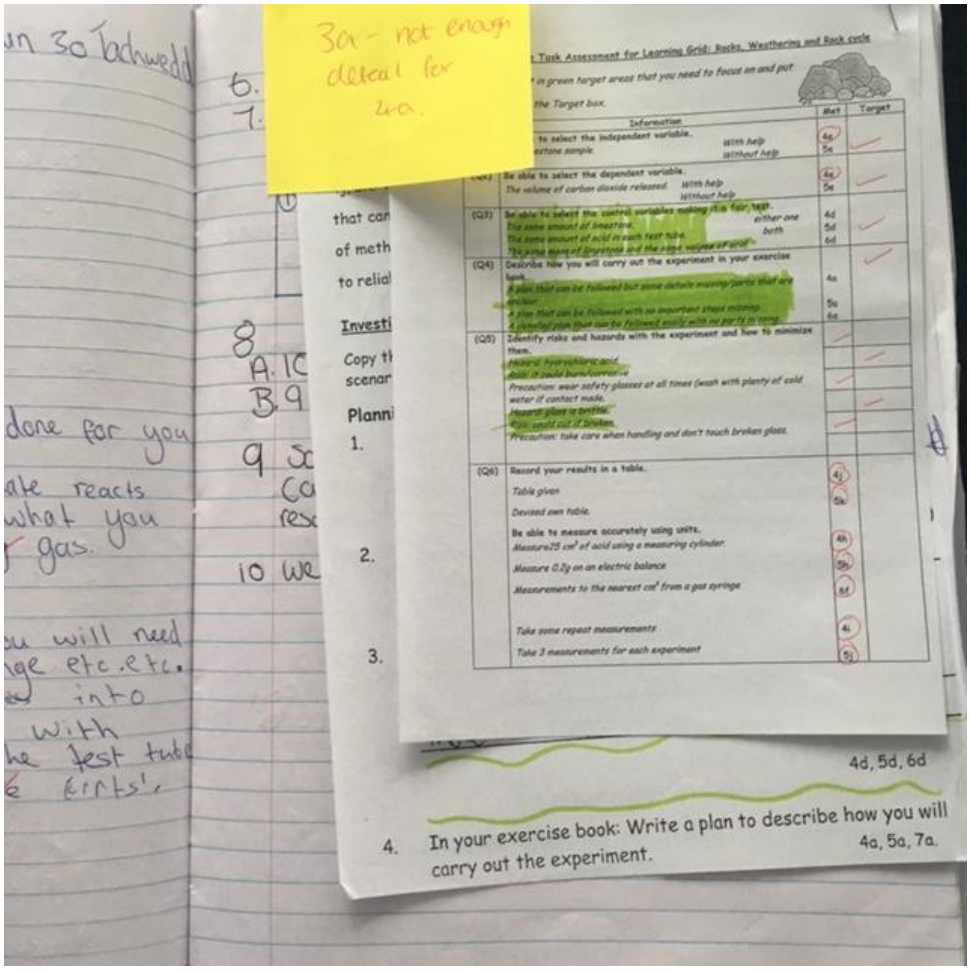
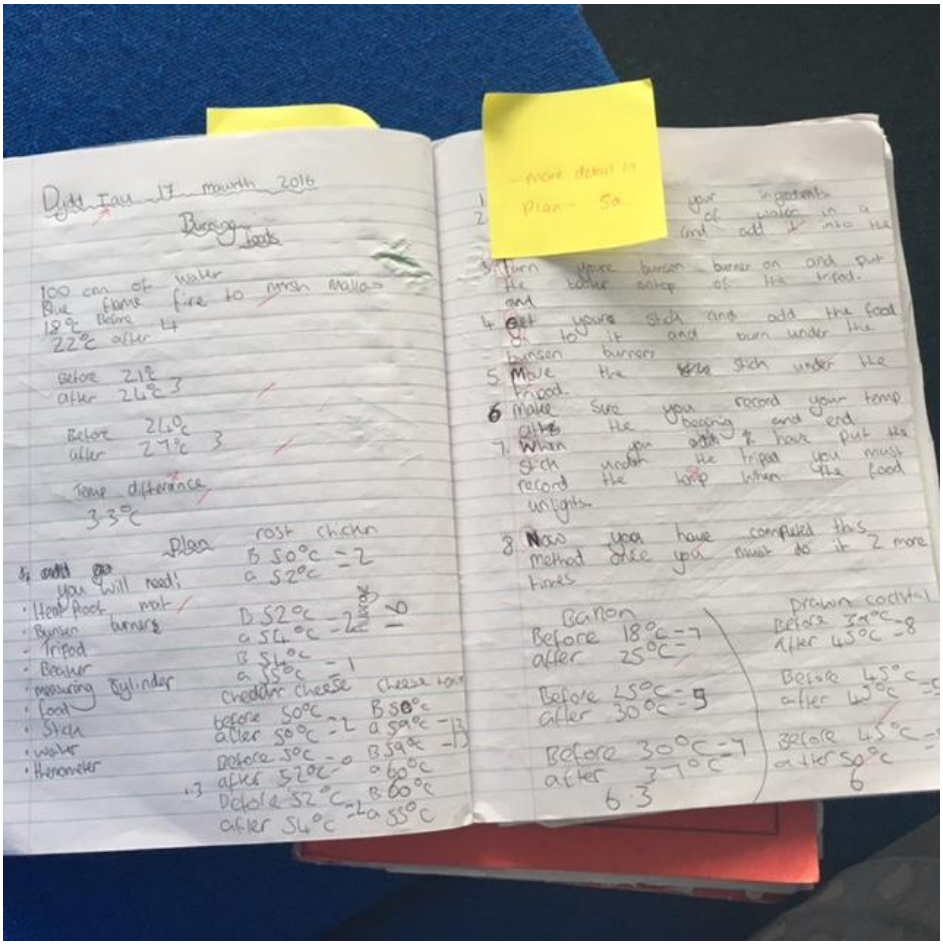
