Hot Dogs in Cars

Students will practice reading a thermometer, collecting first-hand data while learning about the dangers of leaving a pet unattended in a vehicle.

Curriculum Connection

Alberta Education Program of Studies: Math (2007)
Grade 5

Strand: Statistics and Probability (Data Analysis)

1. Differentiate between first-hand and second-hand data. [C, R, T, V]   [ICT: C1–2.2, P5–2.3]

2. Construct and interpret double bar graphs to draw conclusions. [C, PS, R, T, V]   [ICT: C6–2.2, P5–2.3]

Grade 6

Strand: Statistics and Probability (Data Analysis)

1. Create, label and interpret line graphs to draw conclusions. [C, CN, PS, R, V]

3. Graph collected data, and analyze the graph to solve problems. [C, CN, PS, R, T]   [ICT: C6–2.5, C7–2.1, P2–2.1, P2–2.2]

Science (1996)
Grade 5

5–1 Design and carry out an investigation, using procedures that provide a fair test of the question being investigated.

5–2 Recognize the importance of accuracy in observation and measurement; and, with guidance, apply suitable methods to record, compile, interpret and evaluate observations and measurements.

Grade 6

6–2 Recognize the importance of accuracy in observation and measurement; and apply suitable methods to record, compile, interpret and evaluate observations and measurements.

Materials
- Thermometers
- Graph paper
- Vehicle(s)
- Watch or timer
- Calculators

Activity

1 How hot?

This activity is best carried out on a warm day (22°C or above).   Each student pair or student group will require two thermometers; one for the outdoor temperature and one for the temperature inside a vehicle. Place the car thermometer in a place inside the car where the students can see it without needing to open the car door. (different groups can record temperatures in different areas such as direct sun, or shade, etc)

Students measure the outside temperature with one thermometer and the other to measure the temperature inside a car with the windows slightly opened. Have students record the temperature inside and outside the vehicle at five minute intervals for 30 minutes.

Before students carry out the experiment, have them to predict what they think will happen.

Name of activity (continued)

After data is collected, students can create a double line or bar graph to represent their data. This can be done using graphing software such as excel.

Ask students:

- What conclusions can you draw from the graph?
- Were your predictions correct?

Finally have students read the article "Hot Dogs in Cars." www.albertaspca.org/dogsincars.asp

Did the data they collect support the information that was in the article?

2   Spread the Word

Many people aren't aware that leaving your dog in a car "even for a few minutes" can be so dangerous.

Have students create posters warning people of the dangers of leaving their dog in the car.

Educating others about the dangers may save the lives of many animals!

albertaspca.org

everylivingthing.ca