

Level 4-6 Projects

How heat is transmitted
An energy-efficient home
What makes a hot air balloon rise
Expansion of solids, liquids, & gases when heated
How a thermostat works
How a toaster works
The steam engine
The periscope
Kaleidoscopes
How binoculars work
How a microscope works
How a telescope works
What makes rainbows
Different types of mirrors
Lenses and what they do
How a camera works
How Polaroid glasses work
What causes light to bend
How photocells work
How a prism works
The pinhole camera
The Doppler effect
What causes echoes
How a record player works
How an electric motor works
How a generator works
Batteries, how they work
The telegraph
What is a transformer
What is a transistor
Electronic components and their functions
Hydroelectric power
The series circuit and the parallel circuit
How airplanes fly
How a wing works
Hero's engine
How rockets fly
Looping rollercoasters - how they work
How a canal lock works
Primitive clocks
Distillation
Solar still
Water filtration
pH and how to measure it
Acids, bases and pH
How elements combine to make compounds
Capillary action
Radioactivity and Geiger counters
The sextant (or quadrant)
What is density
What is surface tension
Weather forecasting
How a barometer works
Cloud chamber
Effects of air pressure
Fermentation
Osmosis
Phases of the moon (working model)
Eclipses
How a geiser works
Harvesting the wind with windmills
How clouds form
Different types of earthquake faults
Sedimentation
How a sundial works
How does the human heart work (model)
The circulatory system
The ear
Tooth decay
Why a fish has fins
Bird wings, how they work
Photosynthesis
Hydroponics
The action of yeast in bread
How yogurt is made
How cheese is made
Paper recycling
Aluminum recycling
Glass recycling
Oil wells, how they work
The submarine