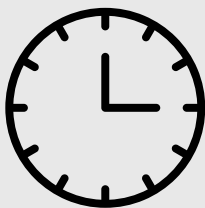
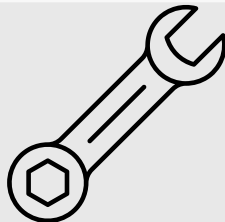
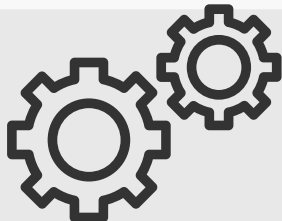


Mars Mysteries

Image credit: Alan Giltinan BCO

Keywords	Level	Time	Core Skills	Activity Type
				
Forces, Gravity, Falling Objects, Speed	Senior Primary 3rd - 6th	1.5 h	Fair testing	Investigation Science experiments

Activity Summary

Mars is the best studied of all the planets, with almost forty years of exploration with robotics studying valleys and volcanoes.

Students will find out what we know about Mars through satellite images and surface exploration by rovers and landers.

Sand trays will be used to model various processes that have affected the surface of Mars, with experiments about cratering.

The 1.5 h version of this workshop includes Martian water channels images and experiments. Students will apply their understanding to design their own experiments on the theme of craters on Mars.

Children will,

- Identify features visible on a satellite image of Ireland.
- Compare satellite images of Mars and Earth
- Design and carry out an investigation to explore factors that affect crater size
- Explore water channel formation, compare to satellite images

Learning Objectives and Curricular Links

Science: Materials: Materials and Change Science: Energy and Forces: Force

Materials

Satellite Images of Earth and Mars Cratering: Sand trays, flour, impactors, rulers
Water flow: Sand trays, funnels, water, rulers

Background Information / Skills required

This activity is based on: DPSM: The Moon, Craters and Meteorites Skills: measurement of distance Fair testing, inquiry skills

Additional Information / Follow on Activities

General Overview

- Exploring the surface of mars with Graphics made with GIS software [ersi mars](#)
- [Mars Express](#), [here](#) are some images taken.

Pre activity resources.

- [Mars Quest](#) collection of mars exploration resources
- [Esa childrens breif](#)

Post activity resources

- [Explore Mars Inside and Out](#) from Lunar and Planetary Institute (LPI)
- [Impact calculator](#)
- [Mars overview](#)

Resource made with the help of previous esero bco workshop development