

GCSE Equivalency Combined Science Exams - How we created these exams

<u>Overview</u>

We have created 4 Exams and 1 sample paper for GCSE Combined Science Equivalency, based on the Edexcel <u>iGCSE Science Sample Papers</u> provided on their website, along with the content specified in the Edexcel (IGCSE) <u>Science (Single Award) (9-1) (4SS0) Specification</u>.

The table below summarises the key points relevant to your A Star GCSE Combined Science Equivalency Exam.

Format	Description				
Exam type	Online or paper based				
Exam location	Sat at home/work - invigilated online				
Exam availability	All year round				
Exam structure	1 paper				
Exam timing	2 hours				
Number of marks	 100 marks, split into the following: Biology - 34 marks (34%) Chemistry - 33 marks (33%) Physics - 33 marks (33%) 				
Tiers	None				
Level	9-1				
Exam specification based on	Edexcel (IGCSE) Science (Single Award) (9-1) (4SS0)				
Exam content coverage	Questions may come from any topic across the specification (including the points in bold)				
Question types	Long written-answer questions, short-answer questions, multiple choice questions, matching questions and calculations				
Additional equipment needed	An appropriate scientific calculator				

Format and Marks

Our exams consist of only 1 paper, instead of 3. The paper is a total of 100 marks, meaning that the total marks has been reduced from 180 marks, as seen on the Edexcel iGCSE Science (Single Award) sample papers, to 100 marks. However all assessment objectives are maintained from the full specification, as well as topic coverage.

The breakdown of marks for each of the three sciences within each exam is as follows:

- Biology 34 marks (34%)
- Chemistry 33 marks (33%)
- Physics 33 marks (33%)

Further, each paper contains a mix of question types, including long written-answer questions, short-answer questions, multiple choice questions, matching questions and calculations.

Some questions are standalone questions, whereas other questions consist of multiple parts and can require using the answer to a previous part of a question, or not. These part questions may vary in the level of demand. This corresponds to what is seen on the Edexcel sample papers.

Across each paper, we have aimed to have a similar coverage of questions with different numbers of marks of that of the Edexcel sample papers, so there are a mixture of 1-6 mark single questions (i.e. not the total of a question containing multiple parts).

Distribution of Topics and Skills

Content from any part of the specification can be assessed in each paper. Each exam has been designed to match the approximate percentage breakdown of Assessment Objectives (AO):

Assess	iGCSE	
A01	Knowledge and understanding of science	38-42%
AO2	Application of knowledge and understanding, analysis and evaluation of science	38-42%
AO3	AO3 Experimental skills, analysis and evaluation of data and methods in science	
	Total	100%

For each paper, we have aimed to increase the demand as the student progresses through each section of the paper.

Further, each paper consists of around 10% of marks that require the use of mathematical skills to Level 2 or above.

Assessment Difficulty

We closely monitor all exam results, and how these change over time, to ensure our exams match the difficulties of the specifications they are benchmarked against and so the grade boundaries are set accordingly. Below are the current grade boundaries for our GCSE Combined Science Equivalency exams:

Level	9	8	7	6	5	4	3	2	1
Mark	90	84	75	68	60	51	N/A	N/A	N/A