### Remote Learning Plan!

Hello Year 4!

During the next few weeks, we will be providing the children with remote learning on a daily basis. The work will be available on the website the day before e.g. Monday's work will be online Sunday. Everyday the remote learning will consist of:

- 1. English Lesson
- 2. Maths Lesson
- 3. Reading Lesson
- 4. One other curriculum lesson (PSHE, Art etc)

We will be available during the hours of 9am-4pm so please feel free to contact us on our new e-mail njs.year4@taw.org.uk

Some of the work provided will be split into the star levels that the children use everyday in class (1,2 3).

Stay safe everyone!

Miss Jones, Mrs Jukes, Mrs Kuczynska and Mrs Sisson.

### English:

Objective: To create a mind-map of ideas.

Yesterday, you looked at an invention of your choice. Next week, we are going to design something for Wallace and Gromit.

Inventors take the time to mind-map ideas and that is what we are going to do! In the middle of a mind-map place the words 'My Ideas'.

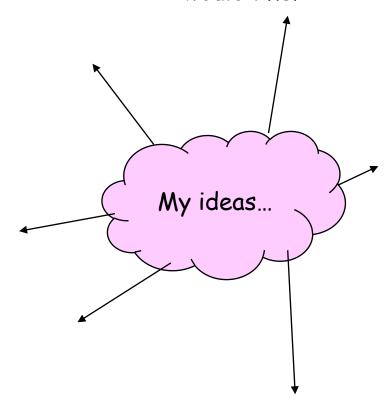
Come up with as many inventions as you can. Think of ideas that will change your life or help you everyday. For example: a homework machine or a robot that cleans the house.

Mind-map as many ideas as possible before completing the final task below...

Out of your ideas, pick your favourite two! Write a short explanation on why you think they would be good inventions and how they will help people.

BE AS CREATIVE AS YOU CAN BE!

An oven that cooks everything for you! You simply add the ingredients and press which meal you would like!



A lawn mower that recognises where the grass is on the garden and cuts it for you.

Maths: We will be focusing on Statistics.

Objective: To interpret Bar Charts.

Please watch the video link below and focus on the teaching strategies used to help you interpret Bar charts and retrieve data from them. How many children like the colour red? How many children like the colour green? What is the most popular colour?

### Bar Charts

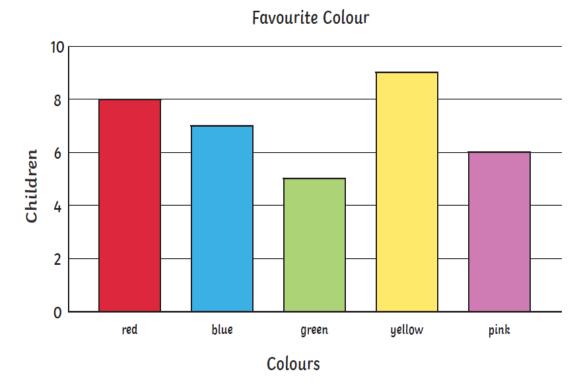
https://newportjuniorschool.org.uk/wp-content/uploads/2019/10/Calculation-Policy.pdf As we are beginning a new topic, please read the calculation policy which will offer guidance on how to set calculations out.

1\* - Today you will be focusing on bar charts and you will need to focus on the bar chart and answer the questions focusing on the data from the bar chart.

