





KEY  Forces  Energy  Waves  Earth and beyond

YR9

Y9 SUMMER TERM UNIT 1



Changes of state

What is density?
How is specific heat capacity calculated?

Y9 SUMMER TERM UNIT 2



Calculating motion

What is a distance-time graph?
How do you calculate acceleration?

YR10

Y10 UNIT 1



Pressure

What is atmospheric pressure?
How is it determined if an object will float or sink?



Y10 UNIT 2



Newtons laws

What is used to represent forces in a diagram?
Why are some objects able to accelerate?



Y10 UNIT 3



Forces in action

What is Hooke's law regarding stretching of a spring?
How do simple machines work, such as levers and gears?

Y10 UNIT 6

Wave behaviour

What are the properties of waves?
How is sound processed by the ear?

Y10 UNIT 5



Advanced magnetism

What is a transformer and how does it use magnetism?
How do motors use magnetic fields to turn?



Y10 UNIT 4



Electricity

What is static electricity and how can it be used?
How do current and potential difference change in series and parallel circuits?

Y10 UNIT 7



Electromagnetic spectrum

What are the uses of electromagnetic waves?
How are electromagnetic waves used in imaging?

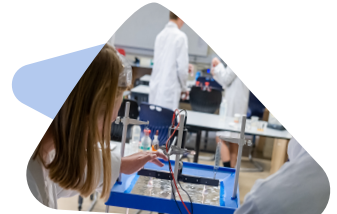


Y10 UNIT 8



Wave interaction

What is the difference between a concave and a convex lens?
How do you produce a spectrum of white light?



Y10 UNIT 10



Uses and hazards of radiation

What is nuclear fission?
How are nuclear fission and nuclear fusion different?

Y10 UNIT 9



Radioactive emissions

What are the different types of radioactive emissions?
How are the the different types of radioactive emissions stopped?

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Y11 UNIT 1



Work done

What energy stores exist and what happens when these stores are used?
How can calculations between energy stores be calculated?

Y11 UNIT 2



Power and efficiency

What is used to insulate the home?
How is the cost of energy calculated?



Y11 UNIT 4



Powering Earth

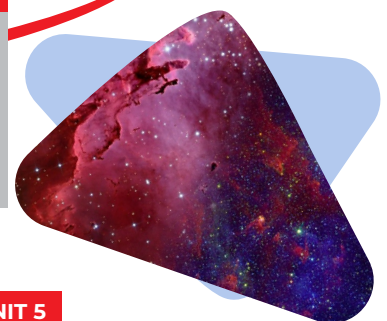
What are the wires in a plug and what are their roles?
How does the National Grid supply energy safely to homes?

Y11 UNIT 3



Physics on the move

What factors affect thinking distance?
How are stopping distances calculated?



Y11 UNIT 5



Beyond Earth

What are the key components of the Big Bang?
How do we know about the structure of the Earth?