



## Independent Learning: Key Assessment Tasks

### Subject: Science

At Key Stage 3 topics covering Biology, Chemistry and Physics are taught on a rota basis. 'How Science Works' runs through all areas of the science curriculum and includes 5 Assessment Foci:

AF1 Thinking Scientifically

AF2 Understanding the application and implications of science

AF3 Communicating and collaborating in science

AF4 Using Investigative approaches

AF5 Working critically with evidence

We use The Ridgeway Version of Exploring Science to deliver The National Curriculum for Science across the whole key stage. Project work on specific topics is interspersed with the Scheme of Work.

Key Assessment tasks and Key Homework tasks will cover various aspects of all these areas of science. The tasks will be set by topic rather than term however there will be approximately 4 longer key homework or key assessment tasks set throughout the year. I.e. approximately one per term. Many other smaller pieces of work will also be set for each topic. Some topics will be assessed by end of topic tests.

Key Assessment tasks, Key Homework tasks and continuous Assessment for Learning through lessons and smaller homeworks will contribute to the overall level awarded at the end of the year. There is some overlap between Homework tasks and some Key Assessed tasks.

Over the year your child will complete one Key Assessed task each for Biology, Physics and Chemistry and Investigating Science.

At the end of the year there will be an end of year summative assessment covering all the topics completed in year 8 and it may also include aspects of prior learning from Key Stage 2 and Year 7. Out lined below are some examples of the types of assessment from each topic

which your child may be assessed on. N.B. The tasks may differ from these but the format will be the same. Your child will always be given clear guidance and time frames for Key Assessed Tasks which they should record in their homework diary.

Term 1	Task	Assessment Focus	Skills assessed
<b>Modelling</b>	To design and make a model to explain a scientific idea and produce a presentation through any media to explain how your invention works	AF1 AF2 AF3	Research  Planning Making and Modelling Presentation
<b>Food glorious food</b>  Biology 8A  HAT	‘Diabetes and Diet’ Produce a leaflet for a fellow year 8 student who has just been diagnosed as having diabetes’ The leaflet should include <ul style="list-style-type: none"> <li>• What the disease is and the effects it has on the body</li> <li>• How it can be controlled</li> <li>• History of the disease and it’s treatment</li> </ul>	AF1 AF2 AF3  RT	Research skills  Selection of appropriate material  Use of ICT in the presentation of information
<b>Going for Gold</b>  Biology 8B  SAT/HAT	‘Athletics Training Camp’ To design a presentation to give to young athletes to explain what is going to happen to their bodies during their training	Open ended assessment task 8b  AF1 AF2 AF3  ES	Using information they have learned in class and applying it to a new situation  Use of ICT in the presentation of information  Use of modelling to develop explanations

<p><b>Doctors and Diseases</b></p> <p>Biology 8C</p>	<p>AT1 Investigation Microbes</p>	<p>AF3 AF4 AF5</p> <p>ES</p>	<p>Methodical collection of data</p> <p>Risk Assessment</p> <p>Selection of appropriate methods of displaying scientific data</p> <p>Interpretation of information.</p> <p>Evaluation of techniques used</p> <p>Prioritising of time to work to deadlines</p>
<p><b>Water</b></p> <p>Chemistry 8E</p> <p>SAT</p>	<p>Open- ended assessed task 8E or Separation Project</p> <p>Water purification</p>	<p>AF4</p> <p>AF3 AF5</p> <p>ES</p>	<p>Methodical collection of data</p> <p>Risk Assessment</p> <p>Selection of appropriate methods of displaying scientific data</p> <p>Interpretation of information.</p> <p>Evaluation of techniques used</p> <p>Prioritising of time to work to deadlines</p>
<p><b>Materials and Recycling</b></p> <p>Chemistry 8F</p> <p>HAT/SAT</p>	<p>‘Recycling is the answer’</p> <p>Produce a table to record what happens to all the waste you produce in your house.</p> <p>Select an appropriate means of presenting this data graphically</p> <p>Write a conclusion about your findings. Make valid comments on the quality of the data.</p> <p>Suggest changes you could implement in the home to increase your recycling</p>	<p>AF4</p> <p>AF3 AF5</p> <p>RT</p>	<p>Methodical collection of data</p> <p>Selection of appropriate methods of displaying scientific data</p> <p>Interpretation of information.</p> <p>Evaluation of techniques used</p>

<b>All that glitters</b> Chemistry 8G  SAT	AT1 Investigation The boiling point of water	AF4  AF5	Methodical collection of data  Risk Assessment  Selection of appropriate methods of displaying scientific data  Interpretation of information.  Evaluation of techniques used
<b>Explaining the earth</b>  Chemistry 8H  SAT	Simon's story AFL task	AF1	Using the knowledge they have learned in class and applying it to a new situation
<b>Heat Transfers</b>  Physics  SAT	Sweat and Cooling AT1 Investigation	AF4  AF3 AF5  ES	Methodical collection of data  Risk Assessment  Selection of appropriate methods of displaying scientific data  Interpretation of information.  Evaluation of techniques used  Prioritising of time to work to deadlines
<b>Forces and Transport</b>  Physics 8J  SAT/HAT	FutureMove Test Paper	Open ended Assessment AF1 AF2 AF3 ES	Recalling, researching, using and explaining knowledge  Applications and implications of science in everyday life Presentation of data for a target audience