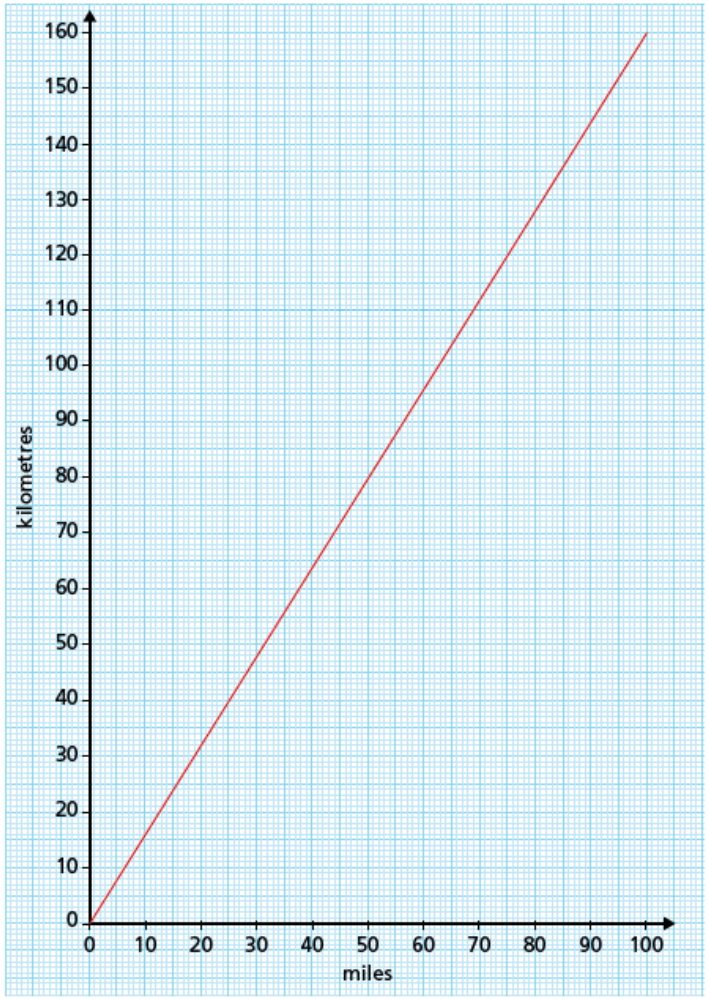
Has a new record been set? _____

Explain your answer.

_____

_____

3 This graph shows the conversion between miles and kilometres.



a) How many kilometres are there in 50 miles?

b) How many miles are there in 130 km?

c) Explain to a partner how you worked out the answers to part a) and b).

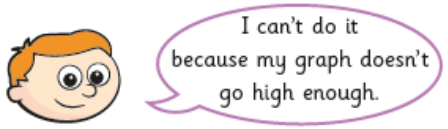
d) Eva cycles 60 miles.

Dexter cycles 80 km.

Who cycles the furthest? _____

How much further does the person cycle?

e) Ron wants to convert 800 km into miles.



Ron is incorrect. Explain why.

_____

_____

Complete the conversion.

Show your working.

800 km = ☐ miles

f) A high-speed train can travel up to 400 km in an hour.

How many miles can it travel in an hour?

FRIDAY CHALLENGES

Challenge 3

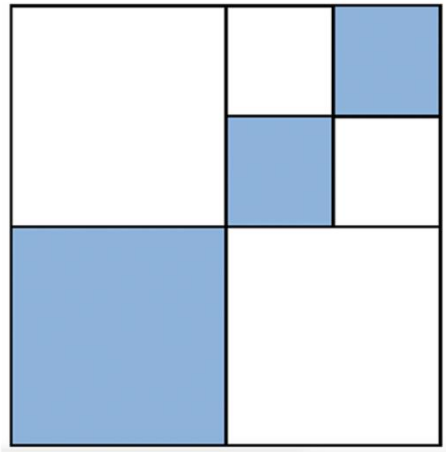
A sequence is made up of three 2-digit numbers.

The sequence increases by eight each time. These are the digits that make up the three numbers.

Work out the numbers in the sequence.

Challenge 4

A square is divided into smaller squares.



What fraction of the square is shaded?

Challenge 5

The mass of an empty jar is 470 g.

6 marbles are placed in the jar.

