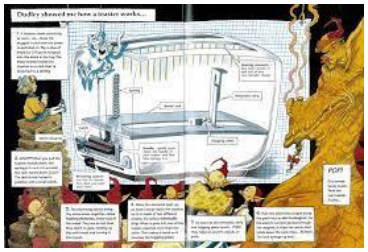
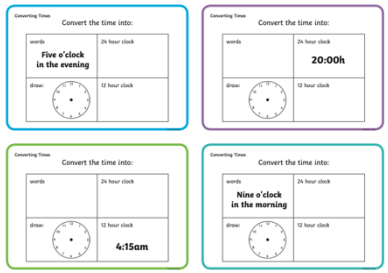
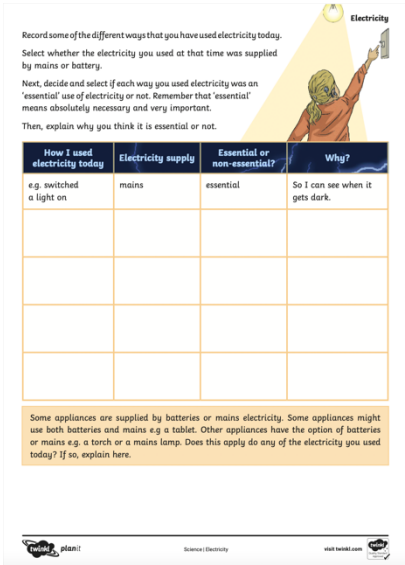
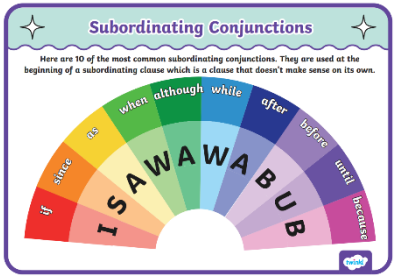
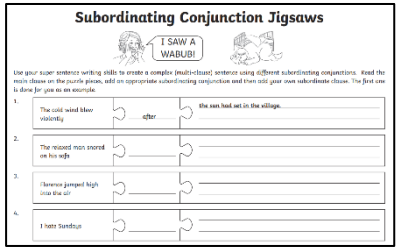
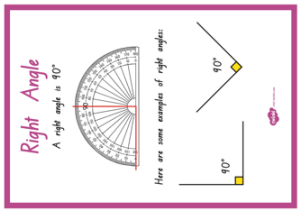
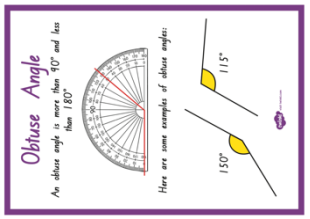
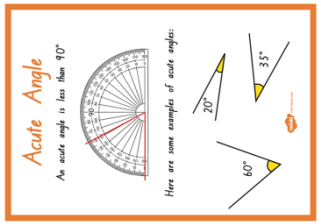
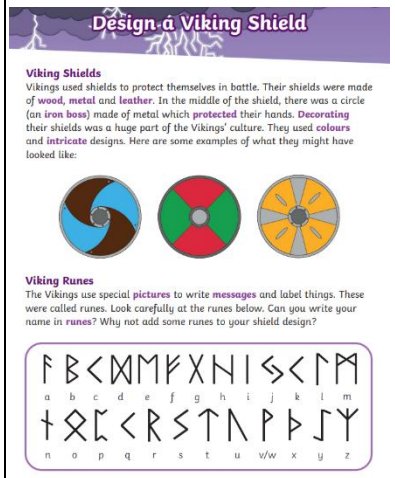
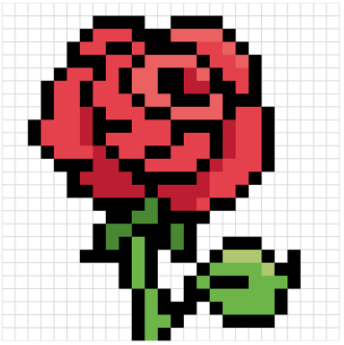
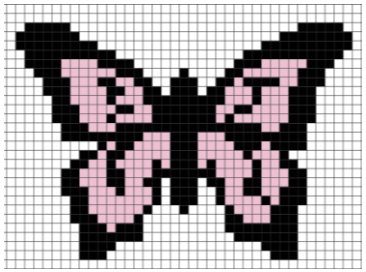
Year 4 Homework Grid

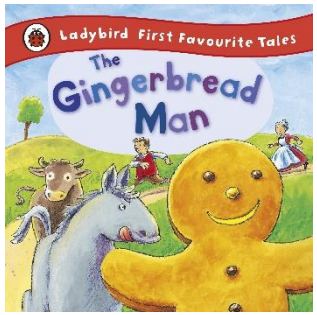
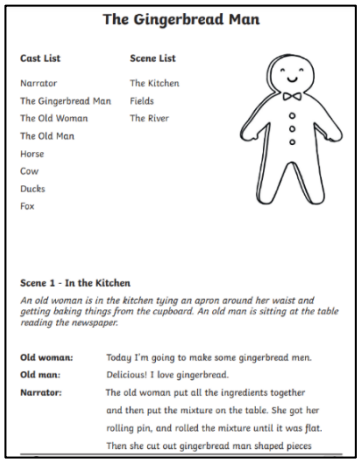
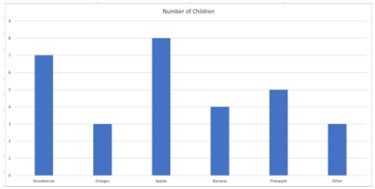
Your homework activities for this term are on the grid below. You can choose to complete the activities in any order; most of the learning activities are linked to our current topic so you should already have lots of knowledge about the areas of study! Make sure that you ask someone at home to help you if you find any of the activities too tricky and always ask an adult to accompany you with any outdoor activities.

