

Iron in Cereal

Power Science Lab

Background: Each cell in your body needs **oxygen** to function properly. **Red blood cells** are responsible for delivering oxygen to all of your body's cells. **Iron** is needed to make red blood cells.

Question: Place the cereals in order by the levels of iron that they contain.

Prediction: Review the three cereals that you will use in this experiment. Which one do you think will have the highest level of iron? Why do you think that is? [Parents take a moment to discuss this with your child/ren].

Materials

- Cereal: Bran (Total), Chocolate (Choco-Puffs), Fruity (Froot Loops).
- Three petri dishes
- Three mortar & pestles
- Strong magnet
- Clear plastic sheet
- Dry erase marker

Procedure:

1. Line the three petri dishes in a row for easy observation.
2. Scoop one tablespoon of each cereal into its own mortar & pestle.
3. Using the marker, draw a large circle, and divide it into thirds.
4. Label each third of the circle: **Sample A**, **Sample B** and **Sample C**.
5. Using the pestle, crush the cereal in the mortar until it is ground into a coarse powder.
6. Pour each crushed cereal sample into its own petri dish.
7. Pass the magnet over the petri dish A and dump its contents onto the part of the plastic sheet marked **Sample A**.
8. Repeat step 7 for **Samples B & C**.

What Just Happened?

Iron is attracted to magnets. As you passed the magnet over the different cereal samples, the magnet was able to attract the iron from the samples. The more cereal the magnet picked up means the more iron the cereal has.

Science Flash Quiz: Iron's strong magnetic attraction is known as a physical _____ .

Answer: **Physical Property**. Physical properties are traits that describe an object such as its color, hardness, or its ability to be drawn to magnets!

References

<http://www.feosol.com/about-iron/why-is-iron-important>

<http://www.redcrossblood.org/learn-about-blood/iron-and-blood-donation>