IPC – Chocolate

Hello Laurel, Magnolia and Sycamore.

Our new IPC topic for this term is chocolate.

In this unit, we will be finding out lots of exciting things including:

Geography: Where in the world chocolate comes from.

History: Who discovered chocolate and who took the first chocolate to Europe?

Science: What ingredients are in chocolate and what the melting point of chocolate is?

Design & Technology: How to make your own chocolate and how to design your own chocolate wrapper.

Entry Point

Time to think about chocolate! If you have been very well behaved you could ask your parent or carer to get you some chocolate to help you to complete your entry point. If not, think about the last time you had some chocolate and try to draw and complete this chart using all your senses.

Chocolate

Taste:

What does chocolate taste like?

How does it eating it make you feel?

Do you prefer sweet tastes such as chocolate or savourv tastes such as cheese?

Smell:

What does chocolate taste like?

If chocolate smelled like onion would we still like it?

If we couldn't smell chocolate could we still taste it?

See:

What does chocolate look like?

Why don't manufacturers make green or purple chocolate?

If chocolate were the colour of cabbage would we still eat it?

Hear:

Does chocolate have a sound?

What sound does it make when I chew it?

What sound does it make when I suck it?

Touch:

What does chocolate feel like?

After how many minutes and seconds will a piece of chocolate melt in your hand?

Does chocolate that has been refrigerated feel (and/or taste) different to chocolate kept at room temperature?

Knowledge Harvest

https://www.bbc.co.uk/newsround/18778746

Watch Charlie & The Chocolate Factory chocolate making scene

https://www.youtube.com/watch?v=OMFQtY6655E

Can you answer the following questions:

What do they expect to see?

What arrives at the factory?

Where does it come from?

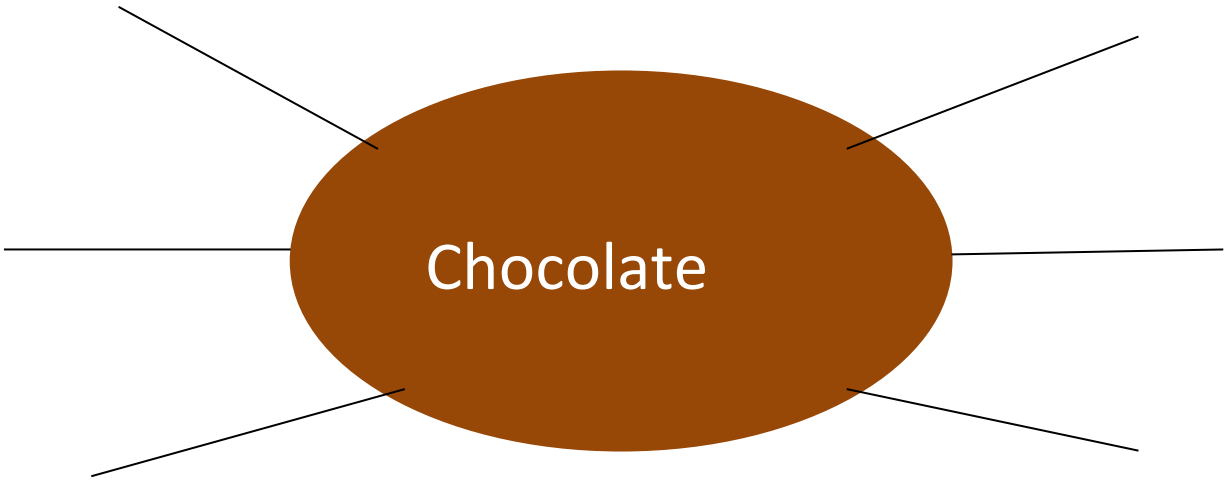
What goes in and what comes out?

What is produced by the factory?

How is it wrapped and packed?

Complete a Knowledge Harvest to mindmap everything you know about chocolate.

Write at least 3 things you would like to find out about chocolate.



Art Project

Check out this fantastic idea for making your own chocolate artwork!

https://www.tate.org.uk/kids/make/paint-draw/make-chocolate-painting

You don't have to have different types of chocolate. You could try to make a design using whatever type you have.

If you don't have any acetate, try making your design on baking sheets or the plastic lid of Tupperware box. We would love to see your efforts.

Have fun!

Science Experiment

Watch these clips about melting chocolate.
https://www.bbc.co.uk/programmes/p04ts97w

https://www.bbc.co.uk/food/techniques/melting_chocolate

You've no doubt experienced chocolate melting on a hot day, so let's do some experiments to recreate these conditions as well as a few others before comparing results and coming to some conclusions.

Give this fun science experiment a try and find out!

What you will need:

- Small chocolate pieces of the same size (chocolate bar squares or chocolate chips are a good idea)
- Paper plates
- Pen and paper to record your results

Instructions:

1. Put one piece of chocolate on a paper plate and put it outside in the shade.
2. Record how long it took for the chocolate to melt or if it wasn't hot enough to melt then record how soft it was after 10 minutes.
3. Repeat the process with a piece of chocolate on a plate that you put outside in the sun. Record your results in the same way.
4. Find more interesting locations to test how long it takes for the chocolate pieces to melt. You could try your school bag, hot water or even your own mouth.
5. Compare your results, in what conditions did the chocolate melt? You might also like to record the temperatures of the locations you used using a thermometer so you can think about what temperature chocolate melts at.

Results:

Place	Time it took to melt	Solid or liquid
In the shade		
In the sun		
In my mouth		
Above hot water		
Other place		

Conclusions:

Can you write some sentences about what you found out?

At a certain temperature your chocolate pieces undergo a physical change, from a solid to a liquid (or somewhere in between). On a hot day, sunlight is usually enough to melt chocolate, something you might have unfortunately already experienced.

You can also reverse the process by putting the melted chocolate into a fridge or freezer where it will go from a liquid back to a solid.

The chocolate probably melted quite fast if you tried putting a piece in your mouth, what does this tell you about the temperature of your body?

For further testing and experiments you could compare white chocolate and dark chocolate, do they melt at the same temperature?

How about putting a sheet of aluminum foil between a paper plate and a piece of chocolate in the sun, what happens then?

Draw a labeled diagram of what you did: