

For 4 to 5 year olds

Context

The weather on Mars is much more extreme than on Earth. Mars has very few clouds and it does not rain, so although very cold, it is sunny, except when it experiences strong winds and huge dust storms. There are some similarities however, for both have seasons and polar ice caps.

In this activity the children name different types of weather and complete a class weather chart using symbols. They choose appropriate materials to construct a simple wind gauge and decorate it using their imagination. Finally they test their models and explain how they work. They enjoy a video animation of a trip to Mars.



Mars' Whirling Dust Devil

© NASA / JPL-Caltech / UA

Curriculum links

Understanding the world:

- Identify and name different types of weather

Expressive arts and design:

- Choose suitable materials and construct a simple wind gauge
- Explain how the model works

Resources

- Weather chart and symbols
- Selection of:

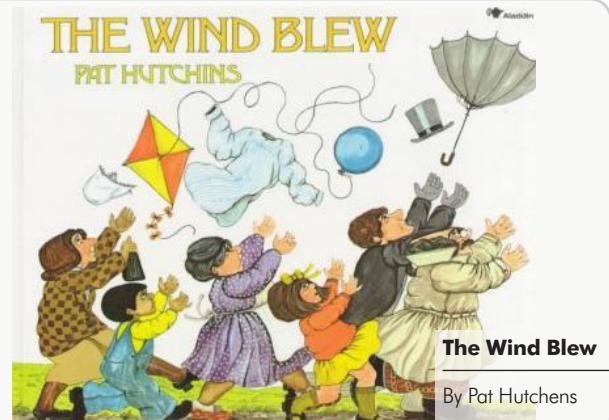
› Feathers	› Battery operated fans or hand fans
› Streamers	› Straws
› Paper	› Disposable cups
› Paper plates	› Wooden lolly sticks or thin dowels
› Glue	› Sticky tape
	› Wind chimes

Lesson starter

Read the story 'The Wind Blew' by Pat Hutchins (or a similar windy weather themed story).

- What types of weather can the children name?
- What is the weather like today?
- Identify some weather symbols and add the appropriate symbol to the chart. How can we find out what the weather is like on other planets far away in space?
- Show the telescope. Does anyone know what it is for?

Scientists use big telescopes to look at planets far away in space. Scientists have found out that one of the planets, Mars, is often very windy.



The Wind Blew

By Pat Hutchins

Main activity

Show the variety of materials available.

- Which would move in the wind most easily? Why?

Demonstrate the model wind tester, made by decorating a disposable cup or paper plate with strips of paper streamers glued around the edge, and attaching a stick handle. Demonstrate how blowing gently makes the paper strips move. Show the children the variety of materials available.

- Which would move in the wind most easily?

Explain that they are going to design and make a wind tester to measure the strength of the wind. The children plan, make and then test the effectiveness of the wind measurers by blowing the streamers with small hand held fans.

- Can your wind tester show how windy it is today?

Investigate!



Plenary

- Did they enjoy making and trying out their wind testers?
- Did they work well?
- What happened when the wind blew?
- What did the wind feel like? Think of some words to describe the wind.

Watch ESA's animation Paxi goes to Mars:

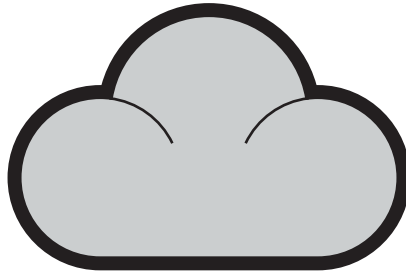
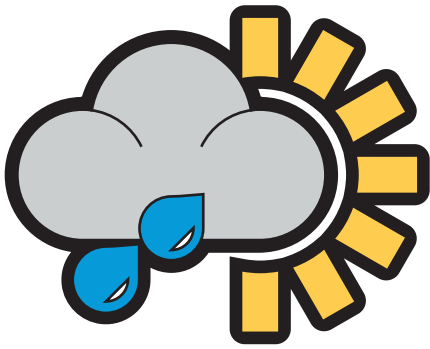
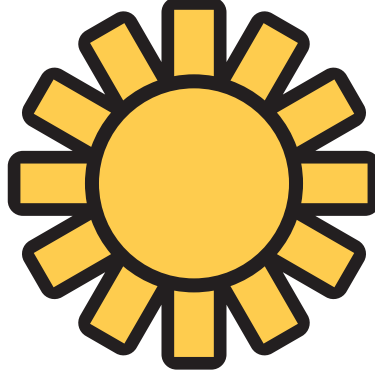
www.esa.int/spaceinvideos/Videos/2016/05/Paxi_-_The_Red_Planet

Further activities

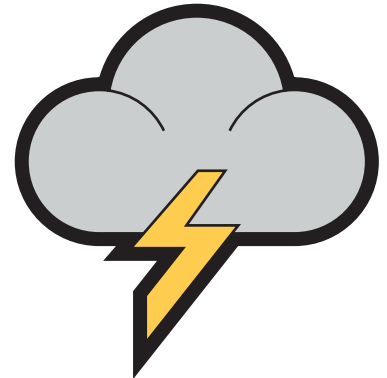
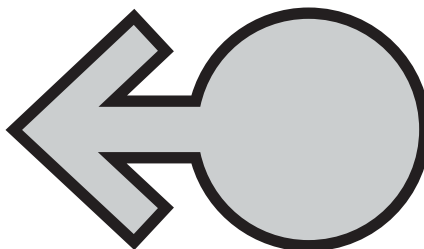
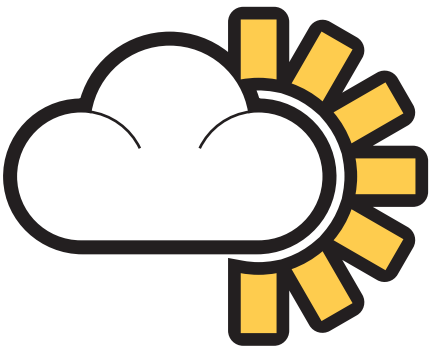
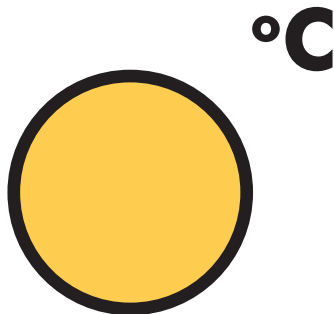
- Investigate a variety of materials. Sort into two groups – can or can't be moved by the wind; by blowing through a straw
- Set up a windy day washing line. Attach a variety of materials and watch them blow in the breeze
- Blow bubbles, run with kites or paper of different sizes, drop parachutes, fly paper planes

STEM Vocabulary

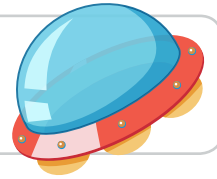
Weather	Sunny	Mars
Windy	Rainy	Telescope



FOG



Cut out and stick a different weather word (or symbol) on each face of a large dice.
Stick a different movement word on each face of a second dice.



run

windy

hop

rainy

skip

cloudy

walk

sunny

jump

snowy

twirl

partly cloudy

roll

icy

fly

foggy