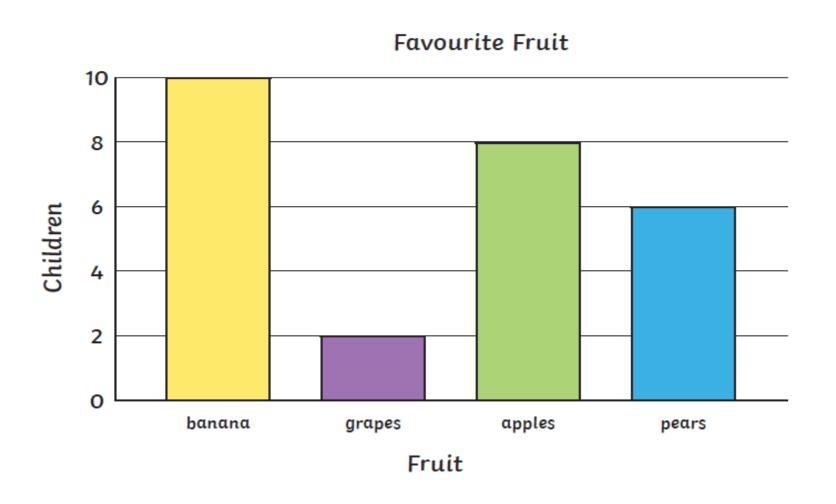
2\*/3\* - Today you will be looking at bar charts and you will need to look at the data carefully and answer the questions.

Extension: Today you will be focusing on the bar chart. Answer the true or false statement focusing on the bar chart.

# Interpreting Scaled Bar Charts



# Interpreting Scaled Bar Charts



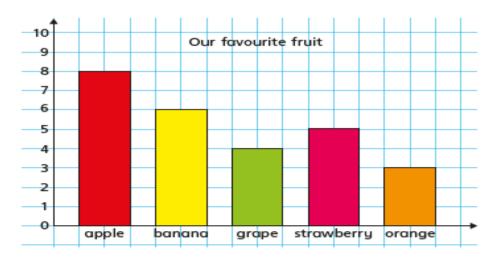
Ans	wer the following questions.			
1.	What is the favourite fruit?			
2.	How many children chose apples as their favourite fruit?			
3.	How many more children chose bananas than grapes, as their favourite fruit?			
4.	How many children chose apples or pears as their favourite fruit?			
W	Write your own questions for a friend.			
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_				

#### **Bar charts**



All the children in Class 3 choose their favourite fruit.

The bar chart shows the results.



Use the bar chart to answer the questions.

- a) What is the most popular fruit?
- b) How can you tell just by looking?
- c) What is the least popular fruit?
- d) How many more children like apples best than like grapes best?
- e) How many children are there in Class 3?

Some children are asked how they get to school.

The tally chart shows the results.

Method	Tally	Total
Walk	<del>1111</del> 1111	
Bike	111	
Car	<del>1111</del> 111	
Bus	<del>1111</del> 11	

- a) Complete the chart.
- b) Draw a bar chart to represent the data.
- c) Which chart do you prefer?
  What are your reasons?



The pictogram shows the number of ice creams sold each day.

Day	Number of ice creams sold <b>Key</b> = 5 ice creams
Monday	9999
Tuesday	88
Wednesday	999999
Thursday	99
Friday	9999
Saturday	999999999
Sunday	999999

Draw a bar chart to represent this data.



#### **Bar charts**



Some children are asked how they get to school.

The tally chart shows the results.

Method	Tally	Total
Walk	<del>1111</del> 1111	
Bike	117	
Car	<del>1111</del> 111	
Bus	<del>1111</del> 11	

- a) Complete the chart.
- b) Draw a bar chart to represent the data.



- c) Which chart do you prefer?
  - What are your reasons?



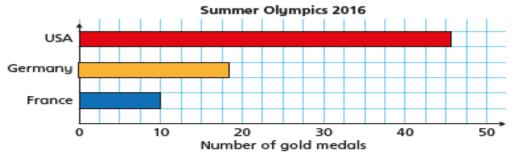
The pictogram shows the number of ice creams sold each day.

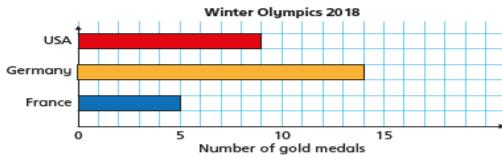
Day	Number of ice creams sold Key = 5 ice creams
Monday	9999
Tuesday	88
Wednesday	9999999
Thursday	99
Friday	9999
Saturday	999999999
Sunday	999999

Draw a bar chart to represent this data.



