



Name: Form:

Based on pages 22 and 23 of *Earth and beyond*

Making craters

Try this...

1. Put a box or plastic bowl of dry sand on the floor. This represents the surface of the Moon.
2. Make a collection of objects to drop into the sand. Each one represents a meteoroid.
3. Think about the width of the crater that each object will make. Arrange the objects in order starting with the one that you think will make the smallest crater. Write down the order of objects from smallest crater to largest crater.



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4. Drop each object from the same height above the sand. Measure the width of the crater each object makes.

5. Arrange the crater widths in order of size starting with the narrowest.

6. Compare your arrangement of the objects with the arrangement of crater widths. How closely do they match?



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7. Think about the depth of the crater that each object will make. Arrange the objects in order starting with the one that you think will make the shallowest crater. Write down the order of objects from shallowest crater to deepest crater.



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8. Drop each object from the same height above the sand. Measure the depth of the crater each object makes.

9. Arrange the crater depths in order of size starting with the shallowest.

10. Compare your arrangement of the objects with the arrangement of crater depths. How closely do they match?



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11. If you dropped the objects from a greater height, what changes would you expect to see in the craters they made?



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