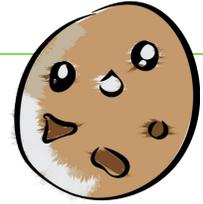




# PROGRAMMING AND COOKIE CODING

Grades K-3/4-8



## LEARN HOW TO CODE

K-3 Students will program the robots.

4-8 Students will use "Cookie Coding" to make binary codes.

### DIA DUIT!

5 min

### SNACK & FREE PLAY

30 min

### STORY TIME

15 min

### STEM TIME

50 min

#### K-3 Materials:

- Chromebooks
- Robots
- Legos

#### 4-8 Materials:

- Student sheets
- Pencil
- Cookies, bits of cereal, or snack crackers

#### Dia Duit is Irish for hello! (pronounced Jee-ah Ghwitch)

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.

#### Enjoy Free Play:

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

#### Read the story:

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

#### Grades K-3: Programming

##### 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: Cookie Coding

Students will use "Cookie Coding" to make binary codes, then they will use the binary number patterns they made to unlock the STEMTaught treasure chest.

##### Instructions:

1. Give each student a pile of cereal and their student sheets.
2. Have the students watch the instructional video.
3. The students will follow the 2 rules they learned in the video as they work on the activity.
4. After the students have practiced making binary codes, bring up the treasure chest activity linked under the STEM coach resources and test kids to see if they can crack the code.

\*Optional- Give prizes to students who can unlock the treasure chest.

Have fun learning the game!



## SPORTS / GAMES

25 min

### Materials:

- A long piece of colored tape, or a long line on the playground, such as a line from the basketball court.

\* Older students may choose to practice their sport instead of playing the game of the day.

## HOMework / FREEPLAY

20 min

## CLEAN UP / DISMISSAL

5 min

### Land, Air, Sea

The students will play Land, Air, Sea. Before playing the game, explain to the students that today they will be learning about pelicans! Pelicans are a type of bird that can live on the land, swim on the sea, and fly in the air! Today they will play the game Land, Air, Sea!

Instructions- Have students line up and spread out along the line. Explain to them that on one side of the line is land, the other side of the line is the sea, and the line in the middle is air. When they hear one of the elements called, the students have to jump to the side of that element or if it is air, they jump up and back as high as they can to the middle where the line is. One person will be the leader. When the game begins, the leader will call out land, air, and sea. They will say it quickly and the kids will try to keep up with the leader. The leader can say them in any order or repeat the same element. For example, air, air, land, sea, air, land, sea, sea. The game ends when the instructor decides, or when all the kids are tired from jumping! For added fun they can flap their arms as pelicans as they jump from each element.

Debrief- Once the game is over, ask the students some questions about pelicans. Do they know what they look like? Do they know what they eat, or where they live?

### 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.

