

Key Vocabulary

Solid	Materials which keep their shape unless a force acts on them, always using up the same amount of space.
Liquid	Materials which take the shape of their container, can change shape and can flow or be poured.
Gas	Materials that can spread out completely to fill their container or room. No fixed shape.
Evaporation	When a liquid turns into a gas.
Condensation	When a gas turns into a liquid.
Melting	When a solid turns to a liquid.
Freezing	When a liquid turns to a solid because of a lower temperature.
Precipitation	Rain, snow, hail or sleet
Run-Off	Water then moves across the surface of the land and combines to form lakes, rivers, seas and oceans.
Infiltration	Water that moves deep into the soil

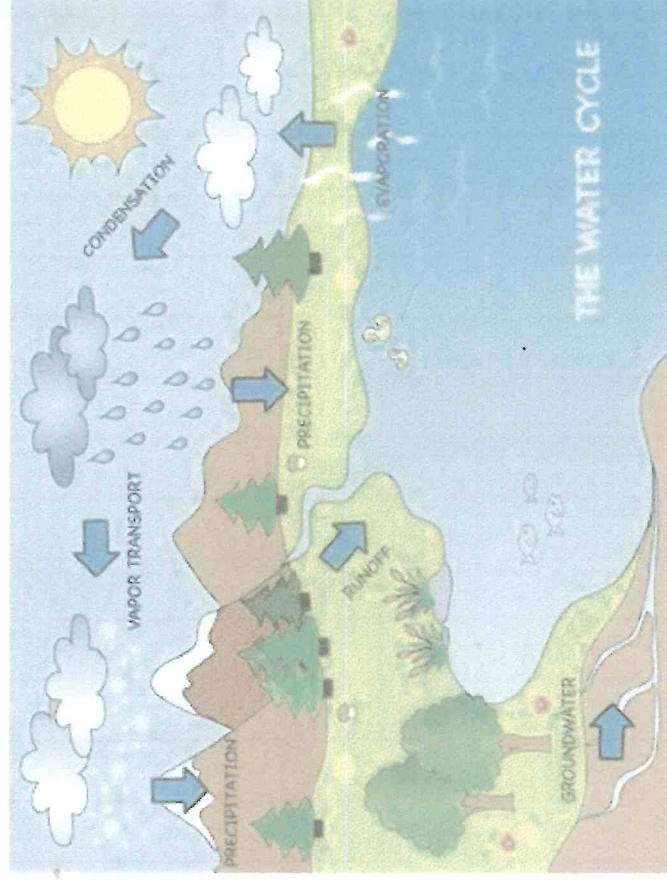
Stem Sentences

"The temperature the temperature the speed the evaporation rate"

"I order to make my investigation a fair test I will _____"

"My results are accurate / inaccurate because _____"

The Water Cycle



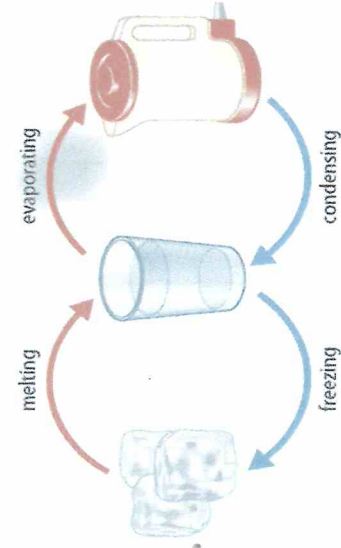
Equipment



Thermometers are used to measure temperature.

The unit of measure is degrees Celsius (°C)

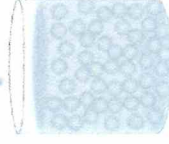
Changing States of Matter



Liquid

- Pool don't pile
- Take the shape of their container
- You cannot hold liquids in your hands – it all drains away!

liquid

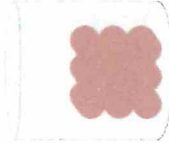


Solid

- Hard
- Difficult to compress
- Keep their shape independently

You can hold solids in your hands.

solid



Gas

- They usually cannot be seen
- They fill their containers
- They escape from unsealed containers
- They spread out to fill all the space available.

