MAKING CRATERS!

A crater is a circular shaped hole or pit on a planet's surface that has been created by an asteroid impact.

On a clear night, you might be able to see the largest craters on the Moon without a telescope. Make your own cratered planetary surface in this experiment!

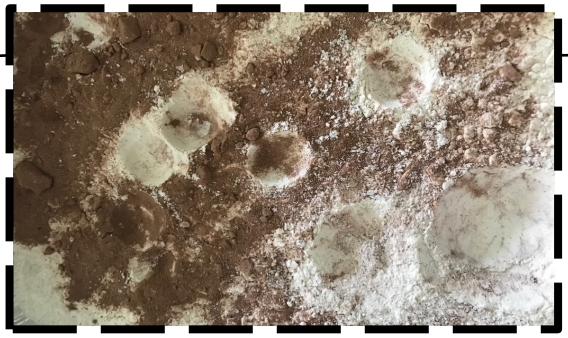
WHAT DO I NEED?

- A tray
- Flour
- Cocoa powder or drinking chocolate
- Small balls or rocks to drop into the tray

INSTRUCTIONS:

1. Fill a tray with a layer of flour (at least 2cm), gently shake the tray to make an even layer of flour.
2. Dust with thin layer of cocoa powder- don't move the tray after this.
3. Drop small balls or rocks from roughly 25cm above the tray. Remove them carefully once they have landed trying not to disturb the crater!
4. Continue making craters across the whole tray. Experiment by dropping from different heights (less than 25cm) or at different angles if you can.
5. Some craters can overlap, but don't overcrowd the tray, otherwise it will be difficult to observe features.

When you have finished, you should have something like this.



TASKS:

- Sketch some of your best craters. Using the pictures of Tycho Crater on the Moon to the right, label some of the features you can find.
- Draw and cut out small astronauts and spaceships to explore the surface of your planet! Put them on your surface and take close-up pictures of your surface. What have they discovered?

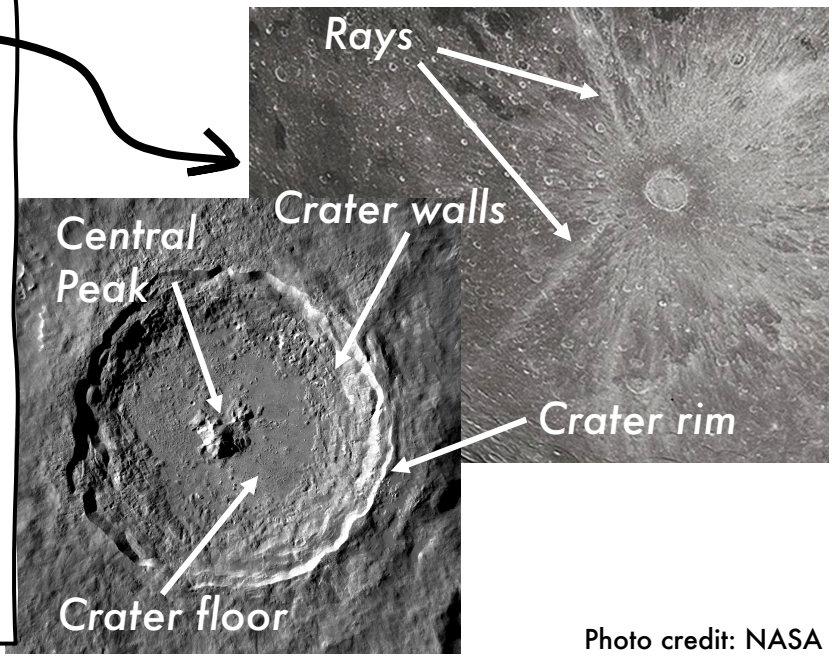


Photo credit: NASA