- ✓ Complete activities in your Homework book
- ✓ Complete at least one activity every 2 weeks
- ✓ Remember you have the whole term to complete all tasks
- ✓ Homework folders are due back to school every Wednesday for your teacher to look at your work
- ✓ You will be set one activity page each week from the English CGP book and one from the White Rose Mathsbook (your teacher will let you know the page numbers)
- ✓ In addition to these activities, practice your spellings and times tables on a regular basis and try and find some time to read each day

Additional Maths activity: Feel free to also complete any of the additional Maths activities if you would like an extra challenge!

1. English	2. Mathematics	3. Science	4. DT	5. Geography
Write a set of instructions explaining how to use something in your home. **Examples:** A Microwave A Toaster A Hairdryer A Music Player Give the instructions to someone to follow. Did they work? Do you need to change anything?  	Are you the master at telling the time? Complete the Time conversions activities to test your knowledge. 	As we are learning all about electricity in science, complete the 'How I Use Electricity' activity to see which appliances you use in your data to day life. 	Create an engaging and informative poster that explains how to stay safe when cooking and working in the kitchen.  	Research one of the following topics about Italy: - Food - Music - Art - Architecture/Buildings - Ancient Roman city    Present your research in an interesting way. Examples could be: - A poster - A leaflet - A presentation - A video - A trivia game - A card game (top trumps)
Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:

1. English	2. Mathematics	3.History	4. PSHE	5. Computing
Subordinating conjunctions are perfect for adding extra detail to our sentences, complete the subordinating conjunction activity to practice it.  	In the area you live, for example bedroom, kitchen, garden, after-school activities, find examples of the following properties: Parallel lines Perpendicular lines/Right angles Acute angles Obtuse angles   	In History, we are learning about the Viking raids and invasion of Anglo-Saxon Britain. Design a Viking shield that your Viking raid would wear.  Challenge: use recycled materials to make your shield. 	Write a letter to someone who is important to you. You could include why they are important, your favourite thing to do together, your favourite memory together etc. You could write this letter inside a homemade card. 	Use the square paper to create pixel art of an object you see in nature. If you have access to Microsoft Excel or Google Sheets, try and copy your picture using the fill tools. Instructions included  
Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:

1. English	2. Mathematics	3. Science	4. Art	5.Handwriting/spelling
Choose a part of a book, this could be the one you're reading at the moment, or your favourite story, and rewrite it as a script (including character descriptions and stage directions). Challenge: record yourself performing your script   **The Gingerbread Man** **Cast List** Narrator The Gingerbread Man The Old Woman The Old Man Horse Cow Ducks Fox **Scene List** The Kitchen Fields The River **Scene 1 - In the Kitchen** *An old woman is in the kitchen tying an apron around her waist and getting baking things from the cupboard. An old man is sitting at the table reading the newspaper.* **Old woman:** Today I'm going to make some gingerbread men. **Old man:** Delicious! I love gingerbread. **Narrator:** The old woman put all the ingredients together and then put the mixture on the table. She got her rolling pin, and rolled the mixture until it was flat. Then she cut out gingerbread man shaped pieces	Conduct your own research and display your findings in a table and an appropriate graph. An example has been provided for you. Some areas you could research are: - What transport do children use to get to school? - What are a group of people's favourite ice cream flavours? - How many different colours of cars drive down a road in 1 hour? - What different pets do a class of children have? 	Favourite Fruit	Number of Children
---	---
Strawberries	7
Oranges	3
Apples	8
Bananas	4
Pineapple	5
Other	3 | 	As we will learn about sound in Science, complete the Sound Survey to measure the difference sounds in your local environment. 	Use a phone, tablet or camera to take photos of interesting things you see in the nature around you.  Challenge: recreate one of your photos. You could use pencils, pens, paints, collage… 	Brush up on your handwriting whilst practising your spellings too! See attached worksheets circle complete consider continue decide describe different difficult disappear early
Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:	Signed (parent/ guardian): _____Date:

Year 4 Maths Home Learning Grid

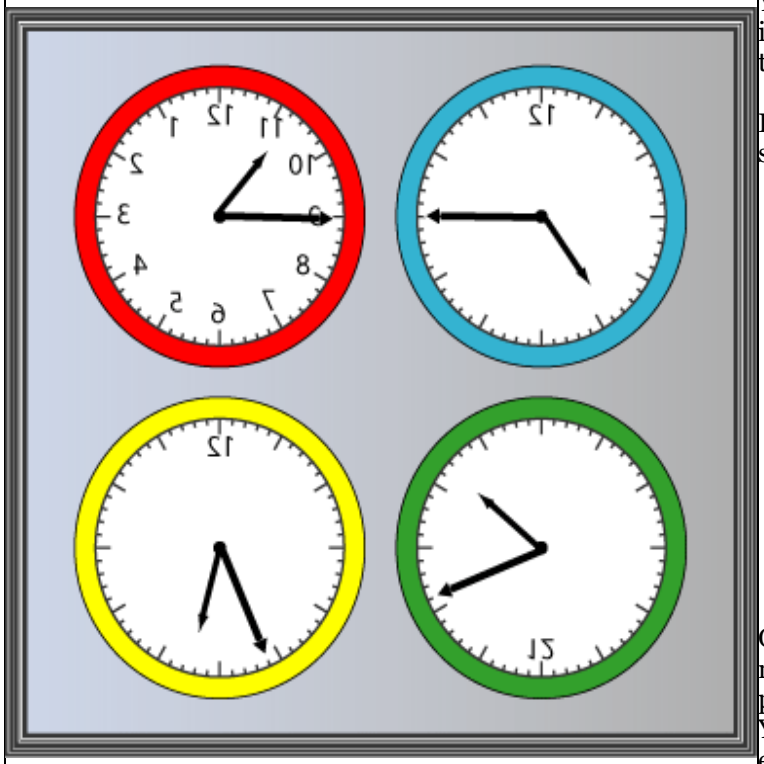
Additional Maths challenges

Write the short date and highlight when you complete a task.

https://nrich.maths.org/1812

Clocks

These clocks have been reflected in a mirror. What times do they say?