You cannot hold gas in your hands – it floats away!

gas



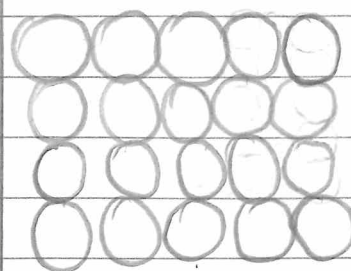
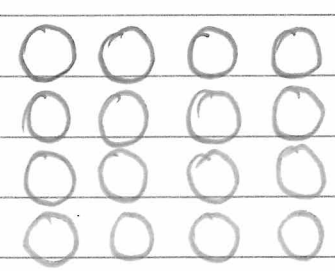
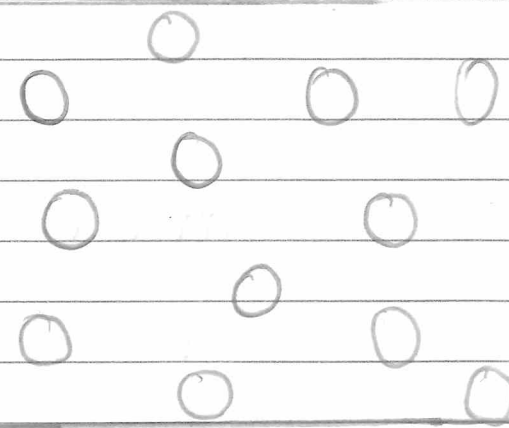
Wednesday 4th September 2024

What are solids, liquids and gases?

Solid	Liquid	gas
- table - cupboard - globe - book - pencil	- blood - oil - water - mercury - hand sanitiser	- air - helium - carbon dioxide

Wednesday 11th September 2024

What are solids, liquids and gases?

Solids	Liquids	Gases
		
table cupboard globe book pencil	blood oil water mercury hand sanitiser	air helium carbon dioxide

Wednesday 18th September 2024
What are the properties of solids,
liquids and gases?

1. Solids ✓

2. Liquids ✓

3. Gases ✓

4. Particle ✓

Solids	Liquids	Gases
- ice cubes - gold - brick - wood - apple - sand - butter - clouds	- blood - ice cubes, solid - water - honey - soup - pepsi - milk - butter, solid - milk - bubble - clouds	- Oxygen - carbon dioxide - petrol - steam - wind - bubble - clouds

Wednesday 2nd October 2024

What is melting and freezing?

RP

1. Because the particles can move a little bit... you can pour it.

2. False ✓

3. permeable ✓

4. Is all insects... none of them have spines.

5. Celsius... degree Celsius

Enquiry

How can you measure/record a melting point of a material?

Material	Predicted Melting Point in Degrees Celsius	Order in which materials will melt
Ice 1	0°C	1
Butter 2	30°C	2
Chocolate 3	100°C	3

Equipment

- Tea light holders
- Tea light and small metal trays
- tongs
- Thermometers
- Ice
- butter
- chocolate

Method

1. Place the first material to be tested into the beaker.
2. Using tongs, place the beaker on top of the lit tea light holder (teacher to light the candle).
3. Put thermometer into the beaker and watch for signs of melting. Record melting point.
4. Repeat for the other materials being tested.

