Introduction to Roversa

Overview: Students will explore what makes a robot a robot and how they will interact with their robots in the classroom.

What will students do?	What will students accomplish/learn?
Students ***draw a robot*** and create a ***list ways to for the care of Roversa***.	Students will ***learn the basics of robotics and collaborate*** on setting up classroom robot rules.

Vocabulary	Definition
Sense	A robot gathers information about their surroundings. Robots can use a variety of sensors to gather information about distance, temperature, sound, and light.
Think	Based on the sensor information, a robot will make decisions about how to act. These decisions are based on the code a programmer writes.
Act	Finally, a robot will act to carry out the decisions. Robots can act in a variety of ways, like moving, making sounds, and lighting up.

Estimated time	Materials
30-45 minutes	• Class slides • Paper for drawing • Crayons or markers for drawing

Teaching Strategy: Reduce imposter syndrome
During discussion, help students feel a sense of belonging around robotics and computer science.

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Discussion: What is a robot?

- What makes a robot a robot?
- What does a robot look like?
- How do robots know what to do?
- What does a robot need to be a robot?
- How do robots stay safe?
- Who works with robots?

Activity

1. Hand out paper and crayons/markers and give students 10 minutes to draw a robot.
2. Do a gallery walk with the drawings - what do you see, notice, wonder?
3. If it has not come up yet, be sure to talk about how robots generally sense, think, and act.
4. Bring out Roversa - what do you see, notice, wonder?



5. What do you think this robot will do?
6. Do a quick demonstration of Roversa.
7. Revisit question: who works with robots? Anyone can, even students!
8. As a class, create a list of ways they will care for Roversa to keep it safe and working properly.
9. Post this list near where you store Roversa and use it as needed to remind students to be careful with the robot.

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Robot Rules

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

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Assessment

Virginia SOLs	Assessment
CSTA: 1B-CS-01 Describe how internal and external parts of computing devices function to form a system.	Student discussion and drawings will confirm understanding about internal and external parts of robots and provide an opportunity to correct misconceptions.

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