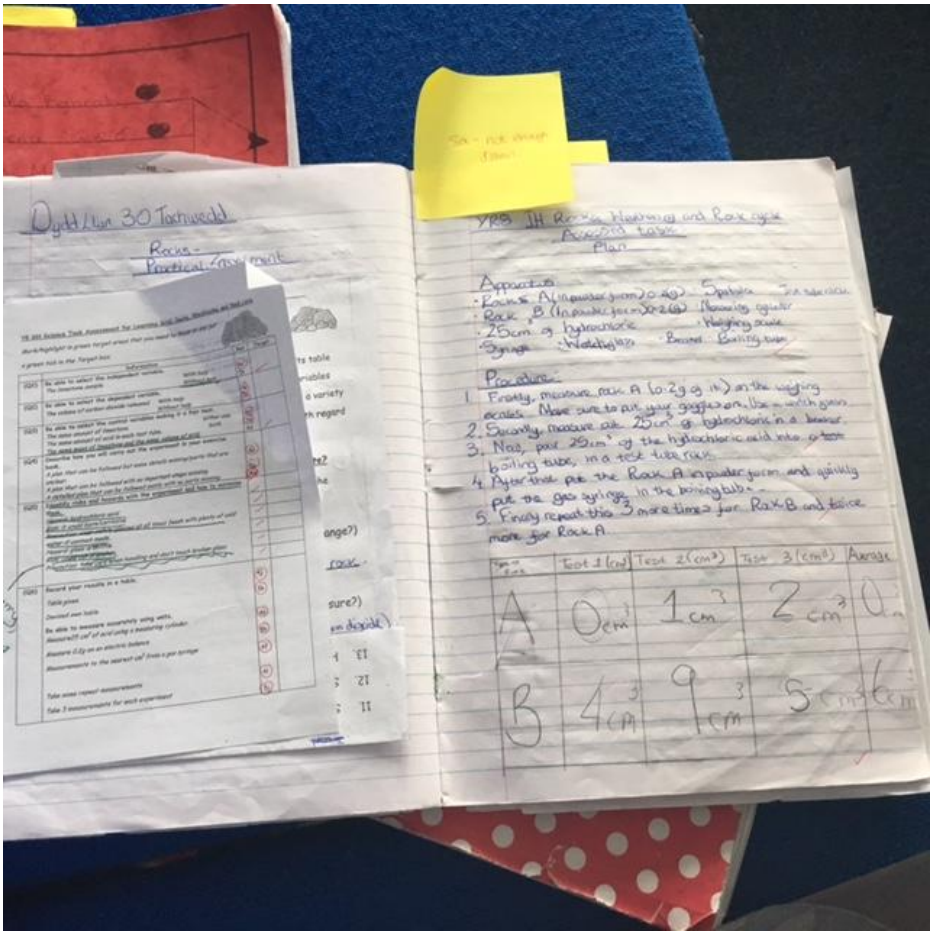
Bryn Hafren Comprehensive – Marking and Feedback (Science)

