

Bath Bombs – Curriculum Links

By Doaa George

Year 7	Year 8	Year 9	Year 10
Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management	Chemical change involves substances reacting to form new substances	Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed	Different types of chemical reactions are used to produce a range of products and can occur at different rates
People use understanding and skills from across the disciplines of science in their occupations	Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management	Chemical reactions, including combustion and the reactions of acids, are important in both non-living and living systems and involve energy transfer	Advances in science and emerging sciences and technologies can significantly affect people's lives, including generating new career opportunities
Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge	People use understanding and skills from across the disciplines of science in their occupations	Advances in science and emerging sciences and technologies can significantly affect people's lives, including generating new career opportunities	The values and needs of contemporary society can influence the focus of scientific research
Collaboratively and individually plan and conduct a range of investigation types , including fieldwork and experiments, ensuring safety and ethical guidelines are followed	Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge	The values and needs of contemporary society can influence the focus of scientific research	Use knowledge of scientific concepts to draw conclusions that are consistent with evidence
Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method	Collaboratively and individually plan and conduct a range of investigation types , including fieldwork and experiments, ensuring safety and ethical guidelines are followed	Use knowledge of scientific concepts to draw conclusions that are consistent with evidence	Evaluate conclusions, including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data
Communicate ideas,	Reflect on the	Evaluate conclusions,	Communicate scientific

findings and solutions to problems using scientific language and representations using digital technologies as appropriate	method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method	including identifying sources of uncertainty and possible alternative explanations, and describe specific ways to improve the quality of the data	ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations
	Communicate ideas, findings and solutions to problems using scientific language and representations using digital technologies as appropriate	Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations	

	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 analyses	Analysis method told	Discussed analysis	Guided analysis	Learner 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