Assessment & Feedback Policy - Science

The McAuley Catholic High School

Last reviewed on: September 2023

Next review due by: September 2024

Assessment and Feedback Policy

Department:

What does assessment and feedback look like in science?

Students are formatively assessed on a day-to day basis through a variety of evidence based questioning techniques, structured learning activities and through listening to student conversations. The outcomes of these assessments are used by teachers to identify gaps and misconceptions and to adapt teaching to increase what students know, understand and can do.

Students undertake regular summative assessments, that include coverage of prior learning, in order to enhance recall and retention. They are used formatively through DIRT to move student's learning forward.

These standardised assessments provide evidence of what students know, understand and can do, enabling teachers to improve teaching and learning and to adapt the curriculum design, sequencing and delivery.

1. Lay the foundations for effective feedback:

This is achieved by….

- Sharing learning objectives with students at the beginning of each lesson or learning sequence. These are tiered through academic taxonomies, based upon the relevant waypoints and are written using tier 2 command words.
- Developing, clarifying and sharing with students the success criteria upon which quality is judged. Students may be involved in the development of these.
- Developing positive relationships and an environment for learning in which feedback is welcomed and acted upon by students to move their learning forward.
- Developing a thoughtfully sequenced schedule of summative assessments to provide timely and accurate evidence of what students know, understand and can do; identify gaps & misconceptions and ensure students are placed on the most appropriate pathway to success. This should be manageable in terms of teacher workload and school resources.
- Using summative assessments formatively, giving students the opportunity to act upon feedback to move their learning forward.

2. Type and frequency of assessment and feedback. This includes the methods used for assessment and the way in which feedback is provided (including details of when and how written and verbal feedback are used)

Key Stage 3	Key Stage 4	Key Stage 5
Formative assessment Verbal day-to-day assessment and feedback as an integral part of teaching & learning. Written feedback is given on a particular planned piece of work according to the schedule. In the form WWW/EBI. Opportunities for self- and peer assessment, learning through structured talk and peer teaching are planned by teachers. **Summative assessment** 3 per year, one in each term. Stepped assessments consisting of short & longer answer questions. Include coverage of prior learning to enhance recall & retention. Used formatively through DIRT to move learning forward.	**Formative assessment** Verbal day-to-day assessment and feedback as an integral part of teaching & learning. Written feedback is given on a particular planned piece of work according to the schedule. In the form WWW/EBI. Opportunities for self- and peer assessment, learning through structured talk and peer teaching are planned by teachers. **Summative assessment** Y10: 3 per year, one in each term. Stepped assessments consisting of short & longer answer past exam questions designed to mirror the structure of external GCSE assessments. Include coverage of prior learning to enhance recall & retention. Used formatively through DIRT to move learning forward. Term 3 assessment is a formal mock exam that mirrors the structure and content of external GCSE assessments. Y11: 3 per year; term 1.1 – baseline assessment, 1.2 – formal mock exam, 2.1 – formal mock exam. All Y11 assessments mirror the structure and content of external GCSE assessments and as such include coverage of prior learning to enhance recall and retention. All are used formatively through DIRT to move learning forward, to identify gaps & misconceptions	**Formative assessment** Verbal day-to-day assessment and feedback as an integral part of teaching & learning. Written feedback is given on a particular planned piece of work according to the schedule. On a particular planned piece of work. In the form WWW/EBI. Opportunities for self- and peer assessment, learning through structured talk and peer teaching are planned by teachers. **Summative assessment** Y12: 3 per year, one in each term. Stepped assessments consisting of MC, short & longer answer past exam questions designed to mirror the structure of external GCE assessments. Include coverage of prior learning to enhance recall & retention. Used formatively through DIRT to move learning forward. Term 3 assessment is a formal mock exam that mirrors the structure and content of external GCE assessments. Y13: 2 per year; term 1.1 – baseline assessment, 2.1 – formal mock exam. All Y13 assessments mirror the structure and content of external GCE assessments and as such include coverage of prior learning to enhance recall and retention. All are used formatively through DIRT to move learning forward, to identify gaps & misconceptions

	and to inform adaptation of teaching. These standardised assessments may be supplemented with topic assessments at the teacher's discretion. Topic assessments are also used formatively through DIRT to move learning forward. **<u>External assessment</u>** Takes place at the end of Y11. Analysis of the results is used to adapt the curriculum design, sequencing and delivery.	and to inform adaptation of teaching. These standardised assessments may be supplemented with topic assessments at the teacher's discretion. Topic assessments are also used formatively through DIRT to move learning forward. **<u>External assessment</u>** Takes place at the end of Y13. Analysis of the results is used to adapt the curriculum design, sequencing and delivery.