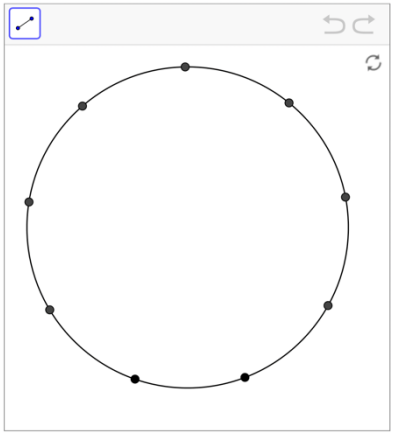
https://nrich.maths.org/2852/index

Nine-Pin Triangles

How many different triangles can you make on a circular pegboard that has nine pegs?

You may like to use the interactivity to try out your ideas. Click on two of the dots to create a line between them.

If you prefer to work on paper, you might find this sheet of nine-peg boards useful.



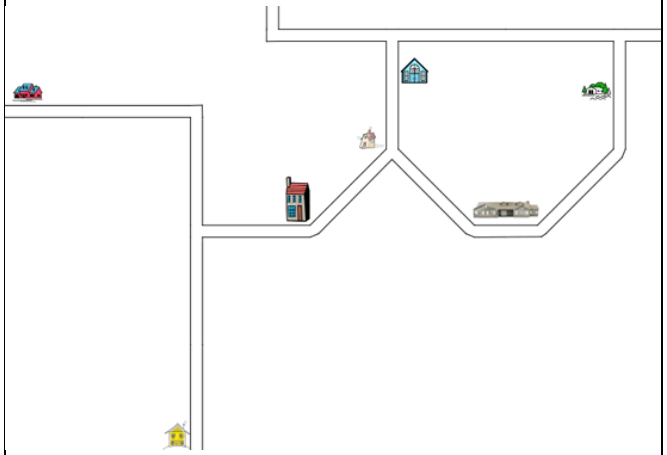
Once you've had a go at this, why not investigate the number of different triangles you can create on circular pegboards with more or fewer pegs?
You might also like to have a look at this task for some extension questions!

https://nrich.maths.org/5655

Six Places to Visit

Well, we're going to look at visiting places.

Here's the road map:

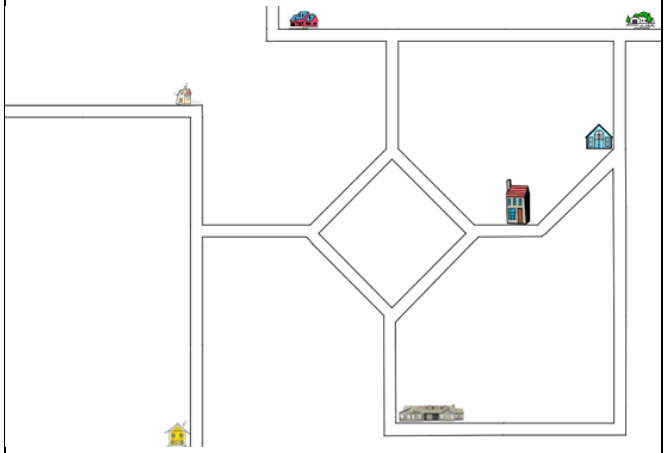


There are six places to visit:
1. Relations who live in the tall house;
2. Friends who live in the house with trees;
3. The wide school building;
4. The blue church;
5. The health centre with blue roof and pink walls;
6. The little pink shop which is leaning over.

You live in the yellow house at the bottom of the map.

Starting at your house, try to describe the journey to each of the six places.
You'll need to describe the bends in the road [how much they turn] and which way to turn at junctions.

Having done that what about trying this next one too:



We have the same places to visit, but they are in different places now.

https://nrich.maths.org/4938

Real Statistics

Census at School is an international project which collects data from children in participating countries all around the world, and makes it available for anyone to look at.

The table below contains data that was collected from the first questionnaires in Autumn 2000 and includes responses from children in England, Wales and Northern Ireland. It shows how pupils travel to school:

Travel to school percentage table

All data	Percentage of all pupils	Percentage of primary school pupils	Percentage of secondary school pupils
Total	100.00	100.00	100.00
Walk	37.90	43.31	33.60
Bus	22.55	8.05	34.10
Car	34.87	46.72	25.43
Cycle	1.89	1.17	2.47
Train/tube/tram/metro	1.79	0.21	3.06
Other	0.99	0.54	1.35

Excludes non responses

https://nrich.maths.org/13271

Roman Numerals

These symbols are the building blocks of Roman numerals:

I, V, X, L, C, D and M

Do you know the value of each letter? Click on 'Show' to check...

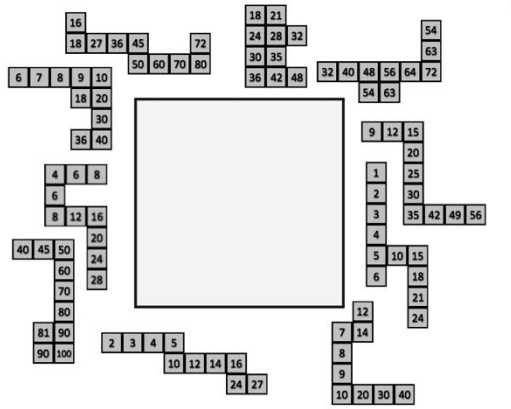
In our number system (the Arabic numeral system), there are ten different digits, (0, 1, 2 , 3, 4, 5, 6, 7, 8, 9) and the place of these digits in the number determines its value. For example, 2 on its own means 'two', but in 3240, the '2' now means "two hundred". In this way, any number can be written down, using only ten digits.

