

LESSON: Cricket Thermometer**GRADE: K****OBJECTIVES:****Counting & Cardinality****Count to tell the number of objects-**

- **K.CC.B.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
 - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - Understand that each successive number name refers to a quantity that is one larger.

MATERIALS & RESOURCES:

- One chirping cricket
- Small box to hold cricket
- Website: [Dartmouth University Chemistry, Chirping Cricket-](http://www.dartmouth.edu/~genchem/0102/spring/6winn/cricket.html)
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- Book: *Chirping Crickets*, Berger, M.

PRESENTATION:

Read the book, *Chirping Crickets* to students. Explain that crickets have a special secret—they can give us an idea of what the air temperature is.

DIRECTIONS:

1. Have students get very quiet, so they can hear the cricket chirping.
2. Explain that they are going to keep track of the chirps by making a mark for each chirp. If they don't already know how, teach how to use the system known as a *five-bar gate*: four marks with a line through the set of four to represent five chirps. After keeping track with the five-bar gate, they can write a number for each mark.
3. When the chirping begins, count the number of chirps the cricket makes in a 13-second period and add 40. This should give you the air temperature.
4. Talk with students about what they've learned. Ask:
 - Did using the five-bar-gate make it easier to keep track of the chirps?
 - Did you think the cricket would chirp more or less than it did?
 - The cricket has a surprising, somewhat mysterious behavior. Do you ever feel mysterious? Why?
 - Do you feel like others do not know what's special about you?
 - Do you want them to know?

TIME:**30 min.****PROCESSING THROUGH THE SIX PILLARS****WHAT**

- What is the special secret of the cricket?
- Now that we know the cricket's secret, how will we respect the cricket's secret?

SO WHAT

- Do you have a special interest or talent?
- Do you feel like other kids do not know what is special about you?
- Do you want them to know?

NOW WHAT

- Once we know something special about someone, just like the cricket, how do we show respect for him or her as a special person? (Golden Rule)