Key Stage 1 - SC1

National Curriculum SC1 Expectations – Key Stage 1

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions

What will you measure/ observe?

We want to find out…

If the height that an asteroid or comet falls from effects the size of the crater formed.

How will you make it fair?

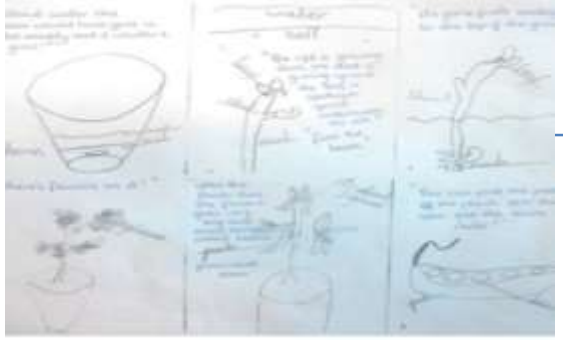
Planning

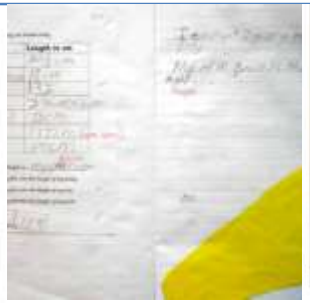
What will you do?

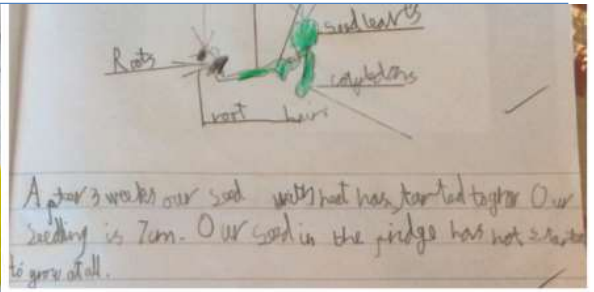
How will you keep yourself safe?

