



PROGRAMMING AND IDENTIFYING TREES

Grades K-8



IDENTIFY TREES ON CAMPUS

K-3: Students will program their robots.

4-8: Students get to identify trees on campus using an app!

HALLO!

5 min

SNACK / FREEPLAY

30 min

STORY TIME

15 min

STEM TIME

50 min

Materials:

- Chromebooks
- Robots
- Legos

Materials:

- Seek App
 - Smart phone
 - Leaves
 - Crayons
 - Paper
 - Student worksheets
- *Optional- Microscopes

Hallo is Dutch for hello!

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 the snacks given out.

Enjoy free play:

Students enjoy playing outside and eating their snacks.

Read the story:

Read to your students outside as they sit in a circle. Older students may choose to read their own books during this time.

Grades K-3: Programming

K-3 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>

Grades 4-8: Identify trees and make leaf rubbing art

Say: "Today we are going on a nature walk around campus to identify trees! As we go, we will use the Seek App to identify the trees around us, and we will get to make a map of the trees on campus!"

STEM Coaches, you choose how to best run this activity. This activity will require a phone or a tablet with internet connection. There are a few ways to do this activity. Here are a couple examples. Either download the Seek App on your personal phone and work as a group, or you can allow some of the students to download the app to their phones, and have the students go out in groups.



STEM TIME

50 min

SPORTS / GAMES

25 min

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

Materials:

- Ten+ bean bags or small objects for each side. A larger number of items may be necessary for larger groups.
- Eight cones: four of one color and four of another if possible.

HOMEWORK / FREE PLAY

20 min

CLEAN UP / DISMISSAL

5 min

4-8 Instructions:

1. Students will need a clipboard, paper, and a pencil.
 2. Download the Seek App to a device.
 3. Students will take a nature walk around campus, and use the Seek App to identify the various trees on campus.
 4. The students will use their paper and pencil to draw a map of the campus, and a picture of each tree. Instruct them to label each tree.
 5. Have the students collect a few leaves.
 6. At the end of the nature walk, students can go inside and use paper, leaves, and the edge of a crayon to make leaf rubbing artwork. They can place a leaf under the sheet of paper, and gently rub the edge of a crayon over the leaf. Watch as the shape and details of the leaf begin to form, and become beautiful artwork.
- Students may also want to look at their leaves under the microscope. Encourage them to do so, and have them draw what they see!

Plant the Trees

Teams will race to collect as many bean bags as they can before time runs out.

Instructions- Use cones to set up the play area into three sections. There will be two outside sections for the teams, and there will be a middle section they will be running across. Organize students into two teams, and have each team go to their section. If the cones are two different colors, then the teams can be named after their cone colors. Disperse an equal number of beanbags or small objects on each team's side. To play, have teams line up. When the STEM Coach says "Plant the Trees!" one player from each team will race to pick up one bean bag at a time and bring it back to their side. After about two to three minutes (adjust time if needed), the STEM Coach will end the round and count how many bean bags each team has. For each round, teams may be re-organized or given different challenges of how they must bring the bean bags to their side. One challenge could be that they must walk it back on their head or hop back with it between their legs. They could even crab walk it back with the bean bag sitting on their bellies! Feel free to be creative!

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 head home.

