Cricket Chirps

Imagine you are outside at night during the summer. Your friend asks you if you know the air temperature. You reply, "Yes, and I can tell you the air temperature without looking at a thermometer." How is this possible? Would you believe it can be done by listening to the cricket chirps of the male cricket? That's right. Only male crickets chirp and

they chirp mostly at night.

You Will Need

a watch or a cell phone

What to Do

- 1. Listen carefully for a cricket chirping.
- 2. Count the number of chirps in 15 seconds.



- 3. Remember the number of chirps and add 40 to it. For example, if the number of chirps in 15 seconds is 30, add 40 to 30 and the answer is 70 degrees Fahrenheit ($^{\circ}$ F).
- 4. You now will have a good guess of the outside air temperature at the cricket's location. The temperature could be slightly different where you are.

How It Works

Like all insects, crickets are cold-blooded. This means they will take on the temperature of their surroundings. Their bodies have more energy in warmer weather so they chirp more rapidly. When the temperature cools, they have less energy so chirping slows down.

On the Internet

The number 40 above works for the field cricket shown in the photo. It is commonly found in the United States. Want to hear a cricket chirping? Go to:

www.naturesongs.com/insects.html

Click on Field Cricket about 7 lines down.