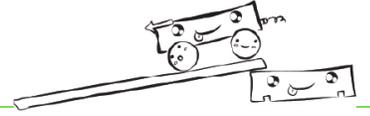




# BLOCKY CAR PLAY AND PROGRAMMING

Grades K-3/4-8



## EXPERIMENT WITH BLOCKY CAR

K-3: Students will have fun playing with Blocky Car

4-8: Students will program their robots

### SAIN UU!

5 min

#### Sain uu is Mongolian for hello! (pronounced say-noo)

Greet your students. Be friendly. Use their name, ask a question, give a high five, Take roll. Mark down which students took a snack and tally the snacks given out.

### SNACK / FREEPLAY

30 min

#### Enjoy Free Play:

Students enjoy playing outside and eating their snacks.

### 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

#### Grades K-3: Blocky car experiment- play

**Say-** "Today we get to do an amazing lab with a fun tool named Blocky. You will get to build your own cars and experiment with how far they can roll. You will get to design things with the ramps, and have fun playing with Blocky Car and it's wheels."

#### Materials:

- Blocky cars/ramps
- Wheels/axels
- Wooden Cubie Blocks

#### Instructions:

1. Go outside if possible! The playground and slide is a really fun place to test out the Blocky Car. Remind students not to lose their pieces.
2. Give each student a ramp, a Blocky Car, 4 wheels and 2 axels. You can use the ramp as a tray to carry the supplies to their chosen building spot.
3. Let students know that if they need more materials they can come up to the crate and get extra supplies.
4. Encourage students to play with rolling their wheels, rolling their car, trying it on different terrain. You can also encourage imaginative play to build a house for Blocky Car, build bridges, and ramps. Students are very inventive. Compliment them on their build.
5. If they want they can have Blocky Car races with the other students.

**Say-** "Look at all the different things we can make out of the same pieces."  
"Great job being engineers!"



**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:**

- Cones to mark start and end points

**HOMEWORK / FREE PLAY**

20 min

**CLEAN UP / DISMISSAL**

5 min

**Grades 4-8: Program your robots****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>

**Wheelbarrow Races**

The players will act as gardener and wheelbarrow as the team's race from one end of the playing field to the other, then relay race back to the starting point in the same order to return wheelbarrows before the others.

Wheelbarrow racing involves two players working together at a time with one player walks/runs and holds the feet of the other player who walks/runs on their hands

Instructions- Have the players separate into teams of 10 or so. Have them line up in their teams at the starting point. The first two players in each line will wheelbarrow race from the starting point to the designated point at the opposite end of the playing field. Once they reach the other side, the next two members of the team may go. Once a team makes it to the other side, the gardeners and wheelbarrows are ready to hurry back to their garden. They must continue their relay race back to the starting point in the same order they did before! The first team to get all their team members back to the starting point wins!

**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.