

Adhesives – Syllabus Links

People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity

- investigating how scientists have created new materials such as synthetic fibres, heat-resistant plastics and pharmaceuticals

People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people’s lives, including generating new career opportunities

- using knowledge of science to test claims made in advertising or expressed in the media

All Grades – Science Inquiry Skills

QUESTIONING AND PREDICTING: Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge.

PLANNING AND CONDUCTING: Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed. Measure and control variables, select equipment appropriate to the task and collect data with accuracy.

PROCESSING AND ANALYSING DATA AND INFORMATION: Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate. Summarise data, from students’ own investigations and use scientific understanding to identify relationships and draw conclusions based on evidence. The students learn how to use develop a method that is safe, and follow that method to achieve reliable results. Students will use digital technology to record their results and produce the graph

EVALUATING: Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements.

COMMUNICATING: Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate.

	Demonstrated inquiry	Prescribed inquiry	Structured inquiry	Guided inquiry	Open inquiry
Questions	No question	Provided question	Sharpened question	Learner selects	Learner poses questions
Plans	No planning	Provided procedure	Discussion with teacher	Guided during planning	Learner determines plans
Conducts	Teacher conducts	Conducting and recording method told	Sharpened plan and conduct	Guided during conducting and recording	Learner conducts and records
Analyse	Teacher	Analysis	Discussed	Guided	Learner

	analyses	method told	analysis	analysis	analyses data studying trends
Problem Solve	No problem solving	Teacher provides reasoning and links	Discussed reasoning and conclusion	Guided reasoning and formulating conclusion	Learner reasons to formulate conclusions
Communicate	No conclusion	Teacher writes conclusion	Student writes	Guided justification and findings	Learner justifies findings and conclusions