

## Personalised Learning Checklist

Subject: Science


Year group: 10



Dear Student,

During the academy closure you have been set a number of tasks. The list below is the learning you should have completed. Your teacher will use the list to check your progress during this time. It may be used for short quizzes, mini assessments or homework. Where there are gaps your lessons will focus on improving your knowledge and understanding.

### CP3: Conservation of Energy

Lesson	Objective	My personal RAG rating (Red- do not understand, Amber- some understanding, Green- I am confident)			Teacher RAG rating
Energy stores and transfers	Explain, using examples, that energy is conserved.	RED	AMBER	GREEN	
	Give examples of energy being moved between different stores.	RED	AMBER	GREEN	
	Interpret diagrams that represent energy transfers.	RED	AMBER	GREEN	
	Represent energy transfers using diagrams.	RED	AMBER	GREEN	
	Describe what happens to wasted energy in energy transfers.	RED	AMBER	GREEN	
Energy efficiency	Explain some ways in which energy is transferred wastefully by mechanical processes.	RED	AMBER	GREEN	
	Explain some ways of reducing unwanted energy transfers in mechanical processes.	RED	AMBER	GREEN	
	Define what efficiency means.	RED	AMBER	GREEN	
	 Explain how efficiency can be increased.	RED	AMBER	GREEN	
	Recall and use the formula for calculating energy efficiency.	RED	AMBER	GREEN	
Keeping warm	Describe the ways in which energy can be transferred by heating.	RED	AMBER	GREEN	
	Describe ways of reducing unwanted energy transfers using thermal insulation.	RED	AMBER	GREEN	
	Explain how different ways of reducing energy transfer by heating work.	RED	AMBER	GREEN	
	Define the meaning of thermal conductivity.	RED	AMBER	GREEN	
	Describe the effects of the thickness and thermal conductivity of the walls of a building on its rate of cooling.	RED	AMBER	GREEN	
Non-renewable resources	List the non-renewable energy resources in use today.	RED	AMBER	GREEN	
	Describe the advantages and disadvantages of non-renewable energy resources.	RED	AMBER	GREEN	
	Compare the advantages and disadvantages of non-renewable energy resources.	RED	AMBER	GREEN	
	Explain how the use of non-renewable energy resources is changing.	RED	AMBER	GREEN	

Renewable resources	List the renewable energy resources in use today.	RED	AMBER	GREEN	
	Describe the source of energy for different renewable resources.	RED	AMBER	GREEN	
	Describe the ways in which the different energy resources are used.	RED	AMBER	GREEN	
	Explain why we cannot use only renewable energy resources.	RED	AMBER	GREEN	
	Explain how the use of renewable energy resources is changing.	RED	AMBER	GREEN	