Robo Friend

Students will code a Root robot to draw parts of a robot with simple shapes.

Time: 60 mins.

Materials:

Device and projector to display Meet Root slides and iRobot coding website

One Chromebook for each student (online simulator)

OR

One Chromebook and one Root robot for every two students

Prep:
Make one
copy of the
Drawing
Handout for
each pair of
students and
one copy of
the Reflection
Handout for
each student.

- 1. Hook: show the Robo Friend Activity Trailer.
- 2. Issue challenge: code Root to draw a picture of a robot made of simple shapes.
- 3. Use the <u>Meet Root slides</u> to introduce students to the Root robot and <u>iRobot coding website</u>. Be sure to discuss how students will work collaboratively with a partner to code the robot.
- 4. Use the <u>Drawing Handout</u> and <u>iRobot coding website</u> to review how to program Root to draw different shapes (all second-grade students coded Root to create a geometric drawing last year).
- 5. Send students off to work with their partners.
 - Plan: What will your robot friend look like? What shapes will you use?
 - Code: use the marker, move and repeat blocks to draw your robot friend.
 - Test and revise: use the mat or simulator to debug and improve.
- 6. Share & reflect: do a "gallery walk" and complete the <u>Reflection</u> <u>Handout</u>.

