



Magnetic Goop

Make a fluid that is affected by a magnetic field.

What you need:

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| 8 to 10 Tablespoons of sand | 1 clear plastic cup/container with lid or lock and seal sandwich bag |
| 2 to 3 plastic sandwich bags | Vegetable oil or hair gel |
| 1 bar magnet or a strong refrigerator magnet might work | 1 teaspoon of water (add food coloring for fun) |
| 1 paper plate | 1 spoon for stirring |
| 1 bowl | |

What to do

1. Pour the sand into a bowl.
2. Wrap the magnet in a bag and pull it through the sand. Look at the magnet. You are collecting small black pieces of sand called iron ore.
2. Move the bag to the paper plate and remove the magnet from the bag so that the sand on the bag falls onto the plate. Then repeat steps 1 and 2 again to gather more sand.
3. Now wrap the magnet in a new bag and pull it through the sand on the paper plate.
4. Place all the black iron ore pieces collected from the paper plate into a cup or lock and seal bag.
5. Fill the cup 1/2 full with vegetable oil.
6. Add 1 teaspoon of colored water to the mixture.
7. Stir the mixture with a spoon.
8. Place the magnet next to the cup and watch what happens.
9. Move the magnet all the way around the cup.

What to ask

- What do you notice?
- What happens to the sand as you bring a magnet close to it?
- Why do you think there are different clusters in the oil?
- Can you move the clusters around the cup with the magnet?

Did you know?

The tiny magnetic pieces pulled from the sand are iron ore. Not only is iron ore well liked because of its magnetic attraction but also its nutritional value, iron is needed by our body to create red blood cells. Breakfast cereals that are fortified with iron contain iron ore as well.

What's next?

- Take a closer look at the iron in your breakfast cereal. With help from an adult, blend some fortified cereal in a blender till it turns to a pulp. You can also place the cereal in a lock and seal bag and crush the cereal by rolling it with a rolling pin. Wrap a magnet in a bag and place the magnet in the crushed cereal. How much iron ore did you collect?



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