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**Gravity Activity Sheet**

1. True or false: All objects attract one another.

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1. What would happen if there was no gravity?

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1. Fill in the blanks: The strength of gravity depends on \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_.
2. How do we measure gravity?

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1. True or false: Heavier objects always have a stronger pull of gravity than lighter objects.
2. Why would you weigh less on the moon?

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1. If you drop a hammer or a feather, why does a hammer fall faster than feather?

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1. What is friction?

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1. What happens if you drop a hammer and a feather on the moon?

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1. What stops all planets from crashing into each other?

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1. How did gravity help form the planets?

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1. How do black holes form?

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**ANSWERS:**

1. True
2. If there were no such thing as gravity you would fly up into the air and off into space.
3. The strength of gravity depends on distance and mass.
4. Weight is a measure of the pull of gravity on an object.
5. True
6. The moon has less mass than Earth, so its gravity is weaker.
7. Friction
8. Friction makes two objects resist each other when one is pushed or pulled across the other. It causes a moving object to slow down or stop.
9. They would fall at the same rate because there is no air in space, so no friction.
10. The gravity of the sun. Inertia stops Earth from crashing into the sun.
11. Gravity caused particles to collide and form the sun and planets. Gravity holds the sun and planets together.
12. When stars run out of fuel, there is nothing to stop the pull of gravity. The star collapses in on itself. This causes a black hole.