

Wednesday 13th July 2021

WALT: Plan a fair test

Vocabulary:

solution

solute

solvent

dissolve

soluble

insoluble

hypothesis

fair test

Prior learning:

What does it mean to be a scientist?

What are the definitions of **insoluble** and **soluble** ?

I am a scientist...

I want to **explain** the world around me.

I **question** everything.

How?

What?

Why?



I make a **prediction**.

I **investigate** then use what I find out to **explain**.

I **change my mind** after finding things out.

Learning Journey

3. Plan, write
and edit/revise
a scientific
report

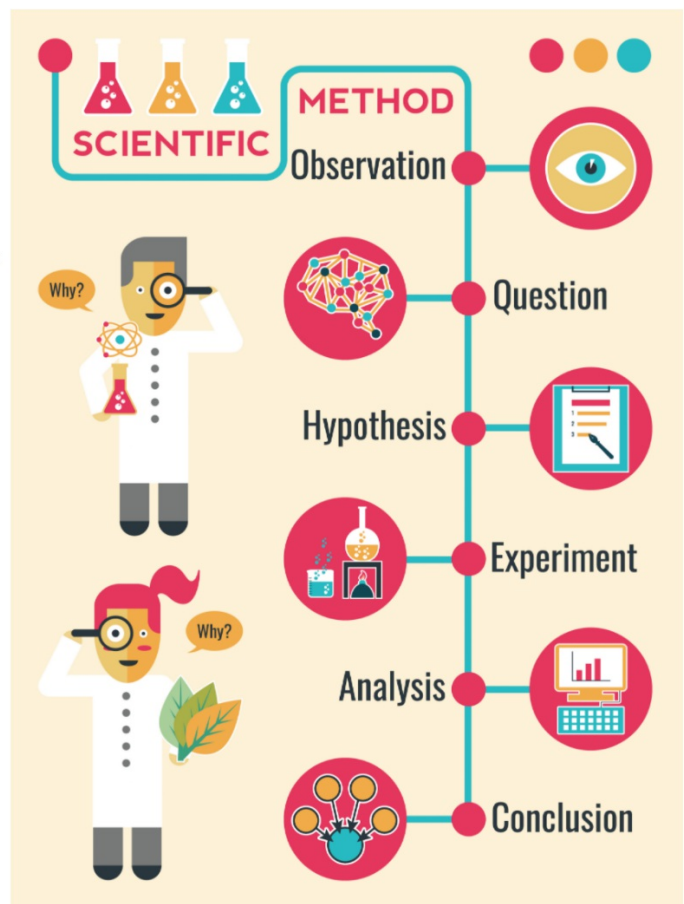


1. Plan a new
fair test by
changing an
independent
variable

2. Conduct a fair
test and record
the results

We have conducted an investigation to discover whether different materials are **soluble** or **insoluble** in water and written our results into a scientific report.

As scientists, we are going to conduct another fair test, and investigate whether changing an independent variable will effect the results of our investigation



As scientists, how do we keep our investigation a fair test?



How many variables will we change each time?

Let's recap our last experiment

The aim of the investigation is to determine whether all materials are soluble.

To ensure the test is fair, there are a number of controlled variables. The amount of water the material is stirred into is always ___ ml. The amount of material is always _____. The number of times the material is stirred into the water will always be _____.

The independent variable that will be deliberately changed each time is _____.

The dependent we are measuring is whether the material will dissolve in the water or not.

We are still investigating whether different materials are soluble or insoluble in liquid

But we are going to be changing our independent variable to see how that affects our results.

What independent variable could we change instead of the materials we are mixing with the water?



Today we will be planning the first 5 parts of our scientific report.

Will much change from our plan for the original experiment?



Title of experiment:		1.
Purpose/Introduction:		2.
Hypothesis		3.
Materials		4.
Method		5.
Results		
Discussion		
Conclusion		

Title:

Written as a class

Introduction:

Full sentence written as a class. Why are we investigating this?

Hypothesis:

What do you predict will happen? Why?

Materials:

What will we need?

Method:

How will the investigation take place?
How will we ensure it is a fair test? Which variables need to be the same each time?

Title of experiment:	
Purpose/Introduction:	
Hypothesis	
Materials	
Method	
Results	<p>These parts will be planned after we have conducted our experiment!</p>
Discussion	
Conclusion	

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