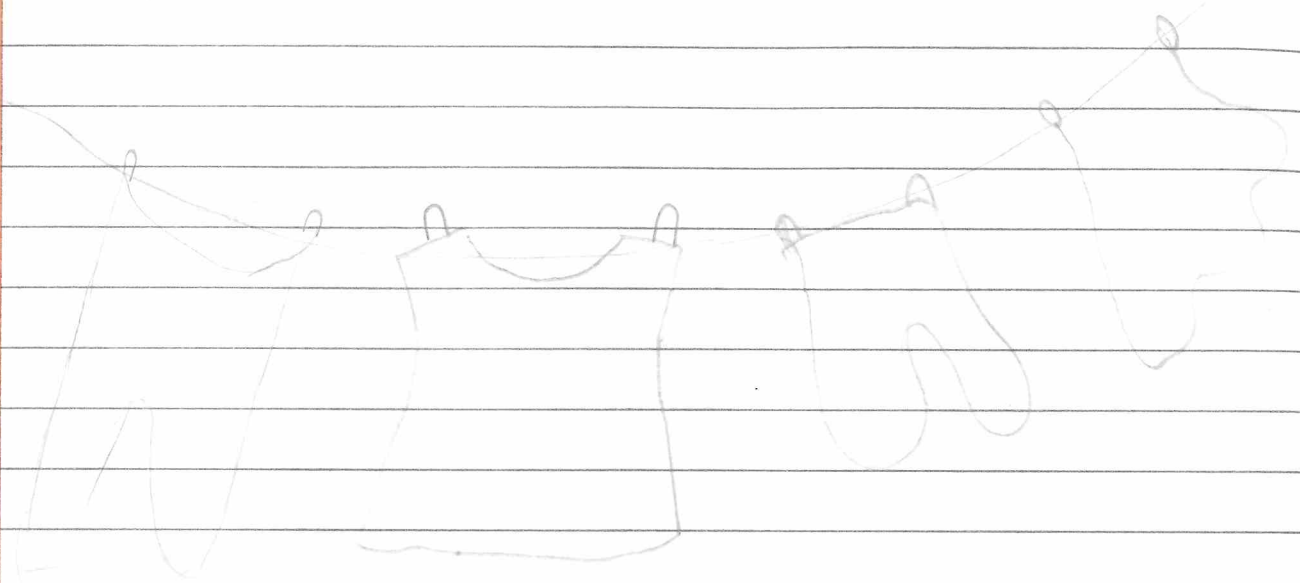
Material	Recorded Melting Point in Degrees Celsius	Order in which materials melted
Ice	15°C	1
Butter	40°C	2
Chocolate	30°C	3

