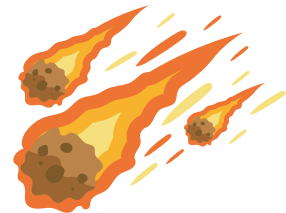


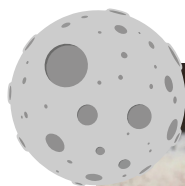
NAME

CREATING CRATERS



You'll need

A shallow pan or tray
Plain white flour
Cocoa powder
Ruler
Marbles or small balls



Instructions

Fill the tray about 2 cm deep with plain flour and lightly sprinkle the cocoa powder over the top to cover the entire surface.

Drop the marbles into the tray. The marbles represent crashing asteroids and comets.

Create craters using different size balls and marbles.

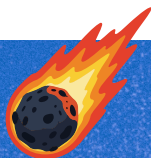


Measure and record the size of the crater for each ball.

Notice how the marble throws the white flour underneath up over the top of the dark cocoa powder, showing how material in the ground is pushed upwards during impact.

If two marbles that are the same size are dropped from different heights, the marble that has the furthest to fall will make the biggest crater as it has the most energy.

What is a crater?



A crater is a bowl-shaped depression formed by the impact of a meteorite, volcanic activity, or an explosion.

NAME

CREATING CRATERS RESULTS



Size of Ball	Height Dropped From (cm)	Diameter of Crater (cm)	Notes



NAME

CRATER INVESTIGATION



Sketch of Crater

When a meteorite impacts a planet or moon, it pushes into the surface. The material thrown out during the crash (called ejecta) reveals hidden rock layers buried beneath the surface, just like how the white flour was exposed beneath the cocoa powder



What happened to the size of the crater when the same ball was dropped from a greater height?

Did a bigger ball make a bigger crater when a large and small ball were dropped from the same height?

What happened to the cocoa powder and white flour when the ball made a crater?

Dropping a ball from a higher position makes a bigger crater.

TRUE

☐

FALSE

☐