Alcester Academy Curriculum Planning: Assessment in Science

Pupils will complete a variety of assessments across key stages. Teachers assess and level using the 9-1 GCSE grades. In KS3 written assessments are completed within the units depending upon the rotation. Tests are completed within the last 3 weeks of autumn and spring terms.

In KS4 progress is assessed through end of topic tests for each unit using GCSE exampro questions. In each unit students also complete an assessed piece of work for which they receive feedback. This work is based on required practicals and key skills of the GCSE specifications.

In KS3 a termly 'working at' grade is reported to SIMS which takes into account of the formal assessment piece, end of term test and is combined with the teacher's professional judgement. Data is used to inform class packs and future setting reviews. The end of year exams acts as a consolidation of the skills, knowledge and understanding throughout KS3 to that point.

In KS4 we report students working at grade in line with the combined science 2 level system (eg 1 2, 4 4) with the exception of year 10 set in the summer term and year 11 set 1. Students in year 9 will receive an appropriate end of year paper based on the topics studied. In year 10 the midterm exams will be a full set of unit 1 exams in all 3 disciplines. In year 11 students will take a full set of unit 1 exams in the December exam window and a set of unit 2 in the late February exam windows. During all 3 years of KS4, students' progress is closely monitored and students are moved to the most appropriate set for their ability, work ethic and aspirations.

	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn	What: Knowledge and understanding of all 4 topics How: End of term test. A combination of short and longer questions When: Last 3 weeks of term What: Diffusion How: Observation of process with written	What: Knowledge and understanding of all 4 topics How: End of term test. A combination of short and longer questions When: Last 3 weeks of term What: Drug use data How: Data handling – interpreting and	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Unit B1 What: Mitosis How: Describing key terms during the process of	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Unit P2 What: Resistance in a wire How: Students set up the practical, collect and analyse the results	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Mock exams unit 1 papers – 1 per subject – during December Unit C6

	description and explanation When: During particle theory unit What: Risk assessment How: Written risk assessment of specific practical When: During acids and alkalis unit	presenting data When: During drugs unit What: Circuit diagrams How: Drawing and interpreting electrical circuit diagrams When: During electricity unit	mitosis Unit P1 What: Energy loss practical How: Collecting, recording and analysing the data from the practical	Unit B2 What: Osmosis required practical How: Students set up the practical, collect and analyse the results Unit C4 What: Salts How: Students describe the chemicals needed to make a variety of salt compounds	What: Reaction data How: Students draw graph and link results to collision theory Unit B6 What: Inheritance How: Students complete punnet squares to show genetic crosses and analyse results Unit P5 What: Acceleration required practical How: Students analyse the data from the experiment
Spring	What: Knowledge and understanding of all 3 topics How: End of term test. A combination of short and longer questions When: Last 3 weeks of term What: Magnesium burning What: Description of process When: During elements and compounds unit What: Label ear and describe process of hearing When: During sound unit	What: Knowledge and understanding of both topics How: End of term test. A combination of short and longer questions When: Last 3 weeks of term What: Handling data How: Interpreting data around the reactivity of metals and applying the reactivity series When: During the unit What: Well adapted creature How: Students design their own creature to meet specific habitat requirements and explain why they chose them When: During the	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Unit C2 What: Giant covalent structures How: Compare and contrast the structure and properties of a variety of structures. Unit P3 What: Density required practical How: Students write method for the practical and carry out relevant calculations	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Mid term exams during school exam timetable. Unit 1 exam papers – 1 per subject Unit B5 What: Reaction times required practical How: Students set up the practical, collect and analyse the results Unit C3 What: Formula mass How: Students calculate formula mass for given compounds	Mock exams unit 2 papers- 1 per subject - during school exam slot GCSE external exams during May and June – 6 papers Unit P7 What: Magnetic fields How: Students write a method to plot a magnetic field using compasses Unit C10 What: Waste water How: Students complete the practical and analyse the results Unit C8 What: Chromatography How: Students complete the practical and analyse the results

		adaptation and inheritance unit		Unit P6 What: Required practical refraction How: Students set up the practical, collect and analyse the results	
Summer	What: Knowledge and understanding of all topics How: End of year test. A combination of short and longer questions When: Whole school exams What: Extension of a spring How: Drawing and interpreting graph of practical When: During forces unit	What: Knowledge and understanding of all KS3 topics How: End of year test. A combination of short and longer questions When: Whole school exams	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning End of year exam during school exam timetable. Past exam questions Unit B3 What: Disease data How: Students analyse data around a variety of diseases and look for links and causes Unit C7 What: Crude oil How: Students describe how the process of crude oil separation is done by fractional distillation Unit P4 What: Half life How: Students draw and interpret a radioactivity half life graph Unit B4 What: Photosynthesis required practical How: Students analyse	End of unit exam style question test per unit Each unit assessment is conducted during the unit at a suitable point in the learning Unit C9 What: Climate change How: Students analyse data around climate change Unit B7 What: Quadrats required practical How: Students write a method, collect and analyse data.	

			data from the practical including drawing a graph Unit C5 What: Experiment data How: Students analyse data of the displacement reaction between zinc and copper sulfate		