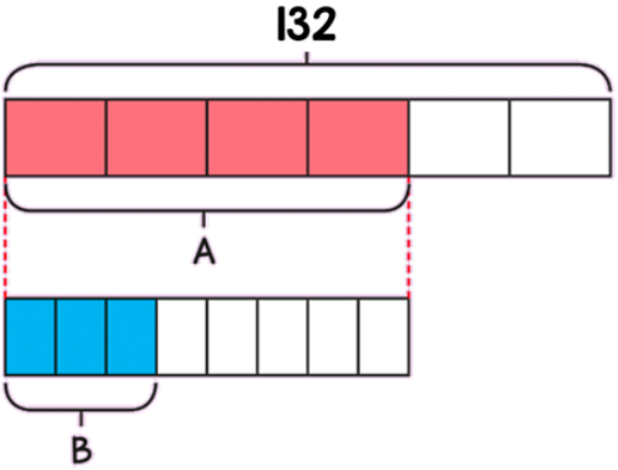
The total mass of the jar and marbles is now 1.1 kg.

Two of the marbles are removed.

What is the mass of the jar and marbles now?

Challenge 6

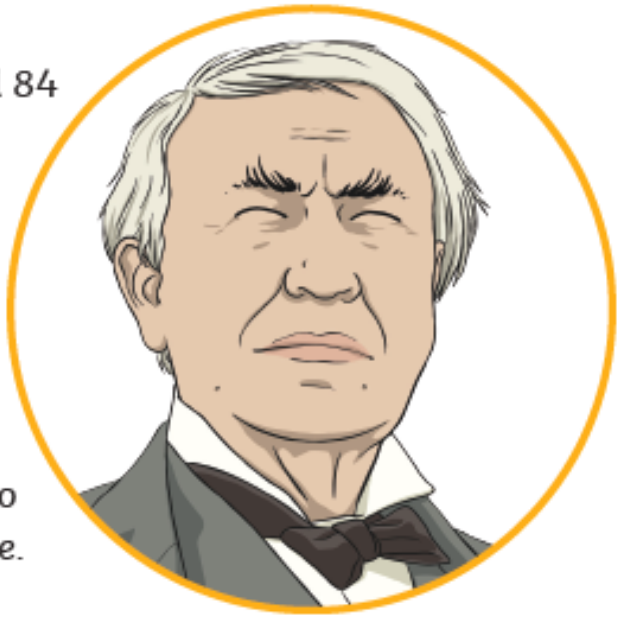
Work out the value of B.



Thomas Edison

Born: 11th February, 1847

Died: 18th October, 1931 aged 84



Childhood

Thomas Edison was born in Ohio, America.

As a child he had hearing problems from the illness scarlet fever. His mother was a teacher, so he did not go to school but was taught at home.

Getting a Job

He got his first job by accident. He saved a 3 year-old boy from being hit by a train, and the boy's father was so grateful that he gave Thomas a job as a telegraph operator.

A telegraph operator: a person who operates a telephone switchboard.

At 19 years old, Thomas got a new job. He wanted to work at night so that he could carry on with his experiments. One night, he spilt sulphuric acid on the floor and it dripped through the wooden floor boards onto the desk of his boss below. Thomas Edison lost his job!

First Invention

Thomas Edison's first invention was in 1877 – the phonograph. This was a machine that could record and replay sound. The sound was played through a large horn.

Thomas Edison

An Amazing Man

Thomas Edison was a very careful worker. He thought hard about all the different things that could go wrong in a project and how to put things right. He managed to get very important people interested in his inventions and they gave money to help him, so that Thomas had the time to work on them properly.

The Electric Lightbulb

Thomas wanted to invent a light that did not need oils or gas to be lit. Edison created a lightbulb that would stay lit using electricity for 13 $\frac{1}{2}$ hours!

His Legacy

Thomas Edison died in 1931; he was 84 years old. Almost everyone in the world has used at least one of his inventions: the electric lightbulb. We are still using them today, almost 100 years later!

Edison with his phonograph invention.

Thomas Edison **Questions**

Answer the following questions in as much detail as you can and using full sentences.

