



A Blue-bot Maze Game



A Blue-Bot Maze Game

In this activity the children makes different mazes and challenges each other in directing their blue-bots through the maze. The children's age and experience with the blue-bots determines the size and complexity of the maze. The youngest children can start with simple routes eg. completing a single line, and then expand to larger and more complex labyrinths.

Building mazes

On the floor you put a large paper/clear vinyl with pre-drawn squares. The children build mazes with bricks on the paper/vinyl. The squares helps the children to make the way around the maze wide enough making it possible for the blue-bot to run and turn. Let the children's creativity run wild and let them build their own ideas. Help the children to ensure that the blue-bot can get around the maze.

Getting around the maze with the blue-bot

The children challenge each other to code the Blue-Bot to find way through the maze. All the children must have the possibility of making an algorithm for the Blue-Bot.

Progress:

Children should have prior experience with using and programming the Blue-bots. Children should work in small groups to promote team-work and communication skills.

Variations:

Build mazes without square templates
Cover parts of the maze so the blue-bot can not be seen on the entire trip through the maze. This makes it exciting to see if the algorithm works well.

What type of resource is this?

Picture:



Resources required:

- Blue-Bot/bee-bot for each group
- Large paper/clear vinyl with pre-drawn squares 15X15 cm.
- LEGO bricks (Optionally other materials to build a maze)

This activity focuses on:

- Making own algorithms
- Calculate distances
- Listen to an give instructions
- Sense of direction
- Collaborative working

Estimated time: 60 – 90 minutes