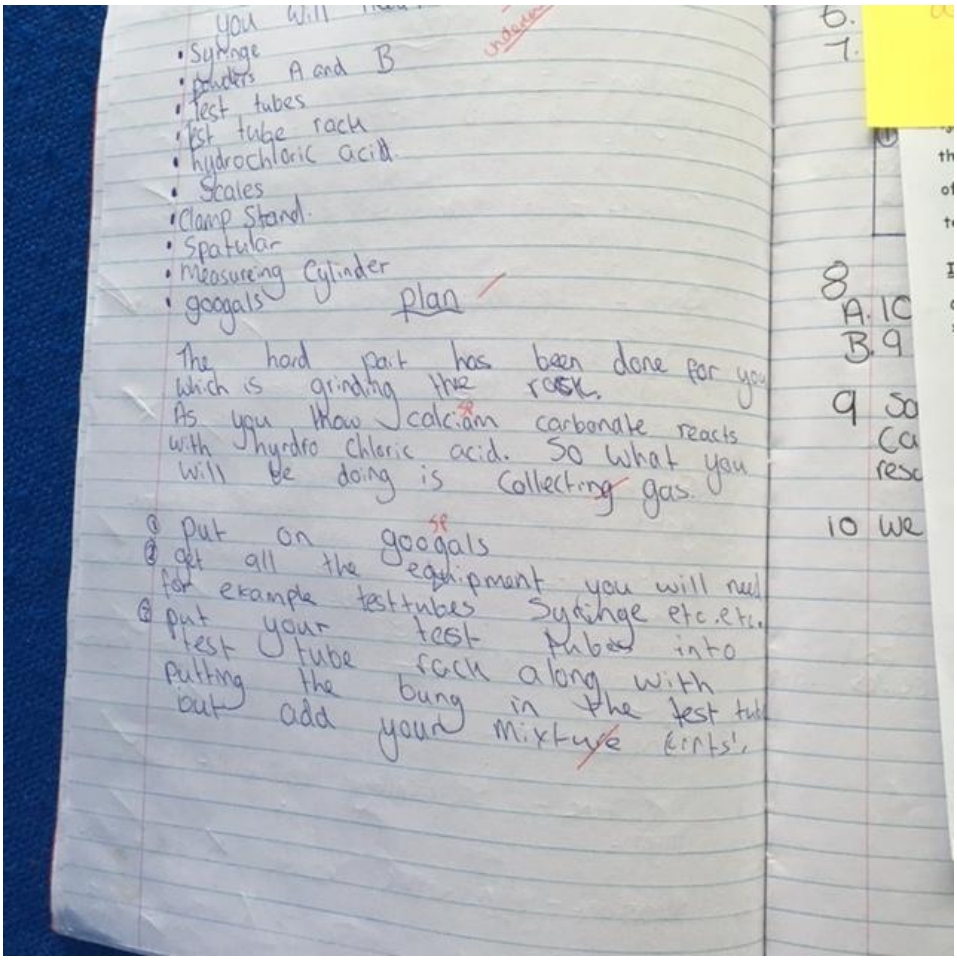
Pupil 1

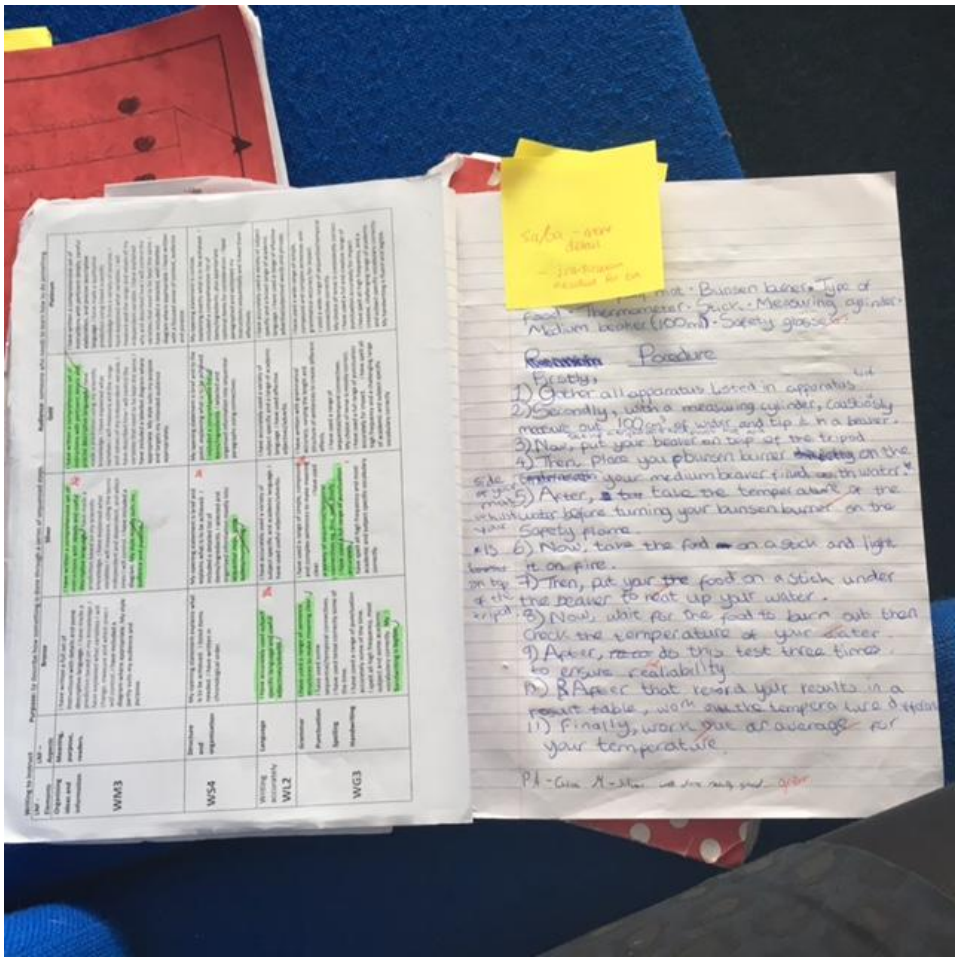




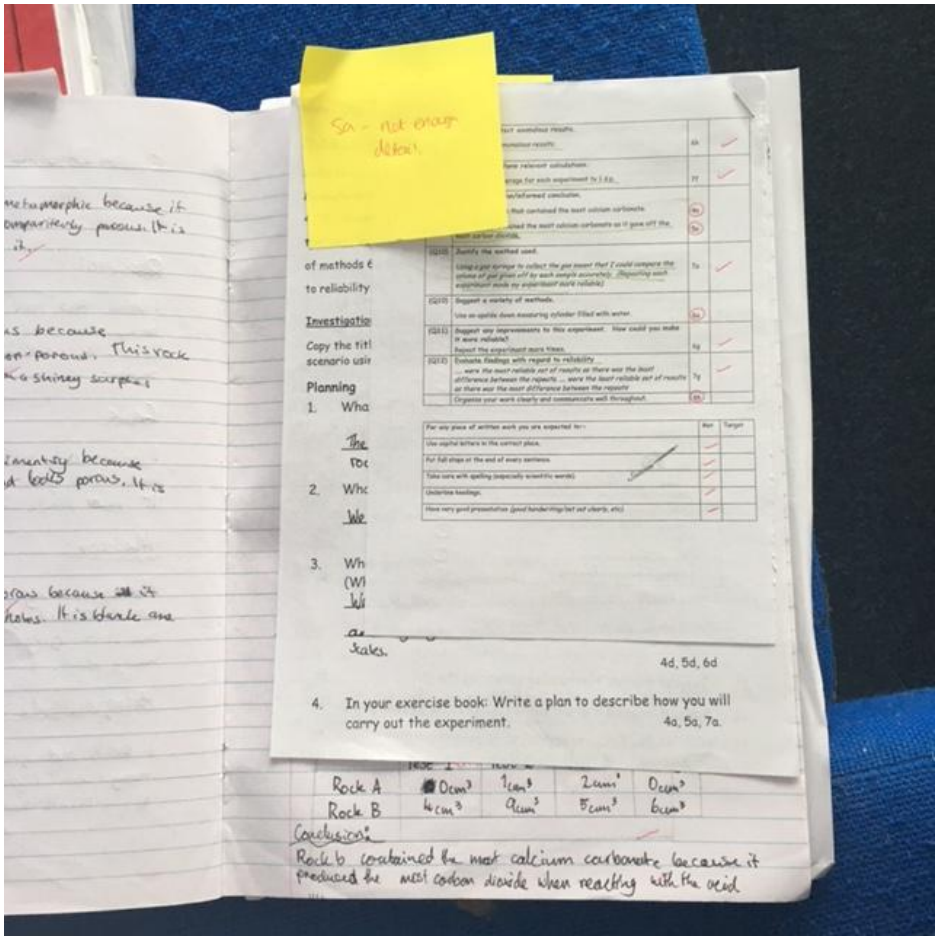
Pupil 2

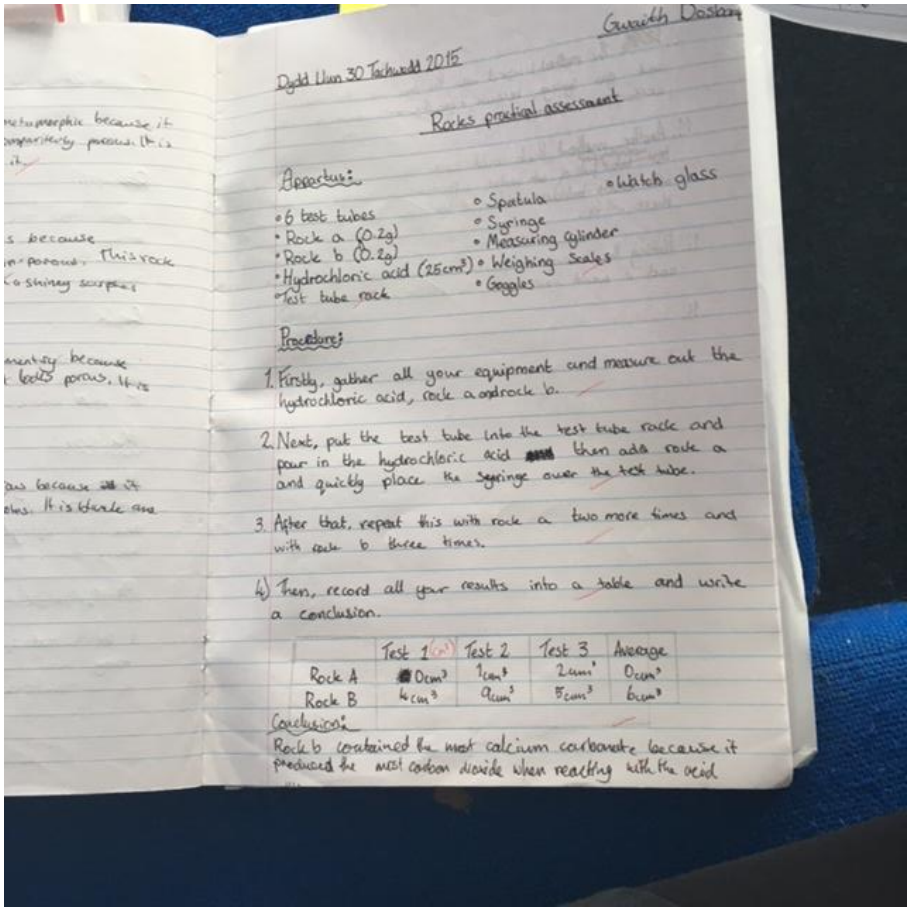

Dydd Llun 30 Tachwedd
Rocks -
Practical Assessment
YR8 IH Rocks, Weathering and Rock cycle
Assessed task
Plan
Apparatus
Procedure
1. Firstly, measure rock A (0.2g of it) on the weighing scales. Make sure to put your goggles on. Use a weigh grain.
2. Secondly, measure out 25cm³ of hydrochloric in a beaker.
3. Now, pour 25cm³ of the hydrochloric acid into a boiling tube, in a test tube rack.
4. After that put the Rock A in powder form and quickly put the gas syringe in the boiling tube.
