



Feel the Heat

Procedure

1. **Observe** Hold your hands together. Do they feel cool or warm? Record your observations below.

2. **Compare** Rub your hands together very quickly for 10 seconds. Notice whether they feel cooler or warmer than they did before. Record your observations below.

3. **Observe** Pick up a steel wool pad and hold it in your hands. Does it feel cool or warm?

4. **Measure** Pour $\frac{1}{4}$ cup of vinegar into a bowl. Place the steel wool pad in the bowl for 2 minutes. Then remove the pad and squeeze it out over the bowl. Place the pad on a paper towel to dry for 5 minutes. **Safety:** Wear goggles and disposable gloves.

5. **Compare** Remove the gloves and feel the steel wool pad. Record whether it feels different than it did in step 3.

Name _____ Date _____

Conclusion

1. **Infer** What was the effect of rubbing your hands together in step 2?

2. **Infer** Mixing two kinds of materials can cause them to change and produce heat. Infer whether materials changed in steps 4 and 5. Explain your inference.

Experiment Predict how a coin will feel before and after rubbing it against sandpaper, cement, cloth, and other materials. Make a prediction about each material.

Guided Inquiry