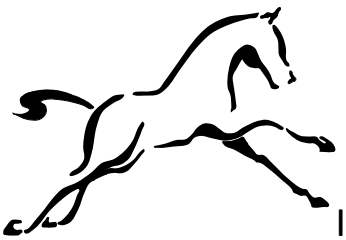

Independent Learning: Key Assessment Tasks
Subject: Science – Year 7

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 7 and it may also include aspects of prior learning from Key Stage 2.

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.

Topic Title	Task	Assessment Focus	Skills assessed
Tissues and Transplants Biology 7A	**Building a Life** To design and produce a model of a cell.	AF1	Research Planning Producing a Model
Sex and Science Biology 7B	**Endangered Animals** Produce a leaflet entitled – Are Breeding Programmes the Way Forward? The leaflet should include • What do we understand by an endangered animal/plant? • What are the advantages and disadvantages of having a breeding programme at a Zoo. • What does the future hold?	AF1 AF2 AF3	Research Selection of appropriate material Identification of application and implications of Breeding Programmes
Ecology Matters Biology 7C	**Adept Adaptations** Design your own animal and say how it is adapted to its habitat.	AF3	Use appropriate presentation skills
Classified Biology 7D	**Continuous Variation** Produce a table to record the variation data you have collected in class • Height • Shoe Size • Eye Colour Select an appropriate means of presenting	AF3 AF4 AF5	Presenting data in a suitable format Collect appropriate data Process and analyse data to support a conclusion

	the data graphically. Write a conclusion about your findings.		
Acids and Alkalis Chemistry 7E	**Finding the Balance** Plan an investigation to find out which indigestion remedy is the best?	AF4	Plan a scientific investigation considering the Variables involved Apparatus required Method Range and interval of observations and/or measurements Display of Results
Bubbles, Bangs and Burning Chemistry 7F	**Fire Safety** Open ended task – How do you put out a fire? – Associated risks	AF2 AF3 AF4	Identification of how Scientists use Science Research leading onto communication of ideas Identification of risks
What a waste? Chemistry 7G	**Bits and Pieces** Using an A3 sheet of paper produce an illustration guide to show how the particle theory can explain properties of solids, liquids and gases.	AF1	Use a model to provide an explanation
Materials from the Earth Chemistry 7H	Not Applicable covered in Year 8		
Energy and Sustainable Physics 7I	**Science – cause or cure?** Open ended task – What has science got to do with global warming?	AF2	Application and Implication of Science – looking at social, economic and environmental effects Using Science learnt in the class-room and applying it to the task Bibliography
Electrical circuits Physics 7J	**Using Electricity** AT1 – How does the length of a wire affect the current flowing through it.	AF3 AF4 AF5	Plan a suitable investigation Identify and Manipulate variables Display data in a suitable format Process and analyse data Draw conclusions

			Evaluation of scientific evidence
Forces and Their Effects	**Friction** Question - How can adventure sports be safe?	AF4	Research Risk Assessments Bibliography
Solar System and Beyond	**Solar System** Solar System plus make up information for your own planet Produce a Game of Top Trumps.	AF1	Using information they have learnt in class and applying it to a new situation Selection of appropriate information/data Research
Transition Project	**Hazard Warning** Imagine there has been an acid tanker crash on a road near to where you live. Write a newspaper report of the incident, explaining some of the actions that the police and fire services would have taken.	AF3 AF4	Communication worldwide using conventions/symbols To be aware of the risks of using certain chemicals
Buoyancy Project	**That Sinking Feeling** How to catch a thief – Archimedes - Looking at how density is used?	AF2	Application of Science ideas to bring about science and technological advances
Separation Project	**Metal ore Extraction** Raisin Extraction – To separate the mineral ore from the waste rock.	AF5	Presentation of Data – tables, graph format Consideration of errors and anomalies