3. Plan for how students will act on feedback:

This is achieved by…..

- Engaging all students in formative assessment and feedback through a variety of evidence based questioning techniques, structured learning activities and structured talk.
- Planning opportunities for all students to engage in structured talk, self- & peer-assessment and peer teaching.
- Providing all students opportunities to experience and engage in revision and retrieval activities prior to standardised assessments.
- Providing all students with opportunities for DIRT so that they can use feedback to move their learning forward.

4. Helpful worked examples of effective feedback practices in the department:

KS3 SAR Tests

The McAuley Catholic High School
Science Department
Key Stage 3 Assessment
Year 8 SAR 1

Name		Marks Awarded	/ 45
Form		Percentage Score	
Teacher		Grade	

Complete the table below to show how many marks you achieved for each question.

Q.	1	2	3	4	5	6	7	8				
Mark	/10	/5	/6	/5	/5	/5	/4	/7				

EBI

Which question(s) did you achieve the lowest number of marks on?

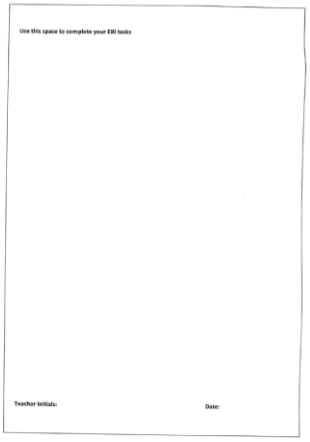
Complete the appropriate task from the list below.

1. Describe and explain why it is better to use a measuring cylinder to measure a volume of water than a beaker
2. Outline the resources that living things compete for.
3. Draw and label the pH scale for universal indicator. Highlight the regions where strong acids, strong alkalis, weak acids, weak alkalis and neutral substances can be found.
4. Explain the difference between environmental and genetic variation
5. Draw a series circuit containing a battery of cells, two bulbs and a switch.
6. Define the terms: independent variable, dependent variable and controlled variable.
7. Explain why a balloon will stick to a wall after it has been rubbed against clothing.
8. Write a summary equation to describe the chemical reaction that occurs when an acid and an alkali are added together. Describe the chemical changes that have occurred during this reaction

GO FURTHER

If you scored 90% or above complete the following task:

Suggest why it is important to have high biodiversity in an ecosystem.

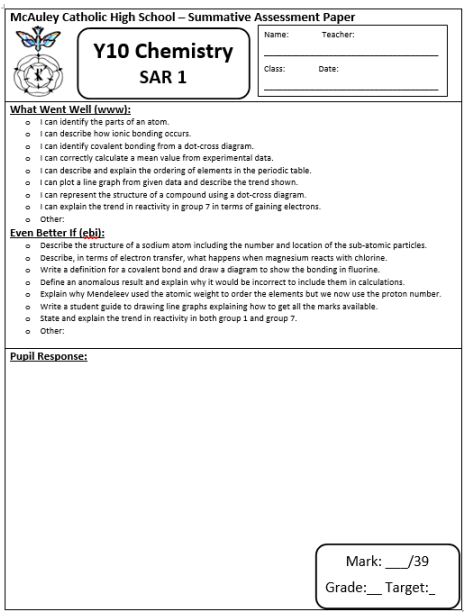


Use this space to complete your EBI tasks

Teacher Initials:

Date:

KS4 SAR Tests



McAuley Catholic High School – Summative Assessment Paper

Y10 Chemistry SAR 1

Name: Teacher:

Class: Date:

