

MAKING RECTANGLES

[Insert picture here]

Lesson Tags

GRADE LEVEL:

Second

SUBJECTS:

Math

DIFFICULTY:

Beginner

DURATION:

Prep: 10 mins

Lesson: 60 mins

PREREQUISITE KNOWLEDGE:

See: [Robotics Guide](#)

Lesson Overview

In this lesson, students will:



Utah Core Standards

Mathematics Grade 2:

2.MD.1, 2.MD.2, 2.G.1, 2.OA.4,

Math Practice:

2.MP.1, 2.MP.2, 2.MP.5

K-5 Computer Science:

2.AP.1, 2.AP.2



Resources & Supplies

VIDEO TUTORIAL

[insert actual video here]

MATERIALS

- Pencil & paper for each group
- Ruler or yardstick for each group
- Masking tape

TOOLS

- Code & Go Mouse

ATTACHMENTS

[Link to Slides](#)

[Student Handout](#)

SUPPORTING LINKS

[HYPER-LINK TO VIDEO TUTORIAL. INSERT VIDEO INTO MULTIPLE PLACES/PLATFORMS]

[HYPER-LINK TO WORD BANK K-5 OR 6-12]

[HYPER-LINK TO MANAGEMENT TIPS FOR WORKING WITH ROBOTICS]

MANAGEMENT TRICKS

Point out that the mouse moves in the direction its nose is pointing. Allow students to practice first by just using the blue forward arrow once and then the green “GO” button. Help students understand that the coding cards help us map out the mouse’s path. Allow students to explore and make mistakes. You can talk about “trouble shooting” or “debugging” when we try to figure out what went wrong if our code worked differently than expected.

DIFFERENTIATION

[You can do a differentiation matrix right here or do a bulleted list of ways to differentiate]



Assessment

ASSESSMENT STRATEGIES:

FORMATIVE ASSESSMENT: [suggested observations, informal, peer grade, etc.]

FORMAL FORMATIVE ASSESSMENT: [suggested handouts, rubrics, etc]

RUBRIC:

[Link to rubric here]



Vocabulary

Prediction

Perimeter

Robot

Code



Instructional Steps

Step 1: SETUP

10 minutes (prior to class)

Ensure all robots have working batteries. Print any handouts and gather supplies.

Step 2: INTRODUCE

20 mins

Present the slideshow, invite students to participate and investigate their group's robot. Define any new vocabulary. Ensure all students know how to use their robot before moving on. Then talk about the definition and properties of rectangles. Do the sides need to be the same length? How do you know how long each side is? How do we figure out how many groups of 5 inches are inside of 10 inches? (etc)

Step 3: SMALL GROUPS

5-10 mins

Put students in groups and distribute materials.

Step 4: EXPLORE

30 mins

Students use the handout or copy questions from the slides to record their work. Groups will work together to complete as many challenges as they can.
