

Art Bot (robotic)

Lesson Overview: Students will create a robotic artist. Students can either create a robot that will create a piece of art, choosing their medium and style of robot, OR all students can build a spin art robot.

Suggested Time: 60 minutes

Learning Objectives:

- To gain an understanding of gearing
- To coordinate building and programming a robot
- To gain experience building a system

Materials:

- Robotics kits
- Gears (optional)
- Cardboard
- Paper
- Tape
- Paint
- Paint brushes
- Magic markers

Directions:

1. As a whole group, share examples of different types and mediums of art. You can stipulate constraints for the robot. For example, it must contain gears and sensors.
2. Tell students they will build a robot to help them create art. Show them the material selection for the art. They should be familiar with the robotic materials at this point.
3. Put students in groups. Have them pick what they will use for the art materials and canvas (size, material, etc.).
4. Have students use a planning document to plan the robot. They should label the parts. They should also address how the paintbrush or markers will be attached to the robot and where the medium will be attached.
5. Once the students have a plan, they can begin building. Remind them to test as they go.
6. The final share can be a showcase of the art that the students create.