1. Why did Thomas Edison have hearing problems?

2. How did he get his first job as a telegraph operator?

3. How did his boss find out he was doing experiments while he was at work?

4. What was the name of the invention that could record sound?

Thomas Edison **Questions**

5. What did his electric lightbulb not need to work, that other previous lights did?

6. Name one quality in Thomas Edison's character that made him a great inventor.

7. How old was Thomas Edison when he died?

8. Why should we be grateful to Thomas Edison?

Thomas Edison **Answers**

1. Why did Thomas Edison have hearing problems?
   Thomas Edison had hearing problems because he had scarlet fever as a child.
2. How did he get his first job as a telegraph operator?
   He got his first job as a telephone operator because he saved a 3 year-old boy from being hit by a train and the boy's father was so grateful that he gave Edison a job.
3. How did his boss find out he was doing experiments while he was at work?
   The boss found out that Thomas was doing experiments at work because he spilt sulphuric acid and it dripped through the floor onto the desk of his boss on the floor below.
4. What was the name of the invention that could record sound?
   The phonograph was the name of the invention that could record sound.
5. What did his electric lightbulb not need to work that other previous lights did?
   The electric lightbulb did not need oil or gas to work.
6. Name one quality in Thomas Edison's character that made him a great inventor.
   Any one of the following: careful worker, thought hard, could get important people interested in his inventions.
7. How old was Thomas Edison when he died?
   Thomas Edison was 84 years-old when he died.
8. Why should we be grateful to Thomas Edison?
   We should be grateful to Thomas Edison because he invented electric lightbulbs and we are still using them almost 100 years later.

Can you match the techniques with the explanation?

Look for any of these being used in the radio adverts below.

Power of three

Emotive language

Rhetorical questions

Say again

Undermine opposing views

Anecdote

Direct address

Exaggeration

Involve your audience by speaking to them directly using personal pronouns and shared experiences.

Questions to get your audience thinking – they don't require an answer.

Including little stories to illustrate a point.

Destroy/criticise the opposing argument.

Being over-the-top to get a point across.

Words, phrases and imagery that arouse an emotional response.

Including lists of three items/reasons in your writing.

Repeating the same word, phrase or idea more than once for emphasis.

Persuasive Techniques

The Amazing Cup!

Are you bored with scooping water up in your hand? Do you find drinking water a pain?
Well worry no longer because Crocko have created the cup, just for you.

The cup has taken 2000 years to develop and is made using space age technology. Its fantastic!

The cup has many features to delight young and old. Along its side is an amazing loop called a handle. The handle will allow you to scoop up water without getting your hand wet. Truly superb.

Find it hard to get a decent drink? The cup is the answer to all your problems. The cup, with its rounded smooth edges, will allow you to place your lips along its rim and empty the whole contents into your mouth. You'll be refreshed like never before!

Your friends will be amazed when they see your cup. They will want one. Everyone will want one!
Don't think it's trendy enough? Well.. the cup comes in many shades of colour. And for those wild enough we have **'the cup plus**' which has bold daring stripes down its side or even wild wacky spots.

The cup has been tested in dishwashers for hundreds of washes and it came out clean time and time again. Yes, the cup is almost indestructible. It's the accessory of the decade.

The cup is priced at just £2.99 or in a fantastic gift box of 6 for just £20. Don't wait for the weekly shop, get down NOW to your local supermarket and get one. It's a MUST-HAVE!

Sonic Handwriter Part 1

Are you bored with your old toys?
Do you wish you had something more exciting to do?

Well now you have.... because Matell have created the new Sonic Handwriter. The Sonic Handwriter has been in development for over 10 years, to make your life easier at school and to allow you to have some fun at the same time.

Too much writing to do? Then get out the Sonic Handwriter, show it the title, tap in how many pages you want and in a few minutes your writing will be completed with beautiful handwriting. It's as easy as that!

However, that's not all! The Sonic Handwriter has been especially programmed to produce beautiful drawings too. You want a picture of horse, the Sonic Handwriter draws it. You want a picture of your favourite football star - your Sonic Handwriter sketches them out in perfect detail.

analysis

1. **Question to draw reader in**
2. **Explain what it does**
3. **Give peoples thoughts and opinions**
4. **What is it made of**
5. **Make them think they can't live without it**

classic

Sonic Handwriter Part 2

Your friends will be amazed when they see what you can do with the Sonic Handwriter. It's amazing!

The Sonic Handwriter has been 10 years in the making and is made from strong durable plastics. In recent tests the Sonic Handwriter was dropped from a tall building and it still wrote a perfect story when it reached the bottom. There wasn't even a scratch!

Don't wait for a birthday or Christmas, get down to the shops now and buy one! Parents will be amazed at the educational potential of the Sonic Handwriter and stunned at the incredible price of just £99.99. It's the gift of the year and a must-have for young and old!