The bar charts show the number of gold medals won by some countries in the Summer and Winter Olympics.





Germany won more medals at the Winter Olympics than the Summer Olympics as the bar is longer.



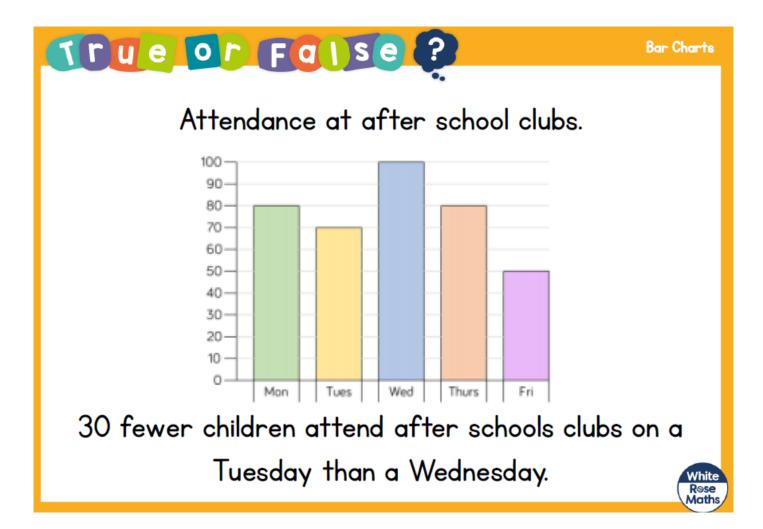
Is Mo correct?

How do you know?

b) Which country won the most medals in total?



#### **Extension Task!**



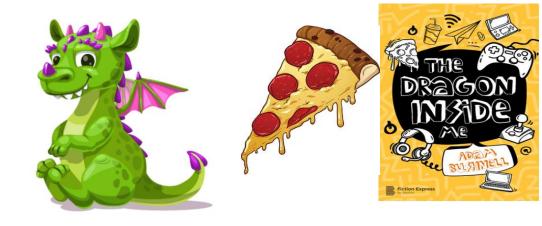
Please explore this statement by focusing on the Bar Chart. Look at the Y axis and focus on the number of children attending the after school clubs. Is the statement correct?

#### Reading:

Objective: To understand and use contractions accurately.

Sometimes, we join two words together to make them shorter.

We call these contractions.



Please complete the tasks on the next slides...

#### I am

If 'I' is one of the words in the contraction, the 'I' must be a capital letter.

When shortening 'am' with 'I', remove the 'a' and replace it with an apostrophe.

I am

=

I'm

The video below provides a recap on using apostrophes for contraction...

https://www.youtube.c om/watch?v=OyI8xH2 CXsw



If 'are' is one of the words in the contraction, remove the 'a' and replace it with an apostrophe.

