

This is The Process of Crater Formation Report Sheet

As you observe Tactile Card images 9a through 9i, describe what you learn about the transfer of energy by following the direction in which the arrows point. Record your responses in this report sheet.

Based on the Contact and Compression Phase Tactile Card Tactile Cards 9b-d, describe how energy is transferred in this first stage of cratering by describing the number and direction of the arrows.

Answer these questions based on Tactile Card Tactile Card 9e Pre-  
evacuation Phase

How is the void different in this image compared with the previous  
image?

What are some of the differences you can observe between this  
image and the previous images?

How has the transfer of energy changed?

Answer these questions based on Tactile Cards 9f-9h Evacuation Phase

As you observe each of these images, what changes are you observing in the size of the crater?

Where is happening to the soil from this crater ?

How is the energy of the ejecta changing in magnitude?

How would you describe the series of events in these sketches?

What do you predict will happen next?

Answer these questions based on Tactile Cards 9i-9j Modification Phase

You can observe the crater depression by tracking the heavy solid line underneath the loose particles. Track the solid line up and out to observe the crater walls. Note that there is a buildup of ejecta material on the edges of the crater.

How does this compare with your prediction?

Tactile Card 9j is a view of the crater as seen from above just like the craters from our tour of the Solar System. The ejecta pattern is the solid textured region and the loose particulate matter is again represented by short curved lines.

How the amount of gravity would affect what happens to the ejecta curtain?

**Thinking about Your Learning:**

Explain the causes and effects of impact cratering.

Describe craters and ejecta patterns that occur on several bodies in our Solar System.

Describe how energy is transferred during the process of crater formation.

What are some of the factors that would cause different shaped craters to form?

What variables would you like to test when you Design a Crater?