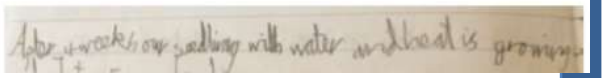
Equipment

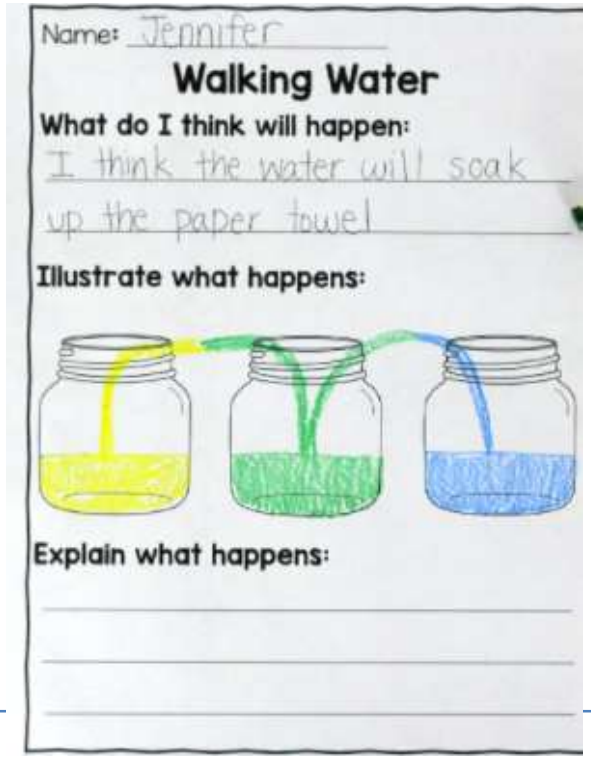
Recording Exemplification

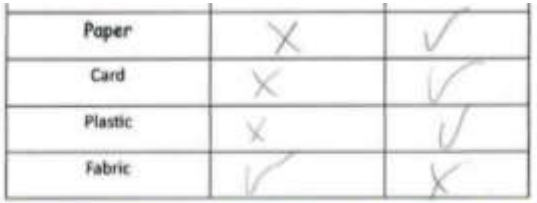


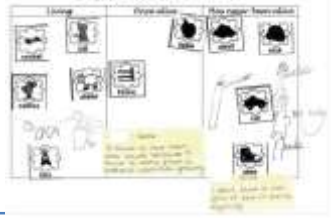












Year 3 and 4- SC1

National Curriculum SC1 Expectations – Year 3/4

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings

Hypothesis

Sources


Equipment

We could change...			We could measure/ observe ...		
We will change ...			**We will measure/ observe ...**		