5. Finally repeat this 3 more times for Rock B and twice more for Rock A.
Test 1 (cm³)
Test 2 (cm³)
Test 3 (cm³)
Average
A
0cm³
1cm³
2cm³
B
4cm³
9cm³
5cm³
6cm³


you will need
• Syringe
• powders A and B
• Test tubes
• Test tube rack
• hydrochloric acid
• Scales
• Clamp Stand
• Spatular
• Measureing Cylinder
• googals
Plan
The hard part has been done for you which is grinding the rock.
As you know calcium carbonate reacts with hydro chloric acid. So what you will be doing is collecting gas.
① put on googals
② get all the equipment you will need for example testtubes Syringe etc.etc.
③ put your test tubes into test tube rack along with putting the bung in the test tube but add your mixture first.
6.
7.
8
A. 10
B. 9
9 So
Ca
resc
10 We


Procedure
Firstly,
1) Gather all apparatus listed in apparatus
2) Secondly, with a measuring cylinder, carefully measure out 100cm³ of water and tip it in a beaker.
3) Now, put your beaker on top of the tripod
4) Then, place your bunsen burner on the side of your mat
5) After, take the temperature of the water before turning your bunsen burner on the Safety flame.
6) Now, take the food on a stick and light it on fire.
7) Then, put your the food on a stick under the beaker to heat up your water.
8) Now, wait for the food to burn out then check the temperature of your water.
9) After, do this test three times to ensure reliability
10) After that record your results in a result table, work out the temperature difference
11) Finally, work out an average for your temperature.
WM3
WS4
WL2
WG3

Pupil 3


Planning
4d, 5d, 6d
4. In your exercise book: Write a plan to describe how you will carry out the experiment. 4a, 5a, 7a.
Rock A
Rock B
Conclusion:
Rock b contained the most calcium carbonate because it produced the most carbon dioxide when reacting with the acid



Gareth Davies

Dydd Llun 30 Tachwedd 2015

Rocks practical assessment

Apparatus:

- 6 test tubes
- Rock a (0.2g)
- Rock b (0.2g)
- Hydrochloric acid (25cm³)
- Test tube rack
- Spatula
- Syringe
- Measuring cylinder
- Weighing scales
- Goggles
- Watch glass

