Boiling and Evaporation Experiment

LO: TO KNOW WHAT HAPPENS TO THE WATER IN A KETTLE WHEN IT BOILS.



What does the word '<u>evaporation</u>' mean?

What does the word '<u>boiling</u>' mean?

What happens to the water inside a kettle when it boils?

How do you know when a kettle has heated all the water?





Water Evaporation Experiment

https://www.youtube.com/watch?v=kmmEV4ohSDA

Control + click to follow the link or copy the link and paste in a search engine of your choice.

Pupil Challenge

Tuesday 23rd February

Dear Year 3,

My name is Professor Marvel and I would like your help. I want to carry out a good experiment to test the process of boiling and evaporation. I <u>curious</u> about what happens to the water inside a kettle when it has boiled. Do you think you can help me?

Many thanks,

Professor Marvel



What do I want to find out?

I want to find out.....



Oracy: What experiment could you design, using the materials below, to test evaporation?









What will your experiment measure? (dependent variable - amount of water remaining)

In my experiment I will measure ...

What will you ensure stays the same during the tests? (the same amount of water)

To make sure the test is fair, I will keep the ...

Which material do you think will be the most waterproof? Make a prediction.

Method

We are going to measure the amount of water we pour into a kettle. Then we will boil the kettle. After the kettle has boiled we will pour the water into a measuring jug to see how much water there is left.

Prediction

I think that:

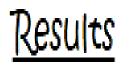




First, put some water into a measuring cup. Use a felt tip or pen and draw a straight line against the water level. Next, pour the water into an <u>empty</u> kettle.

Wait for the kettle to boil. What do you notice coming out of the spout of the kettle?

When the kettle has boiled and switched off, ask an adult to pour the remaining water back into the measuring jug. Draw a line against the water line to show the new water level. What do you notice?



Amount of water at the start

Amount of water after boiling

<u>Conclusion</u>

Put the following labels on the diagram to show what happened in your experiment

Then write a sentence to explain what happened and why below.

Liquid

Heat Steam

Gas

Evaporation



Reflection

What happens to the mirror or walls in your bathroom when you have a warm shower or bath? Is this an example of evaporation?

