### Materials
- Paper
- Cup or bowl
- Lemon juice
- Q-tip or paint brush
- Heat source (e.g. incandescent bulb, lit candle)

### Procedure
1. Pour a small amount of lemon juice into the cup or bowl.
2. Dip the Q-tip or paint brush into the lemon juice and use it to write a secret message onto the paper.
3. Allow the paper to dry completely so that the message becomes invisible.
4. Have an adult reveal your secret message by holding the paper over (but not on) your heat source.

### Results
The secret message was revealed by the heat!

### Why?
When the lemon juice on the paper was exposed to the heat, it underwent a chemical reaction called oxidation. The lemon juice is nearly colorless under normal conditions, but oxidation caused it to turn a dark color and reveal the message.

To learn more about Physical Science, check out the Pink Palace Museum’s *Magic of Science: Physical Science Sampler Program.*