Lesson 6.1 What is a Robot?¹

Identify the criteria that make an item a robot.

Objectives: You will be able to:

- List and explain the criteria that describe a robot
- Determine if something is a robot, using the criteria

Journal Entry/ Brainstorm:

What do you think of when they hear the word "robot"? What are the 'common features' found among 'robots'?

- What do all robots have in common?
- What tasks are easy for robots?
- What tasks are hard for robots?

Now go to *Unit 6 Resources* on *My Mentor* find and open "What is a robot?' After reading over this handout did the class identify most of the common features found on robots?

After completing your journal/brainstorm entry and debriefing as a class, go to *Unit 6 Resources* on *My Mentor* find and open the video *Kismet... The Social Robot*.

Activity: Are We Robots? / Am I a robot?

- Do you recognize the items in the two pictures?
- Do these items have the five attributes of a robot, namely (1) body, (2) input, (3) program, (4) output, (5) behavior?
- Now consider how a programmable device differs from a robot... Does either of these devices have the ability to respond to changes in the environment and adapt?
- Reflecting on the accepted characteristics of a robot, can either of these two items be considered as a robot?

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- Now, with an 'elbow partner' work through the rest of the items on the list and try to determine if one or more of the items listed satisfy all of the characteristics of a robot.
- When you have finished this activity, be ready to share your findings in a class debrief.