



# Physics KS3

## Mastery in Year 9

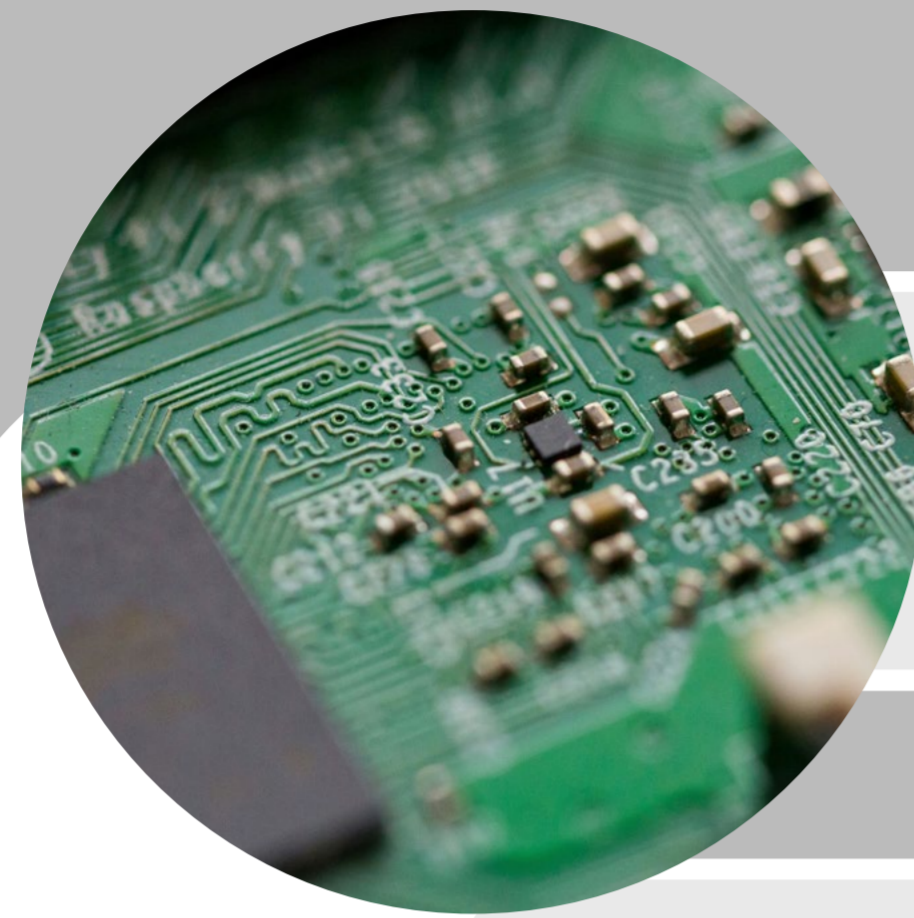
- Demonstrate accurate and appropriate knowledge and understanding and apply these to some familiar and unfamiliar contexts.
- Develop some logical descriptions, which includes some accurate and relevant detail.
- Use appropriate mathematical skills to perform calculations.
- Interpret qualitative and quantitative data and draw conclusions supported by some evidence
- Suggest improvements to experimental methods, and comment on the accuracy of scientific conclusions.

## Mastery in Year 8

- Demonstrate relevant scientific knowledge and understanding and begin to use scientific terminology regularly.
- Perform calculations.
- Draw simple conclusions from qualitative or quantitative data.
- Make comments relating to experimental methods.

## Mastery in Year 7

- Demonstrate some relevant scientific knowledge and understanding and begin to use scientific terminology regularly.
- Perform some basic calculations.
- Draw simple conclusions from qualitative or quantitative data.
- Make basic comments relating to experimental methods.



### ELECTRICITY

How does electricity flow in a circuit with varying levels of resistance?



### PARTICLE MODEL OF MATTER

How does the particle model explain everyday phenomena and behaviour in the states of matter?



TRANSITION

### ENERGY

How do we use energy to power the world we live in?



YEAR  
9



### WAVES – EFFECTS AND PROPERTIES

What happens when waves interact with different materials?



YEAR  
8

### FORCES – CONTACT FORCES AND PRESSURE

How can we calculate the effect of changing forces?



### ELECTROMAGNETS – MAGNETISM AND ELECTROMAGNETISM

What are magnets and how do we use them?



### ENERGY – WORK, AND HEATING AND COOLING

How is thermal energy transferred?



### ENERGY – COSTS AND TRANSFERS

What are the types of energy around us and how do we interact with them?



### WAVES – SOUND AND LIGHT

How do sound and light energy travel??



YEAR  
7

### FORCES – SPEED AND GRAVITY

How do forces change the motion of an object?



### ELECTROMAGNETS – CIRCUITS (VOLTAGE AND CURRENT)

How are voltage, resistance and current different in series and parallel circuits??