*the pen requires 15 AAA batteries and is not guaranteed to write a story or draw a picture. The Sonic Handwriter must be used with adult supervision and must not be used by children under 18. Prices may vary.

Task: To write a radio advert for this product.

TV Advert Storyboard Design Sheet

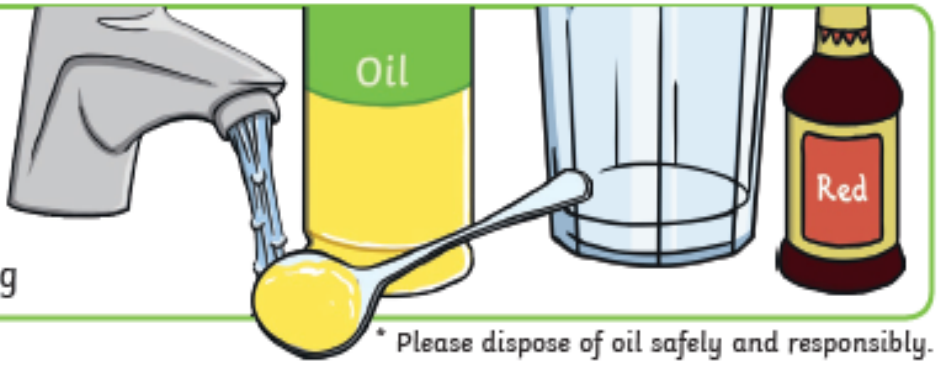
The TV advertisement lasts 30 seconds, so each box represents 5 seconds of the advert. Use the appropriate rows to add details about any voice overs, music or sound effects which will accompany the picture on the screen.

Picture														
Music														
Voice														
Sound FX														
Seconds	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Picture														
Music														
Voice														
Sound FX														
Seconds	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Fireworks in a Glass

You Will Need

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



* Please dispose of oil safely and responsibly.

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.

Pour mon petit déjeuner

Pour mon petit déjeuner, je voudrais des céréales, un yaourt et un jus d'orange.

un thé	un jus d'orange	un croissant	un pain au chocolat
un chocolat chaud	de l'eau	de la confiture	un yaourt
un café	du lait	des céréales	une baguette

Pour mon petit déjeuner

Pour mon petit déjeuner, je voudrais un croissant, de la confiture et un chocolat chaud.

un thé	un jus d'orange	un croissant	un pain au chocolat
un chocolat chaud	de l'eau	de la confiture	un yaourt
un café	du lait	des céréales	une baguette

Invasion Games Activities

Dribbling with the ball is one of the main skills needed for most invasion games. Place markers approximately 1 metre apart and practise your soccer dribbling skills through the cones. Start at a walking pace and see if you can build up the speed you dribble through the cones. Remember to look up to see where you are going!

You can move the cones closer together to make it more challenging!

Throwing and catching are also very important skills needed in invasion games, such as netball and basketball. With a netball or ball of a similar size, practise your throwing and catching skills by throwing the ball against the wall. What happens if you throw it harder at the wall? Stand at different distances away from the wall and see how it affects how hard you must throw the ball. Can you bounce pass the ball against the wall, so that it bounces before and after it hits the wall?

Have a game of **Newspaper Hockey** by using a newspaper as a stick to move, hit and control a soft ball.

- Make the sticks out of rolled-up newspaper (rolled diagonally will give you longer sticks), stuck together with tape.
- Use a soft ball and narrow goals.
- Pass, stop, hit and score – that's it!

Play **Piggy in the Middle** to practise **passing and moving** into space. You will need two other players. Two players throw the ball to one another, while the third player stands in the middle and tries to **intercept** the ball. If they do intercept it, the player who passed it then moves to stand in the middle and the game starts again. This can also be played by kicking a soccer ball to each other. Try introducing a 2nd piggy in the middle so that it becomes 2 v 2 (2 against 2).

Play a game of **Knee Tag** with a friend or family member. Face your partner and try to touch each other's knees, whilst trying to avoid having your own knees touched. Each knee touch is worth a point. How many points can you score in 1 minute? This game encourages you to stay light on your feet with your knees bent, which is a similar stance used by defenders when marking and attackers when dodging to get free from their marker.

What is a **Keepy-Uppy**? It is a bit like ball juggling without using your hands! The aim is to keep a soccer ball in the air for as long as possible by bouncing it off any part of the body except the hands and arm. How many keepy-uppies can you do? Play it with others and see how many you can do together.