Build It!  KS1

Duration: 1 hour, max capacity: 35 students

Budding young engineers and construction crews test special mini houses to explore the properties of different building materials – such as the ability of brick walls to withstand a tornado, and how best to waterproof your roof. They finish by applying their new skills to work as a team and together build a much larger house.

Key Words:
Everyday materials, Design, Building, Construction, Homes, Environment, Fair testing

Learning objectives:
Compare and group together a variety of everyday materials based on their simple physical properties. Develop an understanding that materials are suitable for different purposes based on their properties. Begin to develop an understanding that science is used in the real world to solve real life problems. Know what materials and what arrangements may be most useful to build a house. Know which materials are waterproof. Perform simple tests and realise that carrying tests is a great way to find answers in science. Feel empowered to use the Build It! exhibition.

Curriculum Links:
Everyday materials:
Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties

Uses of everyday materials:
Identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard

Content:
Sort materials into those suitable for building a house and those that are not Watch demonstrations and take part in discussions about the properties of materials to decide which materials are best for building a strong and waterproof house Assess different brick arrangements for strength against a ‘tornado test’ Split into teams based on job roles on a building site and work together to build a giant house

Potential Hazards and accessibility
Presenter uses a blowtorch

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