



HAPPY TRASH ROBOTS AND PROGRAMMING

Grades K-3/Grades 4-8

CREATE A HAPPY TRASH ROBOT!

Grades K-3 Your students will get to create a robot using happy trash!

4-8 Your students will program their robots.

YA'AT'EEH

5 min

Ya'at'eeh is Navajo for hello! (Pronounced yah-aht-eeh)

Greet your students. Be friendly. Use their name, ask a question, give a high five, or thumbs-up! Take roll. Mark down which students took a snack and tally how many snacks were given out.

SNACK / FREEPLAY

30 min

Enjoy Free Play:

Students will have their snack and enjoy time to free play.

STORY TIME

15 min

Read the story:

Read the story of the day. Older students may choose to read their own books.

STEM TIME

50 min

Materials:

Happy trash items may include:

- Boxes - various sizes
- Bubble wrap
- Colored Paper
- Foil
- Chenille pipe cleaners
- Tape
- Paper plates or bowls
- Googly eyes
- Markers
- etc.
- *Optional- glue gun for STEM coach use only

K-3 Happy trash robots

Today students get to make robots out of everyday items! They can make them big or small. Today is a day they get to be as creative as they want to be and engineer their own robot design!



Instructions:

1. Set out a variety of materials for the students to work with.
2. If there are smaller and bigger boxes available let the students know they can make a small robot or a robot as tall as they are! Encourage them to decorate their robots.
3. Allow them to use all the materials they need to make their special happy trash robot creation!

*Optional-The STEM coach can use a glue gun that they control only. This will help the students if they want to glue things onto their robots and have them dry quickly so they can keep creating!



STEM TIME

50 min

Materials:

-  Chromebooks
-  Robots
-  Legos

SPORTS / GAMES

25 min

*Older students may practice their sport if they don't want to play the game.

Materials:

-  Lots of Cones!
-  Paper and pencils for each team

HOMWORK / FREEPLAY

20 min

CLEAN UP / DISMISSAL

5 min

4-8 Program Your Robot

Instructions:

STEM Coaches will go to the portal and help students with the next Edison programming lesson they are on. Students may choose to build a Lego creation on top of their robots.

Link to portal: <https://www.stemexpandedlearning.com/robotics>

Builders and Bulldozers

Each team will work together to either stand up or knock over the cones.

Instructions- Organize everyone into two teams with an equal amount of players. One team will be the builders, and the other team will be the bulldozers. The builders will work to stand up the cones, and the bulldozers will work to knock them all over gently by tipping them over with their hands. Kicking is not allowed. Set out a bunch of cones in a large open area in no particular pattern. Make sure that half the cones are standing upright, and the other half are knocked over. When the STEM Coach says "Go!" the builders and bulldozers will get to work. Have the students keep a personal count of how many cones they tip over or stand up. Each time they do this they will get a point for their team. After 2 or 3 minutes, the round will end and the teams will gather to add up their points. For the next round, have the teams switch roles. At the end of the game, see which team was able to get the most points!

Instructions:

Allow your students some homework time. If they need help let them know you can help them. If they do not have any homework they can have some reading time, or they can have free time to go outside and play.

Clean up/pack up/dismissal

Clean up, pack up and practice lining up.

