

# Lab safety and Working Scientifically Topic Overview



During this topic I have shown that I can	Confidence (tick)		
	$\odot$	••	$\odot$
Identify hazards and risks in a situation or practical			
Describe the controls that will help prevent risks			
Identify, draw and label equipment that is used in a laboratory			
Identify parts of the Bunsen burner and use it safely			
Describe scientific variables			
Write a method that will help someone else to carry out my method			
Carry out an experiment safely			
Collect results in a table correctly			
Draw a bar chart correctly			
Draw a line graph correctly			
Write a conclusion from my experiment			
I can evaluate my results and method			

#### Energy 1 (3.1, 3.2) Module Overview

During this topic I have shown that I can	Confidence (tick)		ick)
	$\odot$	•••	$\odot$
compare the energy in food and fuels with the energy needed for different activities.			
describe the difference between a renewable and a non-renewable energy resource.			
describe the link between power, fuel use, and cost of using domestic appliances.			
state how energy is transferred.			
calculate useful energy and wasted energy from input and output energies.			



## Ecosystems 1 (9.1, 9.2) Module Overview



During this topic I have shown that I can	Confidence (tick)		
	·	•••	(i)
Combine food chains to form a food web.			
Present population data as a graph to describe trends and draw conclusions.			
Describe how different organisms co-exist within an ecosystem.			
Interpret secondary data to describe simple predator–prey relationships.			
Identify the main structures in a flower and link their structure to their function.			
Describe the process of fertilisation in plants.			
Describe methods seed dispersal, and use the features of seeds and fruit to explain how they are adapted to their method.			

#### Matter 1 (5.1, 5.2) Module Overview

During this topic I have shown that I can	Confidence (tick)		
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State that the properties of substances can be described in terms of particles in motion.			
Describe the properties of a substance in its three states.			
Describe how the properties of a substance change as it melts or freezes.			
Draw straightforward conclusions from boiling point data presented in tables and graphs.			
Draw annotated before and after diagrams of particles, and use words, to explain observations about evaporating, condensing and subliming.			
Describe examples of diffusion.			
Use words to explain gas pressure simply.			



# Organisms 1 (8.2, 8.1) Module Overview



During this topic I have shown that I can	Confidence (tick)		
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State what is meant by a tissue, an organ, and an organ system.			
Name the main parts in the skeleton.			
State how a muscle exerts force during movement.			
Carry out an experiment to study the muscle system in a chicken wing.			
Use a microscope to observe a prepared slide, with assistance.			
Identify one similarity and one difference between a plant and an animal cell.			
State structural adaptations of plant and animal cells, summarising this in a table or as a model.			
Identify substances that move into or out of cells.			
Identify some structures in an amoeba.			

## Forces 1 (1.1, 1.2) Module Overview

During this topic I have shown that I can	Confidence (tick)		
	$\odot$	(1)	$\odot$
Describe what forces do.			
Identify familiar situations of balanced and unbalanced forces.			
State the equation for speed and use it to calculate speed, with support.			
Present data given on a distance—time graph, with support.			
Describe the difference between mass and weight.			