

Upside Down World

Created by M4YC Lesson Study Teams

Primary

Curriculum Goal (From the Ontario Ministry of Education Curriculum Document)

Geometry and Spatial Sense

For students to sort, classify two-dimensional shapes and three-dimensional figures by attributes; recognize symmetry; relate shapes to other shapes, designs, and to figures; and describe location using positional language.

Context

Students and the teacher begin by sitting on the floor in a circle.

Materials

Teacher-prepared structures made out of unifix cubes - each structure should be increasing in difficulty

Unifix cubes - enough for all the students to use



Lesson

Introduction

- Have students close their eyes and tell their classmates that they are going to build in their mind.
- Tell students to take three blue unifix cubes, snap them together in a row and lay them on the ground.
 - Ask children to take one green cube and put it on top of the middle blue cube.
 - Tell students to keep that picture in their mind.
- Ask students to open their eyes and show them three different possible structures based on the instructions you give.
 - Listen to students' opinions about which one they believe to be the correct structure. Encourage discussion.

Lesson

- Tell students they are now going to imagine a world where everything is made out of unifix cubes!
- Show children four structures or buildings that are in this imaginary world.
- Tell students that one day someone pushes a red button and all the buildings turn upside down. Show them how the structure looks when it is upside down.
- Now it is their job to rebuild all of those buildings the right side up.
- Each student gets the appropriate number and colour of unifix cubes.
- When rebuilding the first building, ask one student to give instructions to the rest of the class about how to rebuild the building.
- When students are finished rebuilding, ask them to compare their building to the original building to make sure they have built it correctly.
- After students have the hang of it, put students in partners and have one partner give the instructions and the other partner building.
 - Have students sit back-to-back to focus on describing location using positional language.

Closure

- Have students put their buildings right side up next to the original building.
- Facilitate a discussion about which part of the building was easiest to explain and which parts were more difficult.