Science for families

Physical sciences

Push-pull pursuit

F - Yr 2

At least 10 minutes

General household equipment needed

Medium level of supervison

Can be done indoors and outdoors

Internet and camera access are *optional*

Preparation

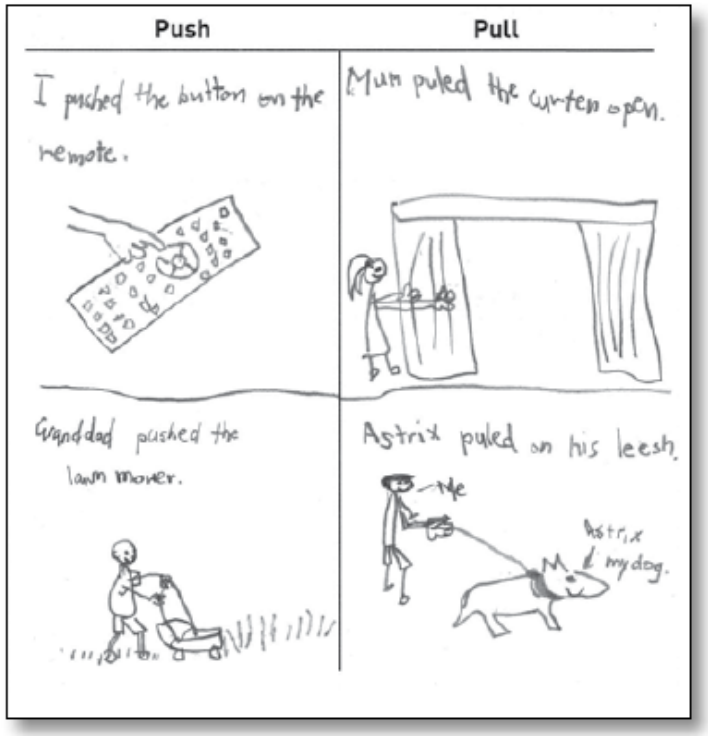
- Print/ copy the task sheet *OR*
- Create a copy on A4 paper or in a scrapbook

Purpose

- To identify pushes and pulls at home, share learning experiences, and record words students know or learn about how objects move.

Description

1. Students explore objects around the home that need to be pushed or pulled to make them move. Some pushes and pulls that might happen at home include: a wheelbarrow being pushed along in the garden, doors that open or close when they are pushed or pulled, or zippers on clothing being pulled up or down.
2. Students create a summary of objects using Push and Pull as categories by completing the *'Push pull pursuit'* task sheet.



EXAMPLE:
A 'Push pull pursuit' task sheet completed at home.

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Before the task

- Find out what students think they know about how objects move. You may wish to use these questions to guide you.
  - How do you think objects move?
  - What might we do to make objects move?
  - What do you think happens when objects move?
  - How might we describe how objects move?
- View the video 'Pushing and pulling' (3:18) with the student: http://www.stem.org.uk/resources/elibrary/resource/32044/pushing-and-pulling
- Discuss what the student thinks they know about the pushes and pulls in the video.
- Explain the Push-pull pursuit task by brainstorming places that could be investigated such as, the kitchen, the backyard, the living room, while on a walk, in a car, on a bike, pram or scooter.

After the task

- You may like to re-view the video (optional).
- Using the completed task sheet, discuss the pushes and pulls identified by the students.
- Create a list of words used or heard in a scrapbook or other.
- You may wish to use these questions to guide you.
  - What was your favourite thing about this activity?
  - What did you find challenging or tricky?
  - What pushes did you notice?
  - What can you tell me about these?
  - What pulls did you notice?
  - What can you tell me about these?
  - What else did you notice during the Push pull pursuit?
  - How do you think objects move?
- You may wish to share the sheet with others.

Explore some more

Explore some toys - What different ways can you push or pull toys to make them move from one place to another? Use pictures and words to show what you did.

Push or pull	Example
Pull (contact force)	Opening a door towards you
Push (contact force)	Throwing a ball
Pull (gravity)	Dropping a pen
Pull (magnetic force)	Magnet attaching to a fridge
Pull (contact force)	Towing a car
Push and pull (contact forces)	Twisting a tap on.

EXAMPLE:
A table of some common examples of pushes and pulls.

SAFETY

Ask students to be careful while they are investigating and not to push or pull things that are fragile and/or too heavy or dangerous, such as chemical containers, tools or appliances.

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Information note for families

Name:	Date:

The ‘Push pull pursuit’ task

During our science time at home, we will be observing how a push or a pull affects the way an object moves. We will learn new words and share our ideas, thinking and learning.

Some pushes and pulls that might happen at home include: a wheelbarrow being pushed along in the garden, doors that open or close when they are pushed or pulled, or zippers on clothing being pulled up or down.

We will complete the resource sheet ‘Push pull pursuit’. We will draw (or photograph) at least two objects at home being pulled to move and two objects at home being pushed to move.

Optional: We might share the completed activity with our teacher or classmates.

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Name:	Date:

Find objects that you push or pull to make them move.

Write, draw or take a photo of what you find. Add it to the T-chart below.

Push	**Pull**