



Summer 2020 Lesson

Class: Innovation Club

Grade Band: Grades 2-6

Teacher: Mrs. Richey

Lesson: Recycled Humanoid Robot

Objective: Make a really cool robot full of personality with movable parts using only recycled materials.

Materials: Boxes, tubes, canisters, buttons, straws, foil, construction paper, duct tape, glue, recycled cups or lids with interesting shapes, bottle lids, 2 paper fasteners (brads), permanent markers

Process:

1. Use your largest box for your robot's body. Your robot may be humanoid, or an animal, such as a cat.
2. Glue or tape a smaller box or canister (such as from oatmeal) on top of the body as a head.
3. Using brass paper fasteners, poke a small hole in 2 cardboard tubes to attach them to the body and allow them to move back and forth (oscillate).
4. Tape cardboard tube or rectangular prism legs to the bottom of the body. Tape small boxes to the bottom of the legs as feet.
5. Tape all sides of your boxes shut and cover the entire robot with foil, duct tape, wrapping paper, or other collage materials.
6. Glue on small containers, buttons, or bottle caps for eyes, add a recycled object or small box for a mouth and straws for antennas. Add buttons, gadgets, and gauges with permanent marker or by gluing on interesting recyclables. Personalize your robot!!
7. Give your robot a name and personality! Enjoy!!

Vocabulary: robot (mechanical creation that can move on its own), humanoid (robot made to resemble the human body), oscillate (move back and forth), automation (using technology to make tasks easier), roboticist or robotics engineer person who designs robots