Roman numerals have a set of rules which allow you to write down any number:

1. If a smaller numeral comes after a larger numeral, add the smaller number to the larger number;
2. If a smaller numeral comes before a larger numeral,

https://nrich.maths.org/5573

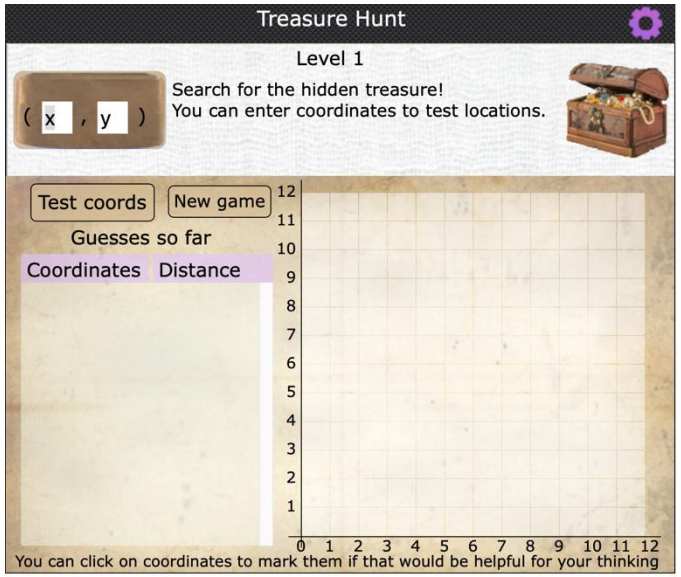
Multiplication Square Jigsaw



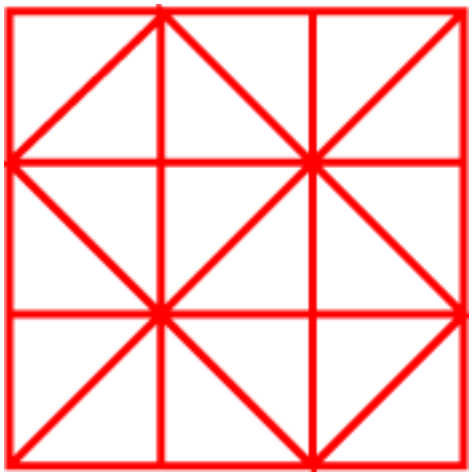
Which is the most popular way of getting to school for primary pupils? How about for secondary pupils? Can you think of any reasons why these might be different? Which is the most common way of travelling to school overall? Can you explain why this answer is different again? What do you think the 'Other' category means? What questions would you like to ask about the data? Conduct your own survey on how everyone usually gets to school, perhaps in your class or year group. Present your results in a table, chart or graph and please send it in to us. Compare your findings to those in the table (you might want to look just at the primary school or secondary school data, depending on how old you are). How are your results different? Are there any similarities? Can you think of any reasons why your findings might be different or similar?	subtract the smaller number from the larger number; 3. Do not use the same symbol more than three times in a row. Can you use these rules to construct and decipher Roman numerals? Try converting the following Roman numerals into Arabic numerals: III IV XVIII XIX MCMLXXVI MMXXIII MCMLXII Now try converting the following into Roman numerals: 55 86 two thousand five hundred and ninety-two 913 Can you work out how to write '1984' in Roman numerals? '1984' written in Roman numerals has more numerals than when it is written in Arabic numerals. However, this will not always be the case. Can you find some examples when the number of Roman numerals is fewer than the number of Arabic numerals for the same number?	
https://nrich.maths.org/6288 **Treasure Hunt** Can you find the hidden treasure? The treasure has been hidden somewhere on this beach, where the grid lines intersect (cross).	https://nrich.maths.org/2124 **Fractional Triangles** Use the lines on this figure to show how the pattern of triangles can be used to divide the square into two	https://nrich.maths.org/5898 **Tug Harder** This game is for two players. You will need to draw a number line from -13 to 13 on a piece of paper, and find a counter and two 1-6 dice to use.

Input coordinates to help find the treasure with the fewest guesses. The interactivity gives you the shortest distance you'd have to travel (along the grid lines) to reach the treasure.

Can you find a reliable strategy for choosing coordinates that will locate the treasure in the minimum number of guesses?



halves, three thirds, six sixths and nine ninths.

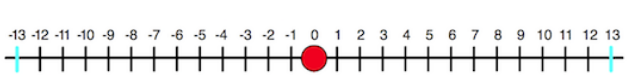


More lines are needed to divide it into four quarters.

What is the least amount of line needed to do this if the quarters are in one piece and all the same shape?

How many ways can you divide it into halves using just the lines given?

You might like to try out your ideas below.
Click on a dot to choose a colour, then click on a triangle.



Decide who is Positive and who is Negative.
Positive moves the counter from left to right and Negative moves the counter from right to left. (Why do you think we have suggested this way round?)
Place the counter on 0 (the picture above shows a red counter).
Take it in turns to throw the two dice and add the scores then move the counter that number of places in your direction.
If the counter reaches -13, Negative has won. If the counter reaches 13, Positive has won.

Is it better to play a game where you have to reach the end exactly, or where you can go over the end? What do you think and why?

Now change the game. This time, when you throw the dice, you can decide whether to add, subtract, multiply or divide the numbers on the dice. You must reach -13 or 13 exactly to win.

Does this make a better game? What do you think? Why or why not?

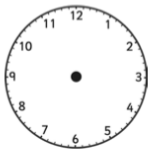
Spellings

This is a list of the spellings we have learnt so far in Year 4. It would be really helpful if you could practise them with your children to help them remember. The spelling rules have already been taught.

