

Comparing Light Bulbs



Grade Levels:
K-3

Questions:

- Do incandescent and fluorescent bulbs produce the same kind of light?
- Do incandescent and fluorescent bulbs produce the same amount of heat?

Possible Hypotheses:

- Incandescent and fluorescent bulbs do/do not produce the same kind of light.
- Incandescent and fluorescent bulbs do/do not produce the same amount of heat.

Materials:

- One incandescent and one fluorescent bulb that produce equivalent lumens
- Thermometer
- Lamp

Procedure:

1. Have an adult place the fluorescent bulb in the lamp and turn it on. Observe the light that is produced.
2. Hold a thermometer six inches above the bulb for one minute and record the temperature. Turn off the lamp and let the bulb cool.
3. Have an adult remove the fluorescent bulb, place the incandescent bulb in the lamp and turn it on. Observe the light that is produced.
4. Hold a thermometer six inches above the bulb for one minute and record the temperature.

Analysis and Conclusion:

Could you tell any difference in the kind of light the two bulbs produced? Did one bulb produce more heat than the other? Which bulb is more energy efficient?

