

## Check Your Understanding Summary **Answer Key**

1. The most basic units used by electrical engineers are:

I: current, R: resistance, V: voltage G: ground

2. Draw the symbols or units used by electrical engineers.

I: mA, A, amp R:  $\Omega$ , ohms V: V, volts G: 

3. What are some current applications of tactile feedback systems that use force sensors?  
Please list and then describe how each system works.

**Automotive seat testing: Conduct seat comfort and ingress-egress testing.**

**Bite force measurement of reptiles: Differentiating the bite force of different species of lizards.**

**Brake pad pressure distribution: Measure, view and evaluate dynamic forces acting between brake pads and rotors.**

**Footwear research and development: Determine locations of foot pressure and force amounts.**

4. What is the importance of calibrating the tactile feedback systems correctly?

**All tactile feedback systems must be calibrated correctly in order to produce meaningful data.**

5. What is the importance of a curve model in any application?

**The studying of these models gives us a better understanding of the behavior and relationships among variables. In most cases, models are an effective and efficient method to simulate solutions to real-world problems.**