Ozobot Lesson Plan

4th	**Topic**: Creating a Loop	

Standard: S4P3. Obtain, evaluate, and communicate information about the relationship between balanced and unbalanced forces.

> a. Plan and carry out an investigation on the effects of balanced and unbalanced forces on an object and communicate the results.

Essential Question: Can you program an Ozobot to navigate given parameters?

Vocabulary:	**Materials**:
	Ozobots
	Ozobot Color Code Reference Chart
	Markers
	Paper
	Tape

Instruction:

1. Explain the challenge to students, identifying the criteria below
   a. Criteria:
      - Collaborate with your partner to utilize markers to create a path for Ozobot to navigate
      - Incorporate Ozo codes into your path
      - On the given strip of white paper, create a straight BLACK path with a U-Turn at each end, and test it with your Ozobot
      - Roll up the strip of paper into a ring and tape it on the outside, the black line path should be on the inside of the ring
      - Set the ring upright and place Ozobot inside the ring in the middle of the black line
      - OBSERVE WHAT HAPPENS!
2. Observe and support students as needed.

Summarizer/Assessment:	**Teacher Notes**
After students finish, ask students the question below:	Possible differentiation methods:
- How successful were you following the criteria?	- Limit criteria
- What did you struggle with?	- Provide I-pad if needed
- How could you improve your design?	- Students can work independently
- What are possible uses for your design?	- Step by step instructions on the board