

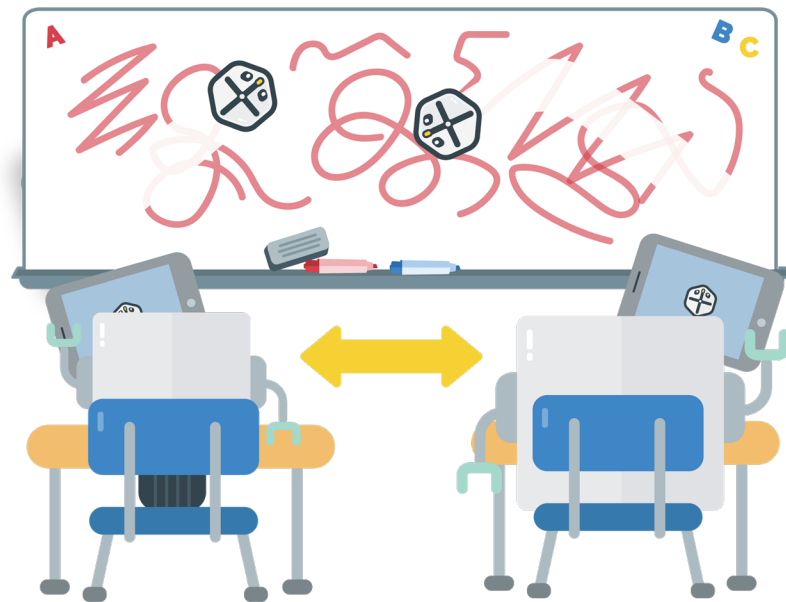
Clear the Board

In this coding challenge, students will work together (from a safe distance) with an army of whiteboard robots to clear a magnetic whiteboard of all dry-erase marks.

Teacher Prep

Robot Station

- Place each of your Root rt1 Coding Robots on your magnetic, wall-mounted whiteboard
- Turn each of the robots on, so that they are ready for students to connect to their coding devices.
- Using a dry erase marker, cover your board with a series of marks, squiggles and general doodles.



With the Class

1. Allow your students to remotely connect to the robots on the board.

* If you have more students than robots, students can take turns connecting and disconnecting with the Roots, all remotely, in between rounds.

Subject(s):

Coding / Robotics
SEL: Communication

Experience Level:

Beginner

Time:

15-20 mins

Group Size:

Full-class activity

Supplies:

Root rt1 Coding Robot
iRobot Coding App
Coding Devices
Magnetic Whiteboard
Dry-Erase Marker

2. Challenge students to work as a team to code Root to wipe the entire board clear of all dry erase marks using its robot eraser.

* TIP: You can find the Eraser Code Block by editing the Marker Block

3. Play multiple rounds with your classroom! After some practice, how quickly can they clear the board?

Extensions

Block Limitations

- If your class is looking for an added challenge, try providing rules like:
 - * You can only turn clockwise.
 - * You can only move backwards.
 - * You can only press play once!

Race for the Board

- Divide the robots in your class into two teams: the Drawing Team and the Clearing Team.
- The Drawing Team will try to cover the board in marks
- The Erasing Team will try to clear the board of all marks
- Which team will win?!

Real World Connections:

Have you ever heard of a vacuuming robot? Roombas, made by iRobot, are robots that clean dirt, dust and debris off of your floor, all without you needing to lift a finger.