Conclusion

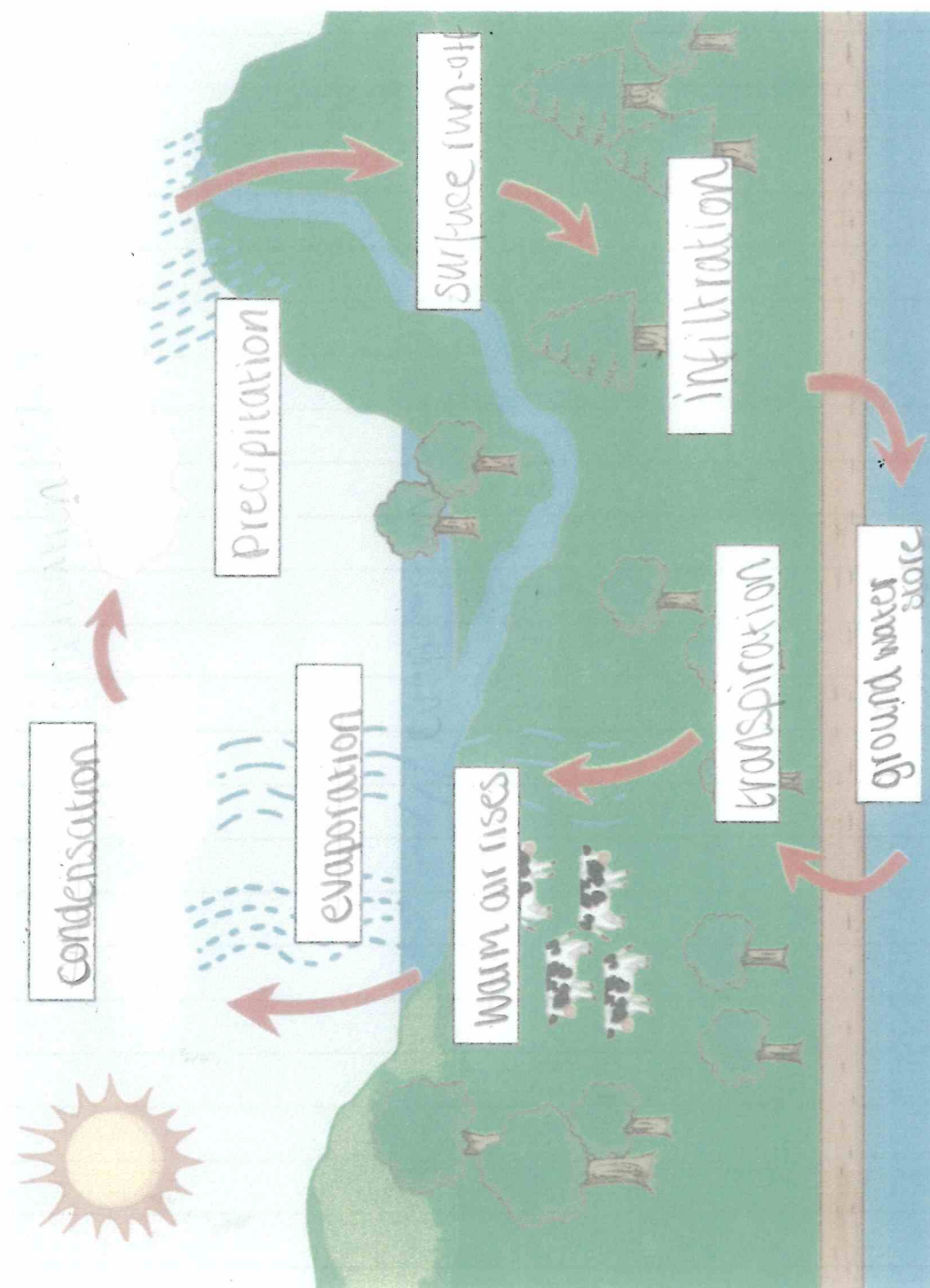
My prediction was incorrect because my guess was super high. I found out that the materials had different melting points. The heavier the particles in the higher

Thursday 10th October 2024
What is Evaporation and condensation

Evaporation



Wednesday 23rd October 2024
How does the water cycle work?



Wednesday 6th November 2024

How does temperature affect evaporation rate?

Investigation - How does temperature affect evaporation rate?

Predication:

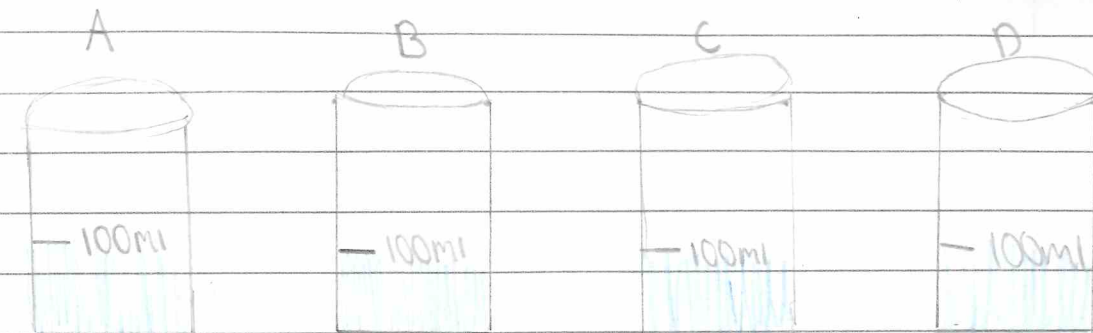
I predict that the dish on top of the radiator will evaporate faster because it gives out heat.

We will need:

- 4 beakers
- Water
- Data loggers
- Marker

Method

1. Fill each measuring container with 100ml of water.
2. Place the 4 containers into different locations.
3. Take the temperature of these locations.
4. At the same time each day the water level on the containers using a marker and take a picture.
5. Record the volume of the container onto a bar chart.



