

Hoverboard

TASK:

Design and create a hoverboard model using the science of magnetic repulsion.

CRITERIA:

- The hoverboard model should be no longer than 20 cm.
- The magnets should not be obviously visible on the hoverboard.
- The hoverboard should be placed above a base that will also contain magnets.
- The hoverboard can be made from any suitable materials, as long as it is lightweight.



SUGGESTED MATERIALS:

- magnets/bar magnets
- craft sticks
- plastic bottles
- polystyrene
- cardboard
- digital camera or iPad®

Physical sciences

Project 4

Hoverboard

- Research how magnetic repulsion works and how it relates to a pushing force.
- Draw and label a diagram of your hoverboard design, including a base, and plan how you will use the magnets to give the effect of hovering.
- Collect the materials you will need, such as magnets and whatever suitable materials you choose to make your hoverboard from.
- Create the hoverboard model and its base, to look like your plan.
- Check that the hoverboard meets the criteria.
- Give a presentation showing your hoverboard 'hovering' and explain how you used magnets to achieve this. Share the digital photograph via email or submit it for use in your school newsletter.

