

## What's My Wattage?

Use the chart at the bottom of this page to record your answers as you follow these steps:

1. Put a 60-watt incandescent lightbulb in the lamp and turn it on. Wait for one minute. On a scale of 1 to 10, with 10 being the brightest, how much light is produced by this bulb?
2. Hold a thermometer 6 inches above the bulb for one minute. Record the temperature. Then turn off the lamp.
3. After the bulb has cooled, remove it from the lamp and insert a 14-watt compact fluorescent lightbulb. Turn the lamp on and wait for one minute. On the same scale of 1 to 10, how much light is produced by this bulb?
4. Repeat step 2.
5. After the bulb has cooled, remove it from the lamp and insert a 100-watt lightbulb. Turn the lamp on and wait for one minute. On the same scale of 1 to 10, how much light is produced by this bulb?
6. Repeat the steps using other bulbs.

### Now answer these questions:

*Which bulb produced more heat?*

*Is the hottest bulb also the brightest bulb?*

*Which bulb is most energy-efficient, and why?*

*How does it feel to now have this expert knowledge about lightbulbs?*

*How can you use your knowledge?*

| Type of Lightbulb           | Temperature | Brightness |
|-----------------------------|-------------|------------|
| 60-watt incandescent        |             |            |
| 14-watt compact fluorescent |             |            |
| 100-watt incandescent       |             |            |
| 27-watt compact fluorescent |             |            |