

Robot Mouse

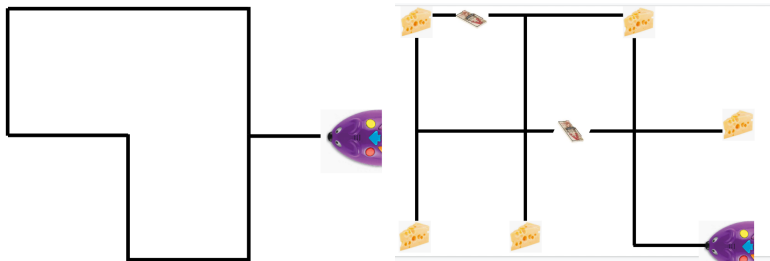
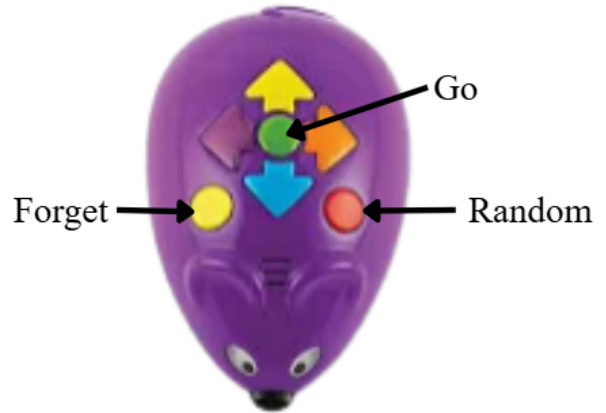
Amazing Maze

Bot	Robot Mouse		
Grade Level	K-3	Subject	Mathematics/Science
Outcome(s)	Social Studies: DRK.1 Describe the spatial relationships among people, places, and environments. DR1.5 Identify and represent the orientation in space (where) and time (when) of significant places and events in the lives of students. Science: MP2.1 Determine the position of objects relative to other objects Mathematics: NK.3 Relate a numeral, 0-10 to its respective quantity P1.1 Demonstrate an understanding of repeating patterns SS1.1 Demonstrate an understanding of measurement as a process of comparing SS2.1 Demonstrate an understanding of non standard units of measurement SS3.3 Demonstrate an understanding of linear measurements (including m and cm)		
Description	Program the mousebot to go through the maze.		
Required Prior Learning	Students need to know how to give instructions to their Robot Mouse.		
Time Frame	1 hours		
Materials	Robot Mouse (one per 1-2 kids) Metre sticks (grade 3 only) Foam mats Robot Mouse Challenge Mazes (optional) - printed out on 11 X 17 paper		
Additional Resources			
Assessment	Students should be able to program their robots, learn from their mistakes and amend their program to complete the challenge.		

Robot Mouse - Amazing Maze

Procedure

- Review all the buttons on the mouse with your class.
 - Blue Arrow - Forward
 - Yellow Arrow - Backward
 - Orange Arrow - Turn Left
 - Purple Arrow - Turn Right
 - Green - Go
 - Yellow - Forget
 - Red Random Move
 - Random moves include
 - Eyes light up
 - Robot Mouse makes a noise
 - Robot Mouse moves back and forth once
- Photocopy enough robot mouse mazes for groups of two. They need to be made on 11X17 paper. Students learn how to use and code the mouse on the mats.
- Use the foam mats to create a customized maze (see picture). Challenge students to program the mouse to get through the maze.
- For fun, place a paper clip at the end of the maze so that the mouse picks it up with its magnetic nose.



Extension

Have students try to make their own mazes or use the supplied handouts.

Grade 3: Have students measure distances that their mouse moves (m and cm). Students should discover that the mouse moves one "mouse body length" with each arrow press.

Student Handouts

[Robot Mouse Mazes](#)

Assessment Guide

This activity lends itself to reflection. Have the students communicate what they did (verbally, written, or pictorially), what problems they encountered and how they solved these problems.

With funding from

