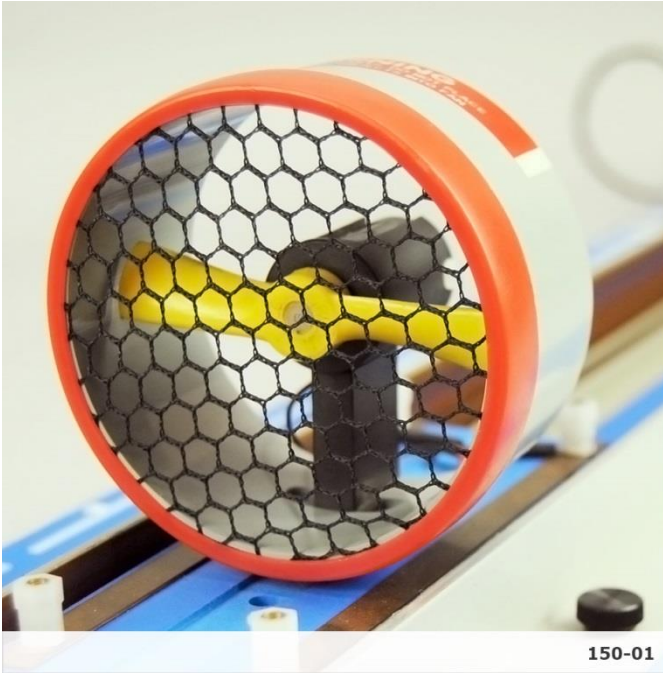


Product Information Sheet

Research and Design Teaching Set



150-01



150-02

Our STEM learning packages have been designed to provide practical real world problem solving tasks and activities within the classroom or lab environment.

These activities will provide an engaging approach that helps instructors show contextualized linkages between Science, Technology, Engineering, and Mathematics.

The Research and Design package offers practical learning opportunities, to investigate the role science and technology plays in research and design. Learners develop an understanding of how STEM impacts our world, through the context of a modern mass transit system based upon a maglev train simulation.

The trainer is supplied with a curriculum CD containing theory and practical lessons, as well as tutor support materials

The trainer can also be used in conjunction with our optional cloud-based STEM software packages, which offer online practical tasks as well as interactive theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

Typical Practical Activities Include:

- Identify transportation issues as problems that a Research and Design project might attempt to solve
- Extract information to create a formal list of specifications for a Design Brief
- Investigate and Research Transportation technologies
- Use the Internet to research information about the fuels used in Propulsion Systems

- Use a virtual laboratory to test materials for use in making electrical contacts
- Measure the force created by a model vehicle crashing
- Design a buffer to be used with a model Maglev vehicle
- Discover how computers are used to control automatic
- Reduce the fares paid by passengers using a Maglev transportation system

Items Included:

- Maglev Track
- 2 Maglev Vehicles
- Maglev Control Interface Unit
- Maglev Connection Lead and Power Supply Set
- Buffer Design Consumable Pack
- Maglev Control Software and Simulation CDRom
- Parallel to USB Adapter

Other Items Required:

- LJ Create Engineering or Technology Content (Optional)
- Computer with DVD Drive and Spare USB Port

General Information:

Power Requirements: 110 – 240V 50-60Hz
Maglev Track Dimensions: 1600 x 120 x 185 mm (W x H x D)
Packed Volume: Approx. 0.126 m³
Packed Weight: Approx. 13.7 kg

Order Code: 150-00

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For more information visit www.ljcreate.com