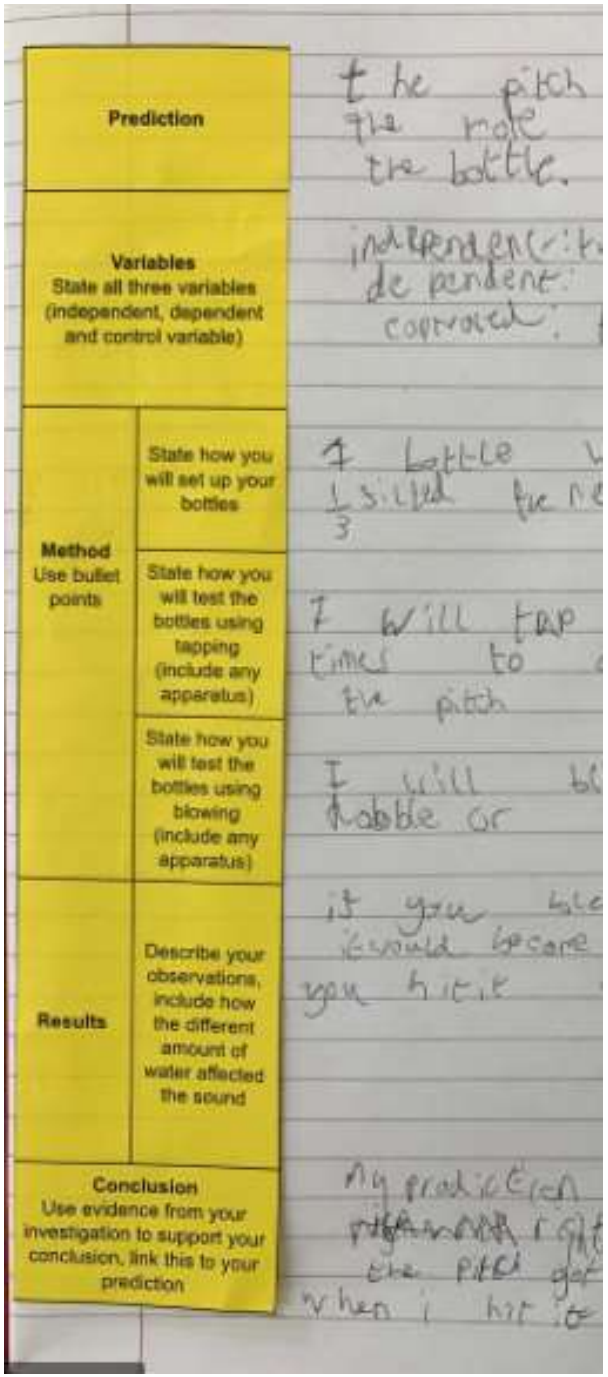
Planning

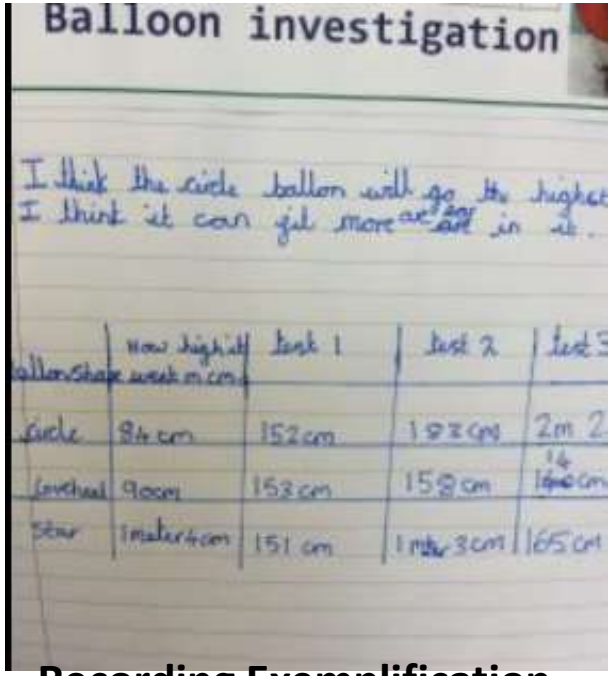
How will you use the equipment?

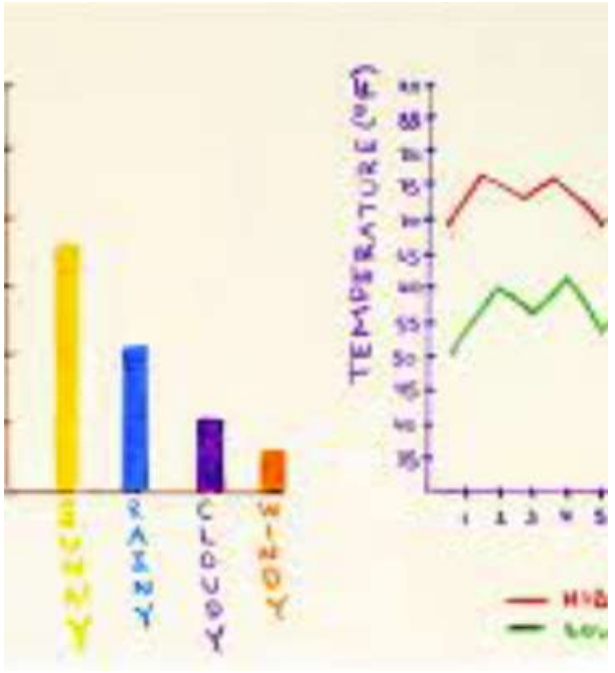
How to control/change and measure variables?

What will you record?

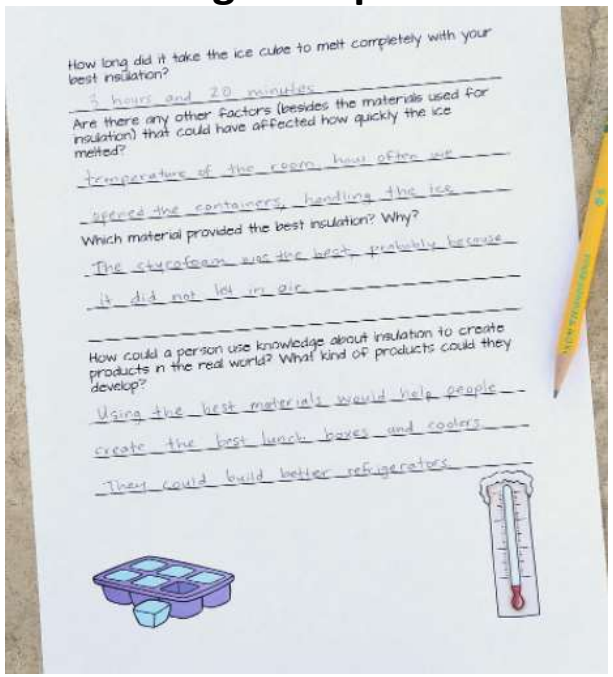
What are the hazards and how will you minimise the risk?

