

Name: \_\_\_\_\_

Date: \_\_\_\_\_



## What Do We Use Robots For?

Directions: Your teacher will divide your class into several groups. Each group will research and present to the class information about the use of their assigned robot in today's society. Your group will have two days to research and prepare a presentation that includes the information below.

My group members: \_\_\_\_\_

My assigned robot: \_\_\_\_\_

Questions to be answered in your presentation:

- 1 What task does the robot perform? What human function or task does this robot simulate?
- 2 Where is the robot used? What is its work envelope (how many degrees of freedom or flexible joints does it have)?
- 3 Is the robotic **end effector**  multi-functional? If so, what other tasks can it perform?
- 4 How is the robot taught to perform its task?
- 5 What sensors does the robot have and how does the robot use these sensors?
- 6 Name some advantages and disadvantages of using a robot to complete this task.
- 7 Describe the **impact**  that this robot has had or could have on its intended audience.
- 8 What type of jobs/careers did the creation of this robot provide for employment for people?
- 9 Predict and explain how this robot may be altered to perform more or different tasks in the future.
- 10 Include sketches, pictures, and/or video of the robot performing its task in your presentation.

- **End effector** – The component of a robot that comes into contact with the work piece and does the actual work on it. Also known as the hand.
- **Impact** – The effect or influence of one thing on another. Some impacts are anticipated, and others are unanticipated.