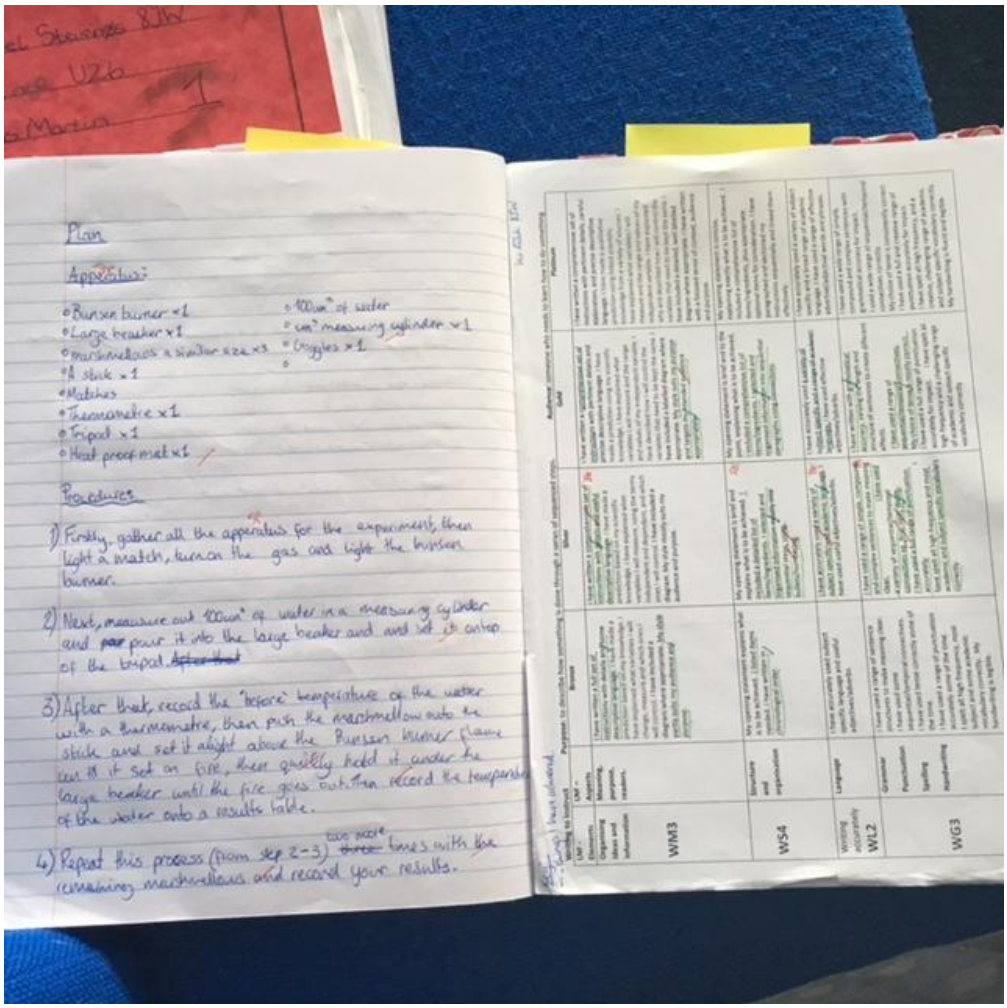
Procedure:

1. Firstly, gather all your equipment and measure out the hydrochloric acid, rock a and rock b.
2. Next, put the test tube into the test tube rack and pour in the hydrochloric acid [redacted] then add rock a and quickly place the syringe over the test tube.
3. After that, repeat this with rock a two more times and with rock b three times.
4. Then, record all your results into a table and write a conclusion.

	Test 1 (cm³)	Test 2	Test 3	Average
Rock A	[redacted] 0cm³	1cm³	2cm³	0cm³
Rock B	4cm³	9cm³	5cm³	6cm³

Conclusion:

Rock b contained the most calcium carbonate because it produced the most carbon dioxide when reacting with the acid.



Plan

Apparatus:

- Bunsen burner x1
- Large beaker x1
- marshmallows a similar size x3
- A stick x1
- Matches
- Thermometre x1
- Tripod x1
- Heat proof mat x1
- 100cm³ of water
- cm³ measuring cylinder x1
- Goggles x1

Procedure:

1) Firstly, gather all the apparatus for the experiment, then light a match, turn on the gas and light the bunsen burner.

2) Next, measure out 100cm³ of water in a measuring cylinder and ~~pour~~ pour it into the large beaker and and set it on top of the tripod. ~~After that~~

3) After that, record the 'before' temperature of the water with a thermometre, then push the marshmallow onto the stick and set it alight above the Bunsen burner flame until it set on fire, then quickly hold it under the large beaker until the fire goes out. Then record the temperature of the water onto a results table.

4) Repeat this process (from step 2-3) ~~three~~ two more times with the remaining marshmallows and record your results.