

## Personalised Learning Checklist

Subject: Science

Year group: 8



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.

### Adaptation and Inheritance

	Objective	My personal RAG rating (Red- do not understand, Amber- some understanding, Green- I am confident)			Teacher RAG rating
Inheritance	>You inherit characteristics from your parents, this is your DNA	RED	AMBER	GREEN	
	> DNA is arranged into long strands called chromosomes, Each chromosome is divided into sections of DNA	RED	AMBER	GREEN	
	>The sections of DNA that contain the information to produce a characteristic are called genes	RED	AMBER	GREEN	
	> Inheritance of genes from both parents leads to variation within a species	RED	AMBER	GREEN	
Types of variation	> Any feature that changes gradually over a range of values has continuous variation e.g height	RED	AMBER	GREEN	
	>Any feature that has a limited number of values or can be grouped into categories have discontinuous variation e.g. eye colour	RED	AMBER	GREEN	
	>Scatter graphs are used to show whether or not there is a relationship between two sets of data	RED	AMBER	GREEN	
	> Variation is important for the survival of a species	RED	AMBER	GREEN	
Natural selection	> Natural selection is a theory that explains how species evolve and why extinction occurs	RED	AMBER	GREEN	
	>Within a species, variation helps adaption to environmental changes, avoiding extinction	RED	AMBER	GREEN	
	>If an organism is not able to change over time due to natural selection, their numbers will decrease	RED	AMBER	GREEN	
Biodiversity	> Biodiversity is vital to maintain populations	RED	AMBER	GREEN	
	>Within an ecosystem, having many different species ensures that resources are available for other populations, like humans	RED	AMBER	GREEN	
	>A lack of biodiversity can affect an ecosystem	RED	AMBER	GREEN	
	>By preserving biodiversity, we can provide useful products and services for humans, such as drugs for disease	RED	AMBER	GREEN	

