

# Pushes and pulls



## Learning objectives

- Understand that objects move when pushed and pulled
- Recognise pushes and pulls as part of everyday life
- Investigate forces required to make objects move
- Gain an appreciation of invisible pushes and pulls (gravity, wind)
- Understand that objects may change shape when pushed or pulled

## Workshop content - students will:

- Have the chance to ride in or push/pull our At-Bristol truck
- Investigate what force is required to make a toy move
- Challenge the invisible pull of gravity
- Explore deformation in the form of squashing and stretching
- Investigate the invisible push of wind by making a windmill to take home
- Launch a rocket

## National Curriculum links

### Sc1 Scientific enquiry

### Sc3 Materials and their properties

#### 2) Changing materials

- a. find out how shapes of objects made from some materials can be changed by some processes

### Sc4 Physical processes

#### 2) Forces and motion

- a. to find out about, and describe the movement of, familiar things
- b. that both pushes and pulls are examples of forces
- c. to recognise that when things speed up, slow down or change direction, there is a cause (for example, a push or a pull)

### QCA science units

1E Pushes and pulls

## Picture gallery



Investigating an invisible push