we are

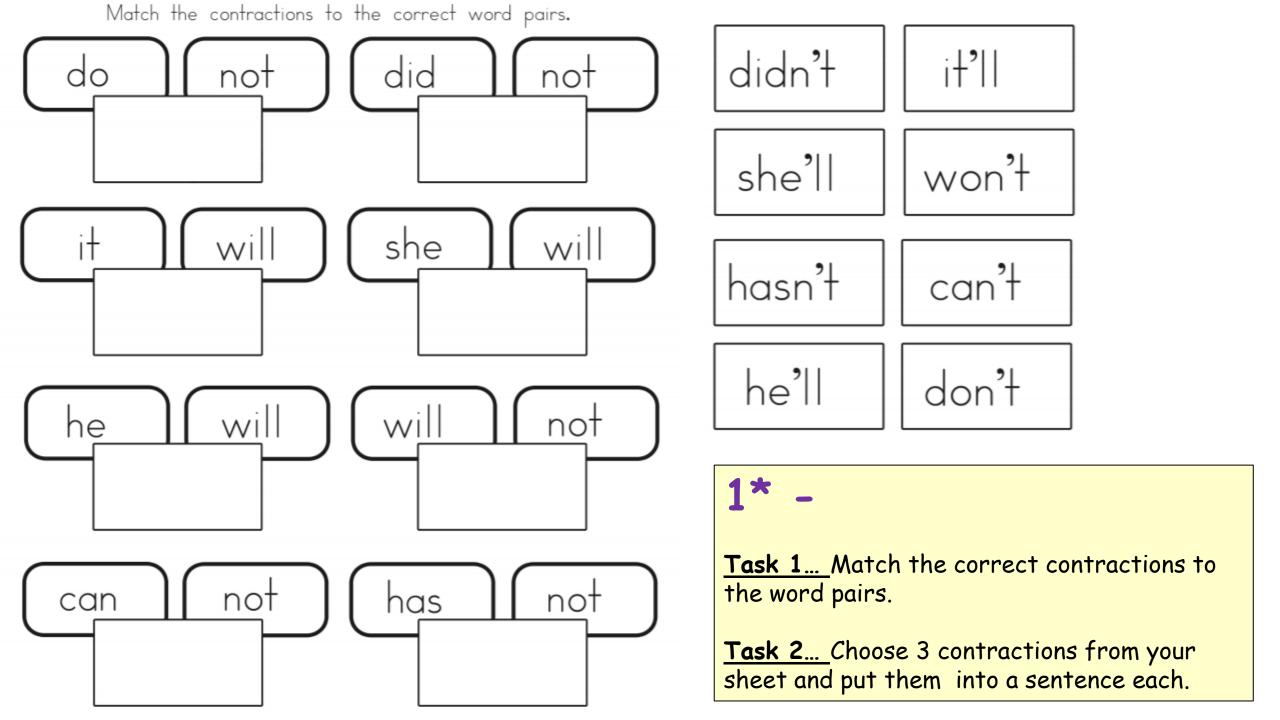
you are

they are

we're

you're

they're



I'll is short for I will.	it's is short for
you'll is short for	wouldn't is short for
he'll is short for	couldn't is short for
she'll is short for	shouldn't is short for
we'll is short for	haven't is short for
they'll is short for	you'd is short for

- 1 George said he <u>did not</u> call Ajay a loser, but Ajay <u>was not</u> sure.
- (2) "OK," said George. "I will show you the dragon. But my mum <u>cannot</u> see!"
- (3) "<u>He is</u> hiding under the bed, so <u>you will</u> need to be quiet," said George.
- 4 Pepperoni <u>did not</u> hide, but Ajay <u>could not</u> see him.
- 5 "I am worried <u>you are</u> seeing things that <u>are not</u> there," said Ajay.

2/3\* -

<u>Task 1...</u> Finish the statements in the box. The first one has been done for you.

<u>Task 2...</u> Re-write the sentences, putting the underlined word in the contracted form.

Other: Science

Objective: To understand how materials can change state through heating and cooling.

The following links will support the learning for today...

https://www.youtube.com/watch?v=ILKJuvjIFgQ

https://www.bbc.co.uk/bitesize/topics/zkgg87h/articles/z9ck9qt

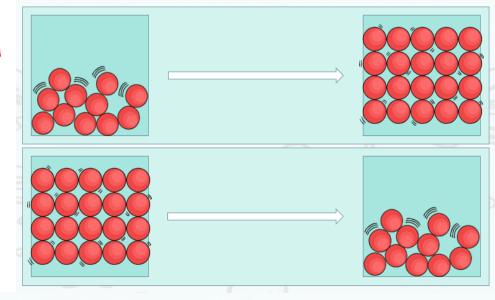
# What Makes Materials Change State?

When a solid turns into a liquid it is called melting.