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

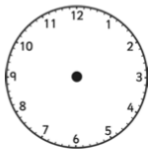
Converting Times

Convert the time into:

words	24 hour clock
Five o'clock in the evening	
draw: 	12 hour clock

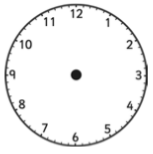
Converting Times

Convert the time into:

words	24 hour clock
	20:00h
draw: 	12 hour clock

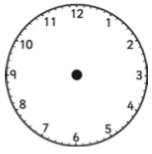
Converting Times

Convert the time into:

words	24 hour clock
draw: 	12 hour clock **4:15am**

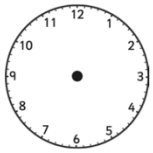
Converting Times

Convert the time into:

words	24 hour clock
Nine o'clock in the morning	
draw: 	12 hour clock

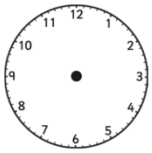
Converting Times

Convert the time into:

words	24 hour clock
Midday	
draw: 	12 hour clock

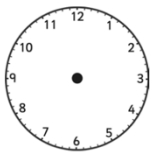
Converting Times

Convert the time into:

words	24 hour clock
Midnight	
draw: 	12 hour clock

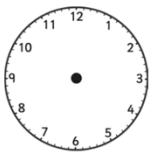
Converting Times

Convert the time into:

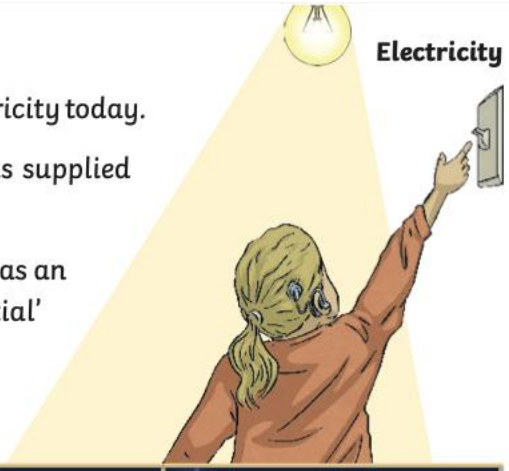
words	24 hour clock
Ten minutes to three in the afternoon	
draw: 	12 hour clock

Converting Times

Convert the time into:

words	24 hour clock
	20:55h
draw: 	12 hour clock

How I Use Electricity



Record some of the different ways that you have used electricity today.

Select whether the electricity you used at that time was supplied by mains or battery.

Next, decide and select if each way you used electricity was an 'essential' use of electricity or not. Remember that 'essential' means absolutely necessary and very important.

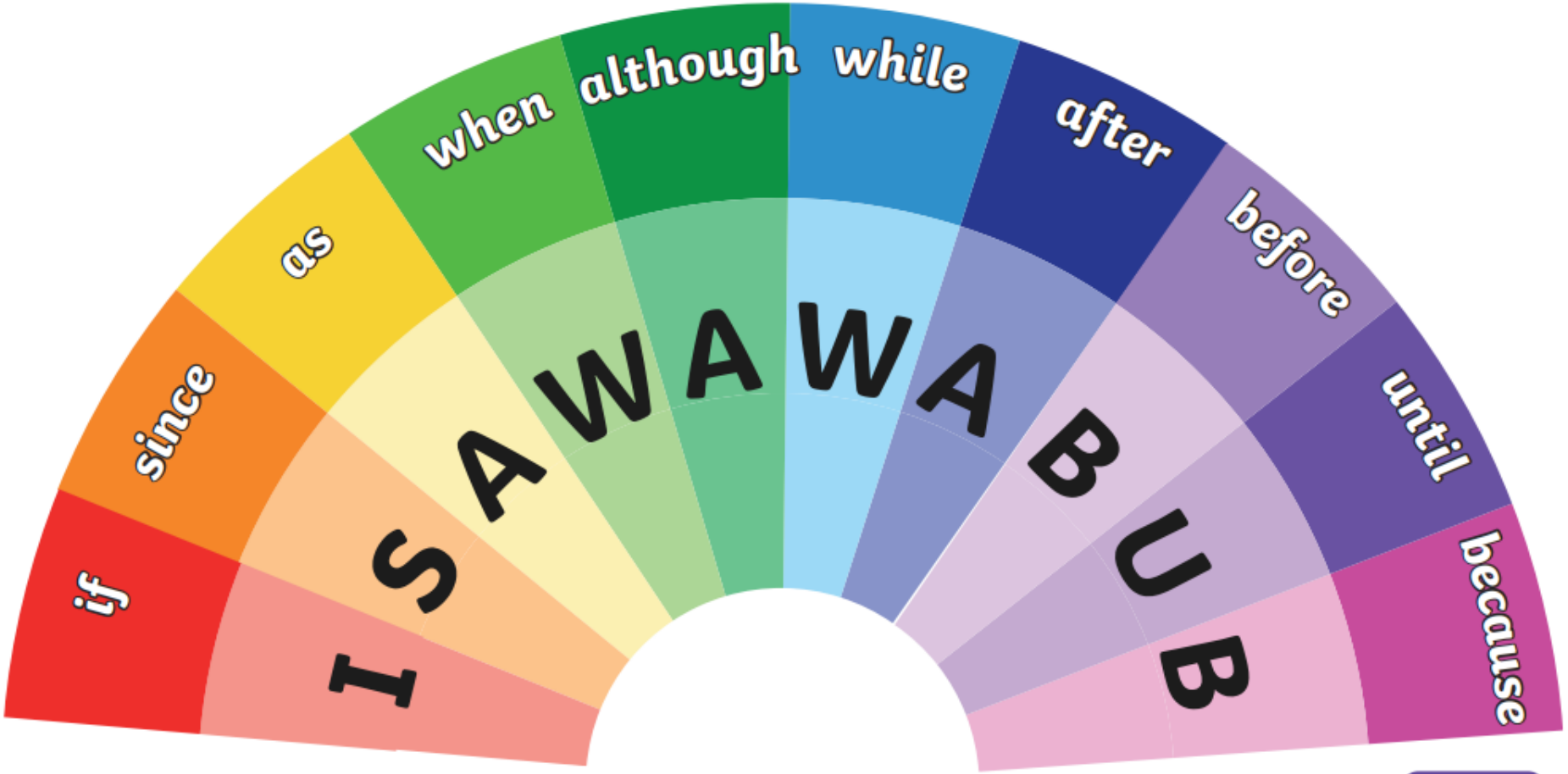
Then, explain why you think it is essential or not.