Next to the
door

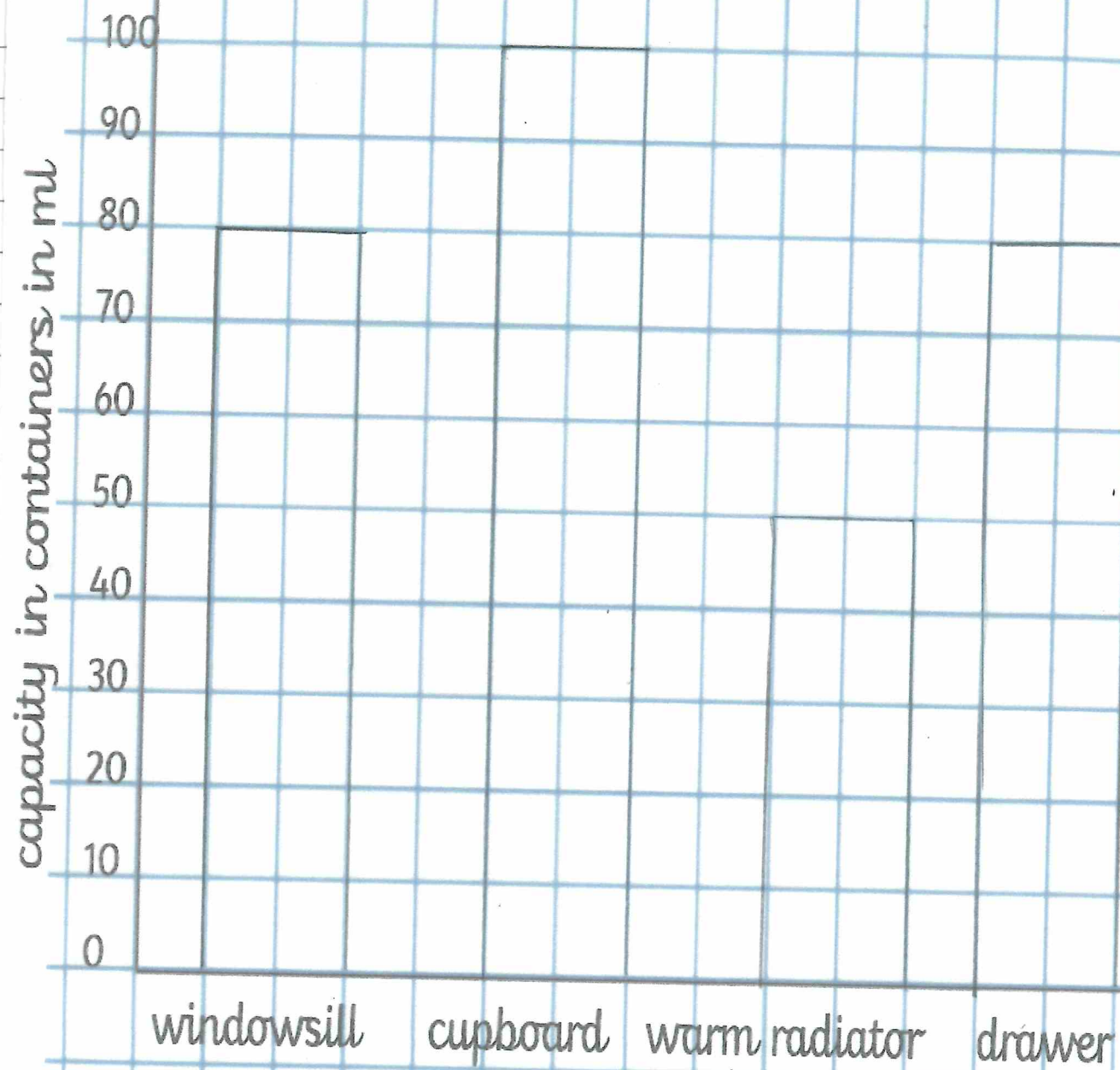
on top of
the radiator

Inside the
cupboard

on the
windowsill

Day: Wednesday	1	2			
Beaker Location:	Volume of water remaining in ml				
A Next to the door	100ml	100ml	100ml	100ml	80ml
B on top of the radiator	100ml	60ml	60ml	50ml	50ml
C inside the cupboard	100ml	100ml	100ml	100ml	100ml
D on the windowsill	90ml	90ml	80ml	80ml	80ml