The temperature at which a solid material melts is called its melting point. Different materials have different melting points

If a solid material is heated to its melting point, it will start to melt and will change state from a solid to a liquid.

In a solid, the particles are closely packed together and are vibrating on the spot. When a solid is heated, the particles start to move faster and faster. If enough heat is applied, the particles will have enough energy to move about. They are still close together, but can move over and around each other. At this point, the solid has melted to form a liquid.



# What Makes Materials Change State?

When a liquid turns into a solid it is called freezing.

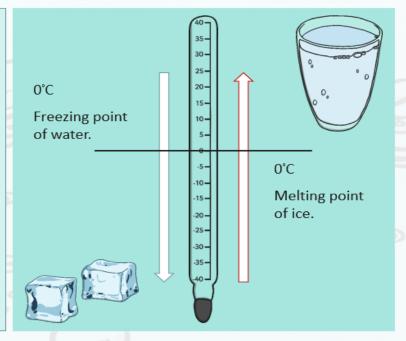
The temperature at which a liquid material freezes is called its freezing point. Different materials have different freezing points. It is important to remember that some materials have freezing points above 0°C. For example, the freezing point of iron is around 1550°C! Interestingly, this means its melting point is also its freezing point, just in reverse! Above this temperature, it will be liquid iron. Below this temperature, it will be solid iron.

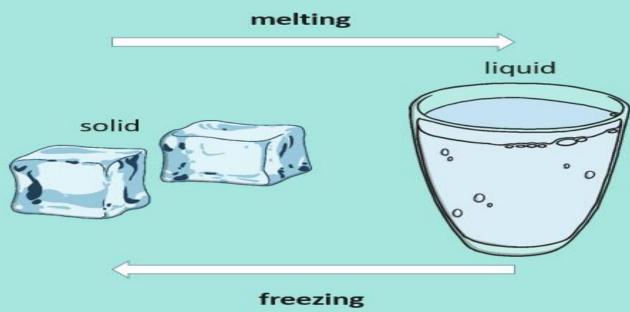
If a liquid material is cooled to its freezing point, it will turn from a liquid to a solid.

The particles in a liquid are close together, but can move quite quickly around and over each other. As it is cooled, the particles start to slow down. Eventually, they slow down so much that they only move gently on the spot, and a solid structure is formed. The material has frozen.

## **Melting and Freezing Points**

For most materials, their melting and freezing points are the same. Although it sounds strange, think of the melting and freezing point as a barrier. If the material is heated to a temperature higher than this, it will melt. If the material is cooled to a temperature lower than this, it will freeze.





Task -

Task 1... Use the table to answer the questions.

Task 2... What has caused the materials to change.

Remember a reversible change is something that can go back to their original state - ice can be changed back to water and back then into ice again. Irreversible changes are ones the you cannot change back bread can be turned into toast but can't be changed back to bread again.

Use the information in the table to answer the questions...

Material	Melting point (°C)
glass	1400
aluminium	660
chocolate	35
iron	1525
olive oil	-20
mercury	-39
gold	1064
tin	232
silver	962
salt	800
candle wax	60
sugar	185
ice	0

1.	Which	material	has	the	lowest	melting	point?
2.	Which	material	has	the	highest	melting	point?

- 3. Room temperature is around 22°C. Name three materials that are solids at room temperature.
- 4. Which materials are liquids at room temperature?
- 5. Which material requires the most heat to melt?
- 6. Which materials have a lower melting point than ice?
- 7. The average temperature in the Arctic is around -30°C. Which material would remain a liquid in the Arctic winter

Melting and freezing can cause materials to change; some of these changes may be reversible and some may not. Some materials can exist as both a solid and a liquid. Orange juice is a liquid but when frozen turns to ice and becomes a solid. Chocolate is a solid but when heated begins to melt and becomes a liquid.

Look at the materials below and say what has caused them to change (melting or freezing) and whether this change is reversible. If the change is caused by heating, colour the arrow RED and if it caused by cooling, colour the arrow BLUE.