How I used electricity today	Electricity supply	Essential or non-essential?	Why?
e.g. switched a light on	mains	essential	So I can see when it gets dark.

Some appliances are supplied by batteries or mains electricity. Some appliances might use both batteries and mains e.g a tablet. Other appliances have the option of batteries or mains e.g. a torch or a mains lamp. Does this apply do any of the electricity you used today? If so, explain here.

Subordinating Conjunctions

Here are 10 of the most common subordinating conjunctions. They are used at the beginning of a subordinating clause which is a clause that doesn't make sense on its own.



Subordinating Conjunction Jigsaws

Use your super sentence writing skills to create a complex (multi-clause) sentence using different subordinating conjunctions. Read the main clause on the puzzle pieces, add an appropriate subordinating conjunction and then add your own subordinate clause. The first one is done for you as an example.

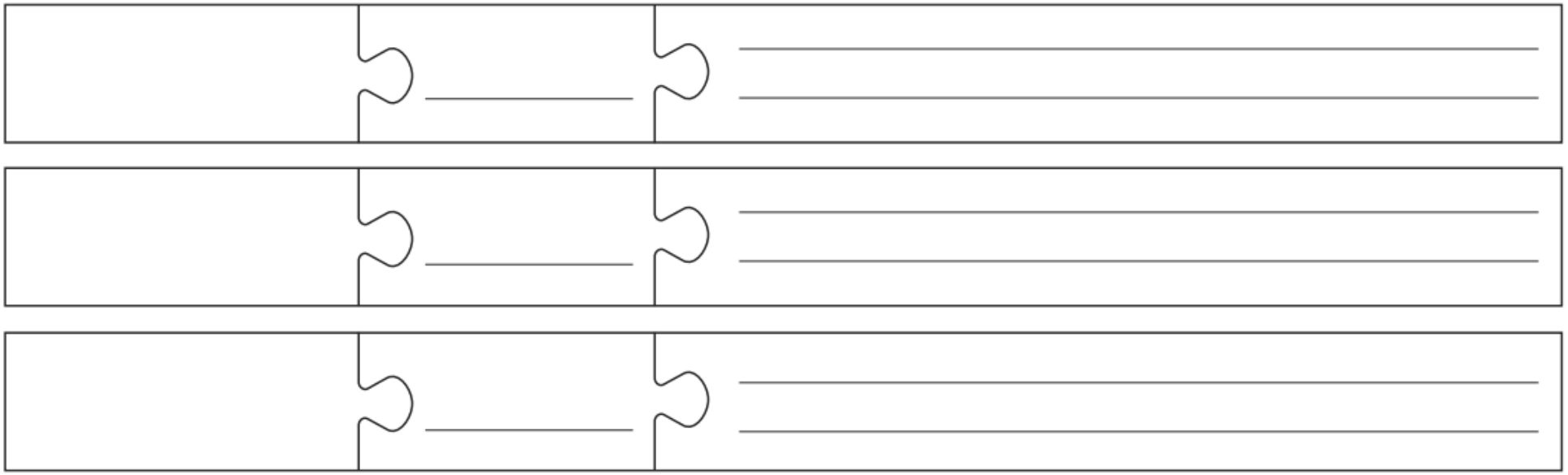
1. The cold wind blew violently ___after___ the sun had set in the village.

2. The relaxed man snored on his sofa _____ _____

3. Florence jumped high into the air _____ _____

4. I hate Sundays _____ _____

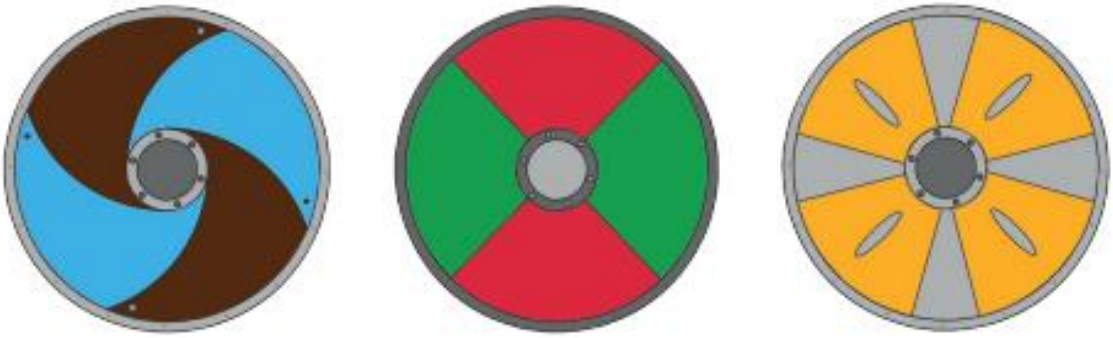
Challenge: Now write three complete complex sentences of your own that follow the same pattern (main clause + subordinate clause).



Design a Viking Shield

Viking Shields

Vikings used shields to protect themselves in battle. Their shields were made of **wood**, **metal** and **leather**. In the middle of the shield, there was a circle (an **iron boss**) made of metal which **protected** their hands. **Decorating** their shields was a huge part of the Vikings' culture. They used **colours** and **intricate** designs. Here are some examples of what they might have looked like:

