# Lesson 01 Worksheet

Name:

Class:

Date:

Answer these questions:

1. What is Ozobot?
   1. How is it different than other robots?
   2. How is it similar to other robots?
2. Describe what happened in Activity 1.
   1. Who is on your Ozobot team?
   2. Did you complete the handout? If not, why not?
3. Explain these team roles:
4. Programmer
5. Robot technician
6. Scientist
7. Engineer
8. Reporter
9. Media specialist
10. Describe what happened in Activity 2.
    1. What did the robot technician do?
    2. What did the scientist do?
    3. What did the reporter and media specialist do?
11. Describe what happened in Activity 3.
    1. How do you need to draw lines so that Ozobot will follow them?
    2. What kinds of lines will it not follow?
    3. What colors of lines will Ozobot follow?
    4. How do you know? What evidence or observation did you make?
12. Explain the scientific method we will use in this class.
13. How is Ozobot controlled? What is your hypothesis?
14. Define programming as it pertains to Ozobot.
15. What was fun or exciting about this lesson?
16. Did you have any difficulties with this lesson? If yes, describe them and how you overcame them.
17. Was there anything that you would change about this lesson? What should the next group of student know?

**Enrichment Activity:** (This is optional. Confirm this is assigned before doing it.)

1. **Real World Applications of Robots.**

A lot of line-following robots are used in factories, warehouses, hospitals and even restaurants! Some of the earliest Automated Guided Vehicles (AGVs) were line following mobile robots. They might follow a visual line painted or embedded in the floor or ceiling or an electrical wire in the floor.

The first AGV was invented in the 1950s and at the time it was simply a tow truck that followed a wire in the floor. Today, AGVs are used in nearly every industry: transporting materials for assembly lines, products in warehouses, but also food in restaurants or medicine in hospitals.

**Part A: Research**. Look up “line following robots” and then “mobile robots” using your favorite Internet search engine. Find information and pictures of robots in industry that follow lines. You may also find videos. You may discover robots that are used in offices, warehouses, factories, hospitals, restaurants, and even homes. Do not include educational robots or toys. Choose one or two robots that are of interest to you.

**Part B: Choose How to Communicate**. Choose a communication method to explain and describe your chosen robot(s). Your method may be writing a paper, acting out a story, creating a poster, creating a work of art, creating a presentation, developing a song, developing a class lesson, or some other creative endeavor.

***STOP - Your instructor must approve the robot chosen and the communication method chosen before continuing.***

**Part C: Develop your Communication.** In your description, include answers to the Who, What, When, Where, Why, and How. For example: Who uses it? What is it? What does it do? When is it used? Where is it used? Why is it used? or Why was it developed? How does it operate? and How is it used? You may add other questions.

**Part D: Editing.** Edit your work to make it presentable and your best work. Is it easy to read? Is the spelling and grammar correct? Does it flow well? Does it look good? Will others be able to understand it?

**Part E: Presentation.** Present your work to the class.