

Rocky & Gas Planets – Student Activity

The eight planets in our solar system are organised into four inner rocky or terrestrial planets and four outer gas giants.

Activity - To demonstrate how gravity may have separated the planets into inner rocky (terrestrial) planets and outer gas planets



Materials

- Three paper or plastic cups
- Some stones, sand and water, sufficient of each material to half fill one cup
- A cricket bat
- An open area of veranda or sealed playground

Method

1. Approximately half fill one cup with stones, the second with sand and the third with water
2. Line up the cups as in the picture above
3. Hit each cup firmly with the cricket bat.
4. Observe what happens to the contents of the cups and report below

Prediction

What do you think will happen to the different materials when they are hit?

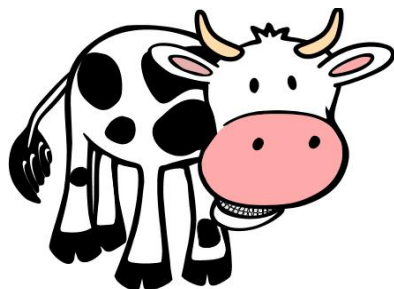
Observations

What happened to the contents of the cups? _____

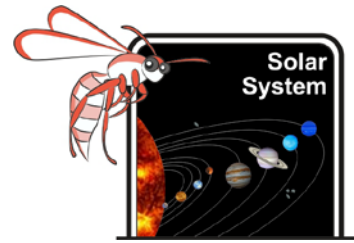
Discussion

Was this a “fair test”? Did the Cow Moo Softly? Explain your answer. **C** _____

M _____ **S** _____



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What could be adjusted to make this a fair test?

1. _____
2. _____
3. _____

If these changes are carried out, will this be a fair test? Will the cow moo softly?

Does this activity prove that gravity was the main source of separation of the planets into inner terrestrial planets and outer gas planets?