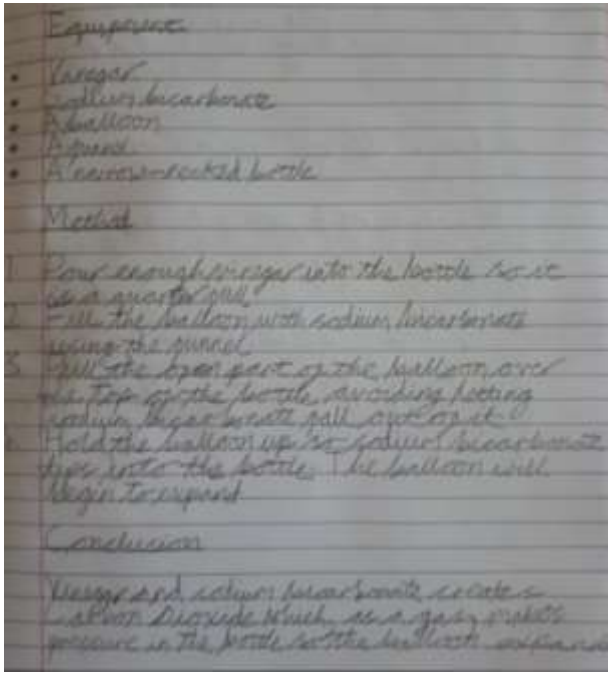






Recording Exemplification





Year 5 and 6 - SC1

National Curriculum SC1 Expectations – Year 5 and 6

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments

Independent

Dependent

Control

-
-
-
-

Sources


Equipment

Hypothesis

?

Always mention your independent and dependent variable

Context

Who would use this science?
Why would it be useful?
How would they use it?

Planning

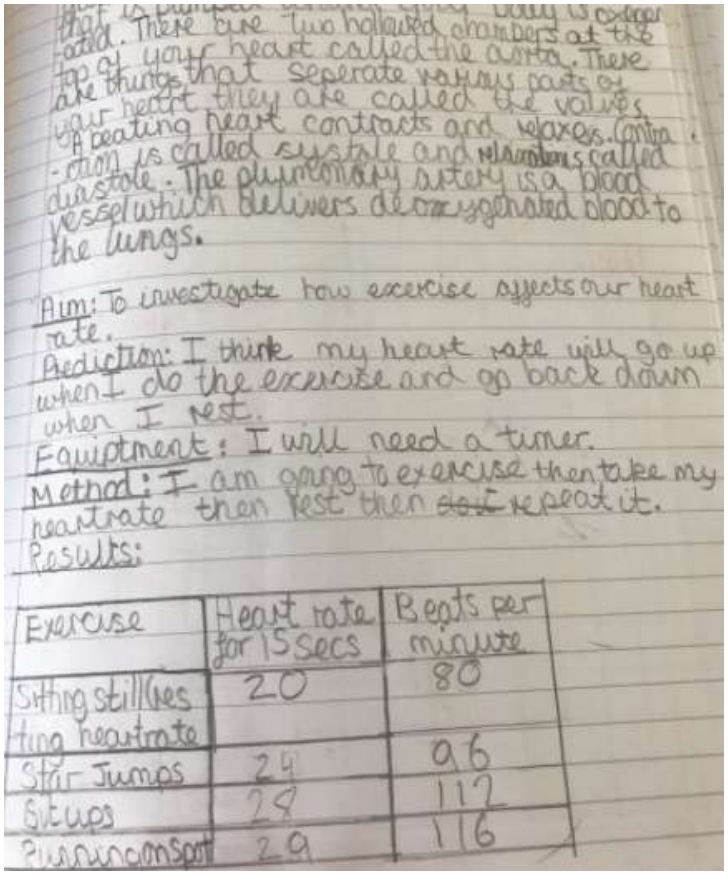
How will you use the equipment?

How to control/change and measure variables?

What range and interval will you use?

What will you record?

What are the hazards and how will you minimise the risk?



...ated. There are two hollowed chambers at the top of your heart called the aorta. There are things that seperate various parts of your heart they are called the valves. A beating heart contracts and relaxes. Contraction is called systole and relaxation is called diastole. The pulmonary artery is a blood vessel which delivers deoxygenated blood to the lungs.