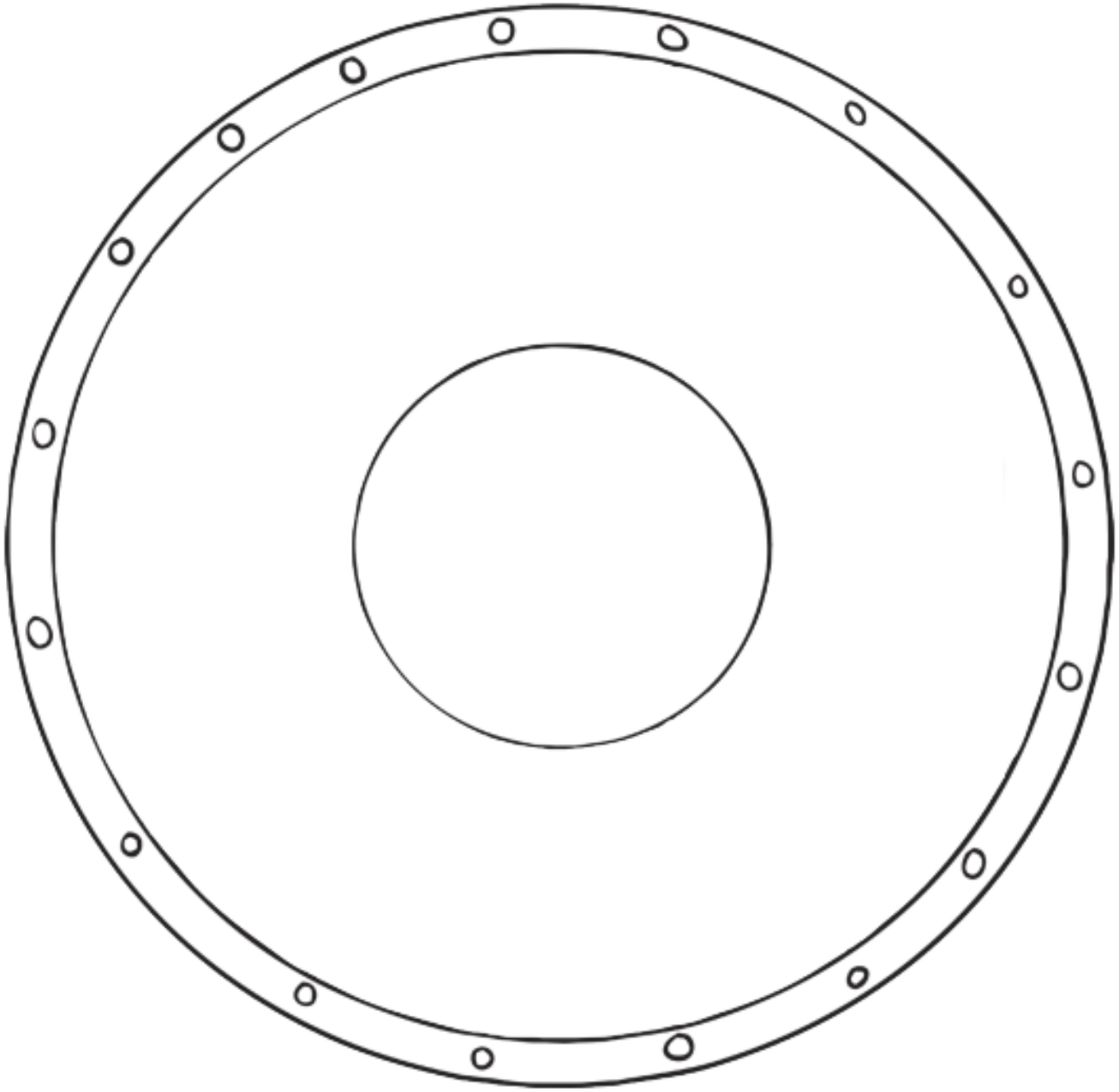


Viking Runes

The Vikings use special **pictures** to write **messages** and label things. These were called runes. Look carefully at the runes below. Can you write your name in **runes**? Why not add some runes to your shield design?

Design Your Viking Shield

Choose **four** colours (one must be a colour for the metal parts) and design your own Viking shield!



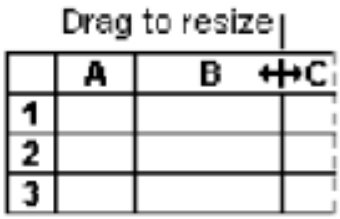
Creating Pixel Art in Microsoft Excel

Step 1: Set up Microsoft Excel.

1. Open Microsoft Excel by clicking on the program from the Start menu and choosing "Blank Workbook" by clicking on it.

2. Change your column width so that the cells are square rather than rectangular. Click on row A at the very top and while holding the mouse, drag across the column letters to highlight as many as you think you will need for your picture (usually going up through AZ is enough).

