



Imagineering Log-book

Name

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Junior Engineering Club

Project	Activity	Club Member feedback Tick the boxes The more ticks the better you enjoyed					Complete
Aero Glide	Review the forces of flight and control surfaces. Construct and test fly a model glider.						
Health and Safety	Review safe practice and risk assessment applied to the use of tools.						
Magnetic Compass	Review magnetic materials. Construct a compass and test accuracy and direction. Use the compass to follow or create a map.						
Balance	Using the concept of moment = weight x distance. Construct, calibrate, and test a beam balance.						
Morse key & buzzer	Review and build an electro-magnet, construct 'make and break' circuits. Introduction to electronic diagrams and symbols Construct and test a model. Create and decipher coded messages.						
Slide rule	Review mathematical principles. Construct and use a slide rule applying estimation rules.						
Helicopter	Review the forces involved with helicopter flight including torque and reaction torque. Construct and test fly the model.						
Robot Duck	Introduction to gearing, offset cranks and rotating mechanisms. Construct and test a model.						
Micrometer	Review methods of measurement. Construct, calibrate, and test a micrometer.						
Factory visit	See modern industry at work						
K'Nex	Construct and test an engineering project:- example a bridge span or a moving mechanism.						
Telescope	Review the properties of light; convex and concave lenses; focal lengths, reflection and refraction. Build and test a refracting telescope.						
Solder Practice	Introduction to eutectic alloy and hot fusion of metals. Hands on soldering practice.						
Resistor chart	Introduction to resistance coding and tolerance bands. Review of multi meter testing.						
Moisture detector	Advanced electrical circuits and introduction to electronic components and printed circuit boards. Assemble and solder parts to construct and test a model.						
Fuse tester	Review series and parallel circuits. Assemble and solder parts. Construct and test a model.						
Steady Hand Game	Review series circuits: construct and shape metal conductors, test and assemble a model.						
Project reviews	Check how each project has gone? How well did we do and did the project work?						
Certificate	Award completion certificates						