How temperature affects evaporation rates

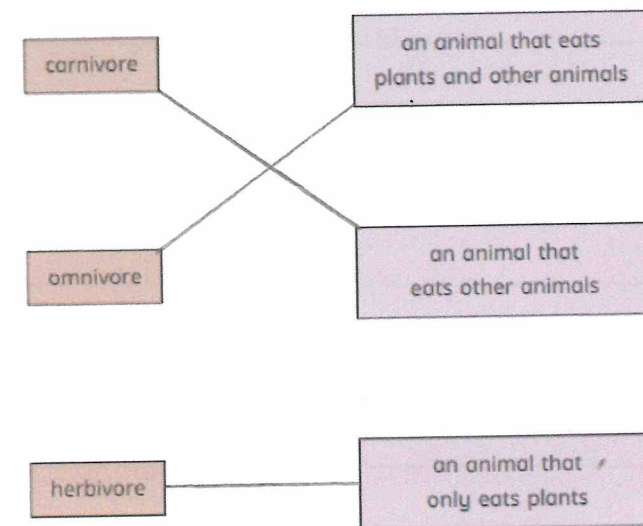


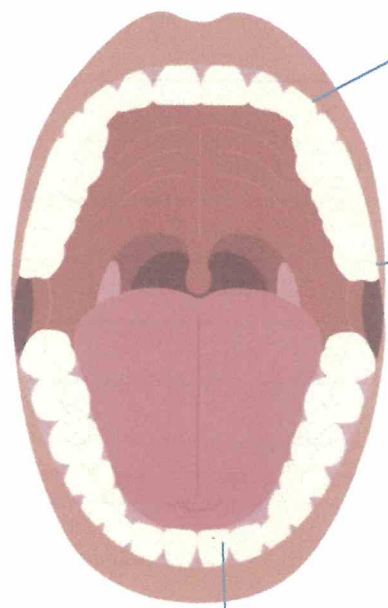
Conclusion

The hotter the location the faster the rate of evaporation.

Wednesday 13th November 2024

Why do we have teeth?





Name of tooth - canines
Function (job) - to rip
and tear food ✓

Name of tooth - molars
Function (job) - To grind
and crush into
smaller pieces ✓

Name of tooth - incises
Function (job) - To cut
and bite food ✓



incises ✓

canines ✓

molars ✓

Wednesday 20th November 2024

Tooth decay

Retrieval

1 Canines, incisors and molars ✓

2 An Omnivores eat animals and plants ✓

3 A skeleton helps us move ✓

Line of enquiry: Questions...

How does a substance effect the rate
our teeth rot.

In your books:

I predict that Coke will have the
greatest effect on the egg shell.

Equipment

- Coke, Orange Juice, water, milk.
- Clear cups or glasses (one for each drink) with cover.
- 4 eggs.

Method

1. Label each cup with the liquid and carefully add a hard-boiled egg to each cup. Optional: include cup and put some tooth paste on a small area or whole egg before soaking.
2. Pour 1 cup of each type of drink into its own cup. Make sure to include one cup with water (control). Soak for 48 hours at room temperature or refrigerator
3. Take out soaked hard-boiled eggs and make observations about its colour and texture. Compare each experimental eggshell to the "control" eggshell that was just soaked in water.
4. Can you brush off the stains using tooth brush?
5. Record your observations and any conclusions you make about how the sweetness or acidity of drinks affect teeth.