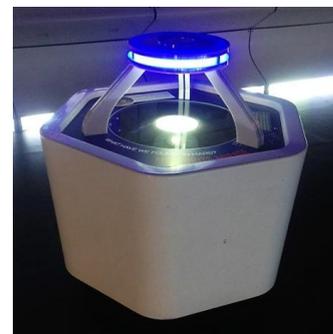


Meteorite Mirage



Location

First floor, Space gallery exhibition

In a nutshell

Have a look at a mirage of 'Block Island' a meteorite that lies on the surface of Mars.

What to do

Students can look at and try to touch the rotating image of the meteorite. Can students identify how the real meteorite compares to the image in size and weight? Try to guess what materials it may contain by observation and then look at the exhibit information to see if they were correct.

Time Required

KS3 & KS4 3 minutes per student.

What's happening?

The actual Block Island is 60cm in length and would weigh close to half a tonne. It is still on the surface of Mars. It was discovered by NASA's Mars Exploration Rover Opportunity in 2009. Most meteorites break up when hitting the ground because today's martian atmosphere is not dense enough to slow them down enough. A meteorite is a piece of a comet, asteroid or meteoroid that has passed through a planet's atmosphere without being burned up and landed on its surface. Scientists say this meteorite could have landed on Mars intact only if it had two things: a very specific entry point into the atmosphere and a very shallow flight path. That would slow it down enough to keep it from breaking apart upon landing. The Mars Exploration Rover Opportunity determined the composition of the meteorite using spectroscopy; this is the study of the interaction between matter and electromagnetic radiation.

Curriculum links

KS3	English - Reading
	– learning new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries
KS4	English - Spoken
	– using Standard English confidently in a range of formal and informal contexts, including classroom discussion
KS4	Science - Identification of ions by chemical and spectroscopic means
	– describe the advantages of instrumental methods of analysis (sensitivity, accuracy and speed)
KS4	English - Spoken
	– listening to and building on the contributions of others, asking questions to clarify and inform, and challenging courteously when necessary
	– using Standard English when the context and audience require it

Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> • Destination space (KS3) • Atoms to Astrophysics (KS3 & KS4) • Is anybody out there? Theme day (KS3 & KS4) 	<ul style="list-style-type: none"> • Launch it! (KS3) • Invaders of Mars! (Planetarium, All ages) • We are aliens! (Planetarium, All ages) 		<ul style="list-style-type: none"> • Spectra • Space invaders • View of Earth