What Went Well (www):

- I can identify the parts of an atom.
- I can describe how ionic bonding occurs.
- I can identify covalent bonding from a dot-cross diagram.
- I can correctly calculate a mean value from experimental data.
- I can describe and explain the ordering of elements in the periodic table.
- I can plot a line graph from given data and describe the trend shown.
- I can represent the structure of a compound using a dot-cross diagram.
- I can explain the trend in reactivity in group 7 in terms of gaining electrons.
- Other:

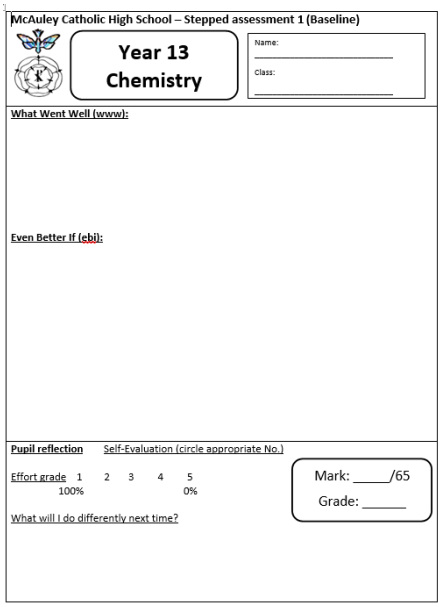
Even Better If (ebi):

- Describe the structure of a sodium atom including the number and location of the sub-atomic particles.
- Describe, in terms of electron transfer, what happens when magnesium reacts with chlorine.
- Write a definition for a covalent bond and draw a diagram to show the bonding in fluorine.
- Define an anomalous result and explain why it would be incorrect to include them in calculations.
- Explain why Mendeleev used the atomic weight to order the elements but we now use the proton number.
- Write a student guide to drawing line graphs explaining how to get all the marks available.
- State and explain the trend in reactivity in both group 1 and group 7.
- Other:

Pupil Response:

Mark: ___/39
Grade:__ Target:_

KS5 Assessments



McAuley Catholic High School – Stepped assessment 1 (Baseline)

Year 13 Chemistry

Name:

Class:

What Went Well (www):

Even Better If (ebi):

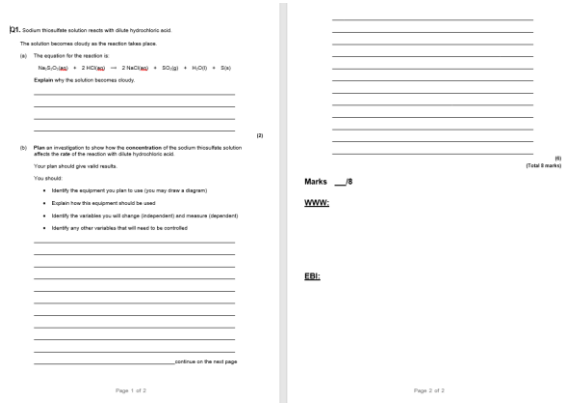
Pupil reflection Self-Evaluation (circle appropriate No.)

Effort grade 1 2 3 4 5
100% 0%

Mark: _____/65
Grade: _____

What will I do differently next time?

Practice exam questions (KS4 & 5)



21. Sodium thiosulfate solution reacts with dilute hydrochloric acid.

The solution becomes cloudy as the reaction takes place.

(a) The equation for the reaction is:

$Na_2S_2O_3(aq) + 2\,HCl(aq) \rightarrow 2\,NaCl(aq) + SO_2(g) + H_2O(l) + S(s)$

Explain why the solution becomes cloudy.

(2)

(b) Plan an investigation to show how the concentration of the sodium thiosulfate solution affects the rate of the reaction with dilute hydrochloric acid.

Your plan should give valid results.

You should:

- Identify the equipment you plan to use (you may draw a diagram)
- Explain how this equipment should be used
- Identify the variables you will change (independent) and measure (dependent)
- Identify any other variables that will need to be controlled

continue on the next page

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(6)
(Total 8 marks)

Marks __/8

WWW:

EBI:

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