

Moving Water

Procedure

1. **Experiment** Fill a large container with cold water. Fill a small container with warm water. Add a rock and several drops of food coloring to the small container. Place the lid on the small container and gently shake it.

2. **Predict** Predict what will happen when the small container is placed on the bottom of the large container and the lid is removed. Record your predictions below.

3. **Experiment** Measure and record the temperature of the water in each container. Then replace the lid and carefully place the small container on the bottom of the large container.

4. **Observe** Gently remove the lid from the small container. Observe the water for 10 minutes. Notice any movement of the colored water. Record your observations.

5. **Measure** Measure and record the temperature of the mixed water.

Conclusion

Write the answers to the questions below.

1. **Analyze Data** How did the temperature of the cold water change after 10 minutes? How did the warm colored water move when the small container was opened?

2. **Infer** Which do you think is denser, warm water or cold water? Explain.

Investigate More!

Design an Experiment Predict what will happen if you place a small container of cold colored water on the bottom of a large container of warm clear water. Try it. Compare your prediction with the results.