Aim: To investigate how exercise effects our heart rate.

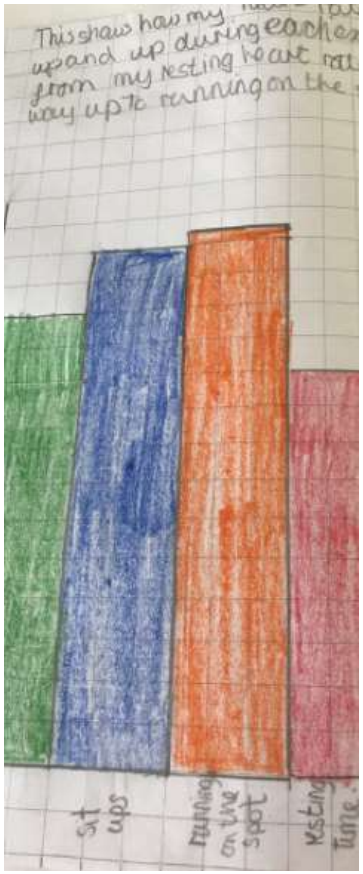
Prediction: I think my heart rate will go up when I do the exercise and go back down when I rest.

Equipment: I will need a timer.

Method: I am going to exercise then take my heartrate then rest then ~~stop~~ repeat it.

Results:

Exercise	Heart rate for 15 secs	Beats per minute
Sitting still(resting heartrate	20	80
Star Jumps	24	96
Sit ups	28	112
Running on the spot	29	116



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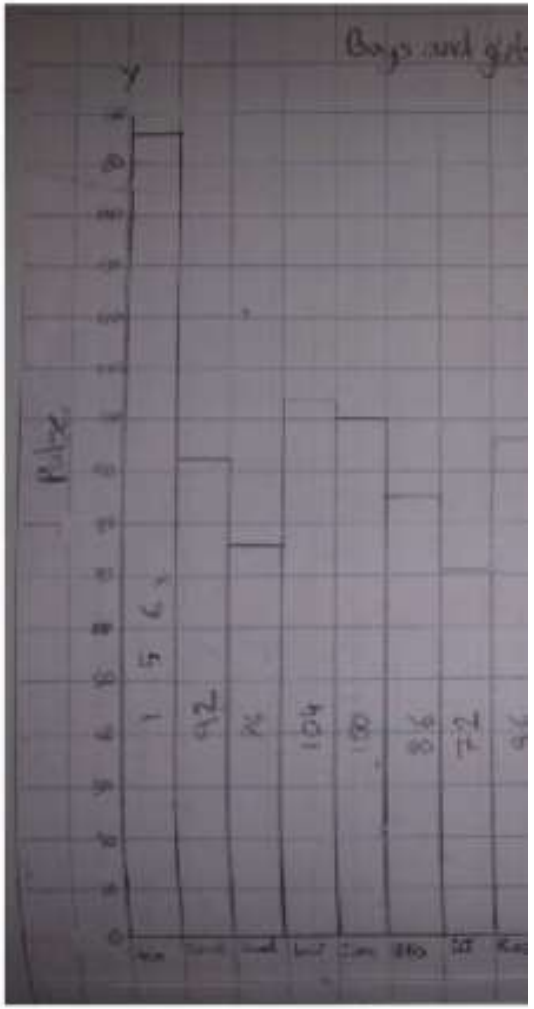

Mrs Wilcox wanted us to do experiment in science today with water and a alkaseltzer tablet We investigated what factors effect the rate of reaction We placed a quarter of an alkaseltzer tablet in a film canister and mixed it with different amounts of water. We wanted to know if the amount of water would change the speed of reaction.

Once the tablet had dissolved into the water, the film canister filled up with gas called Carbon Dioxide. Eventually this made the chemical substances explode!

the temperature every hour from 6 am to 6 pm.
The line graph below shows the results.

Recording Exemplification