



## Craters of Mars

Make your own craters to understand how scientists decipher the ages of surfaces throughout the solar system and what this tells us about geological principles.

### Time

- 45-60 minutes of class time

### Grades

- 5-8

### Next Generation Science Standards

- MS-ESS2-2: Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
- MS-ESS1-3. Analyze and interpret data to determine scale properties of objects in the solar system.

### Utah Core Science Standards

- 5.2 Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface.
- 6.3 Students will understand the relationship and attributes of objects in the solar system.
- 7.2.2 Construct an explanation based on evidence for how processes have changed Earth's surface at varying time and spatial scales.

## Materials

- student worksheets
- fine silica sand
- screen squares for each group
- ring stands for each group
- petri dishes for each group
- spray bottles with water
- plastic knives
- timers or watches with second hands

## Directions

- Gather all materials ahead of time. Cut out the screen squares (10cm x 10cm) in advance from metal window screens.
- You will want to split your classroom into small groups for this activity.
- Follow the “Where is the Oldest Surface on Mars” directions to complete the activity.
- Download is below.