3. Roll your mouse up to where the column heading letters are, in between any column. Your cursor with change to a "+".

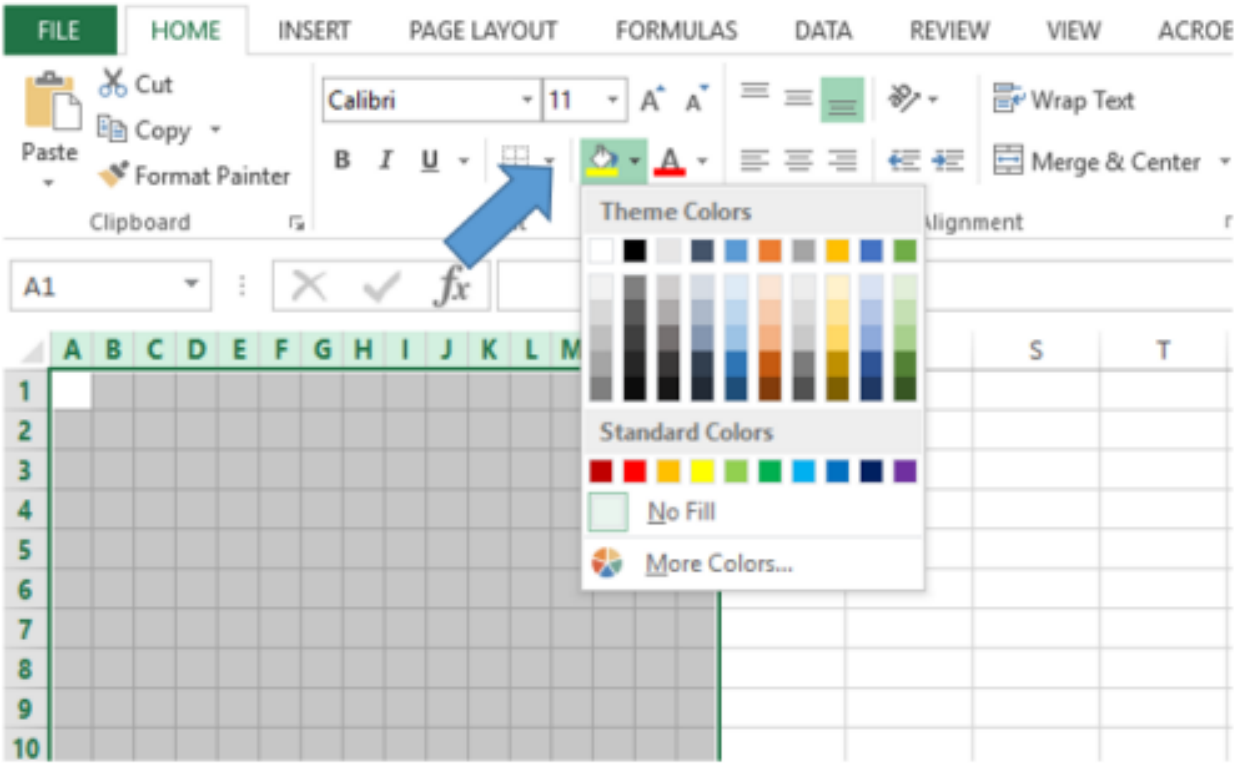


4. Drag one column until it is more narrow and is a square. This will make all the highlighted columns the same size and square.

5. Now you are ready to start your picture!

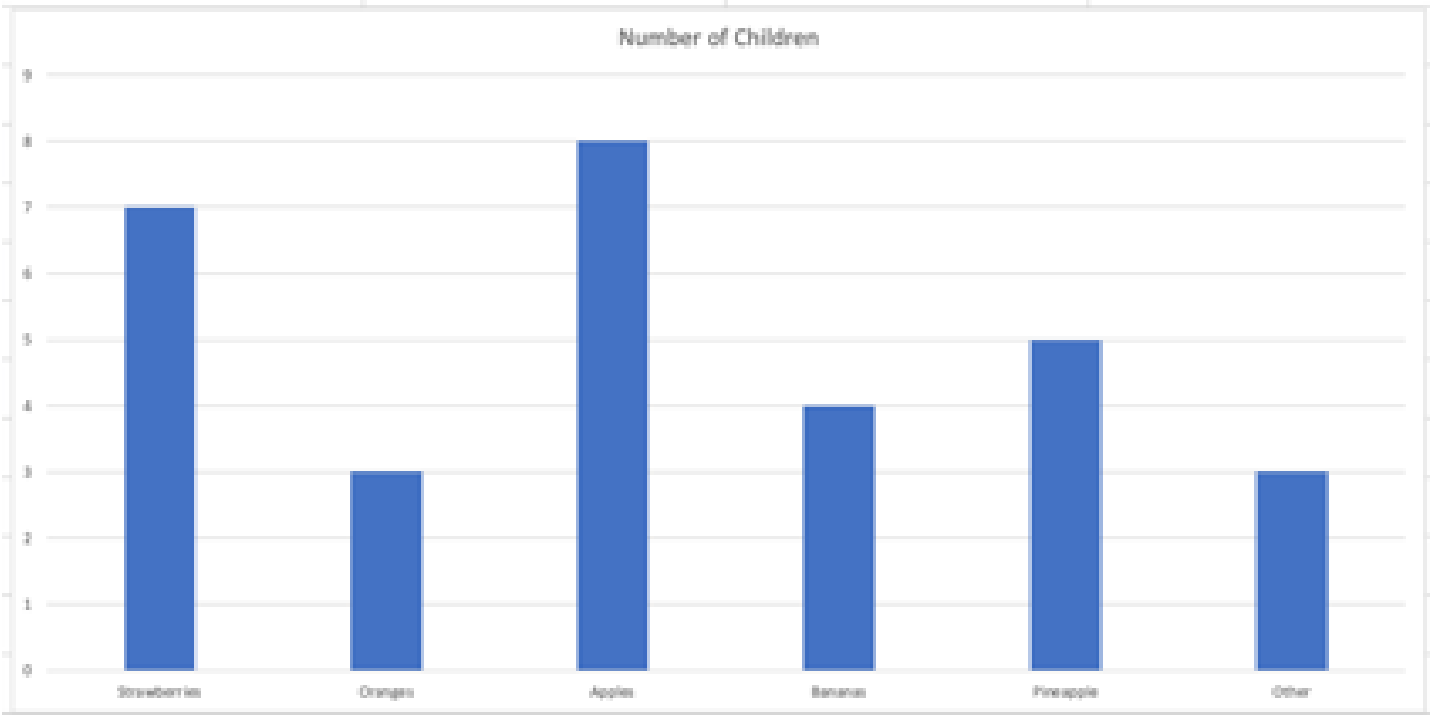
Step 2: Create a picture using the information in the sample.

1. Use the legend below to format the correct cells with the correct colour. Use the Fill Colour option from the menu to choose your colour (it looks like a little paint bucket):



Class A's favourite fruits

Favourite Fruit	Number of Children
Strawberries	7
Oranges	3
Apples	8
Bananas	4
Pineapple	5
Other	3



Sound Survey

Take a walk around indoors or outside to identify and describe the sounds you can hear! What is making each sound? Listen carefully. Can you hear high and low sounds? Can you hear loud and quiet sounds?

Fill in the table by describing the sounds you can hear.

What can you hear?	Is it high or low?	Is it loud or quiet?

How did these sounds reach your ears? Choose one of the sounds you heard and draw or write about how that sound travelled from its source to your ear.

circle

complete

consider

continue

decide

describe

different

difficult

disappear

early

February

forward

forwards

fruit

grammar

group

guard

guide

heard

heart

possible

potatoes

pressure

probably

promise

purpose

quarter

question

recent

regular