

Traveling around Our Town

Lesson Topic _____ **Grades** _____

Tracing a path on a grid from one location to another 1–2

Lesson Length _____

30 minutes

NCTM Standards Addressed _____

- Describe, name, and interpret relative positions in space.
- Describe, name, and interpret direction and distance in navigating space and apply ideas about direction and distance.
- Find and name locations with simple relationships such as "near to" and in coordinate systems such as maps.

Sample State Standards Addressed _____

There are generally no mathematics standards listed for these grade levels.

Student Objectives _____

Students will:

- specify locations on a grid
- use words such as right, left, up, and down to describe locations on a grid
- identify and describe paths from one location on a grid to another.

Grouping for Instruction _____

- Whole class and partners for motivation and introduction and for summary and closure
- Small groups for creating the grids and identifying paths

Overview of Lesson _____

Students learn to specify locations on a grid by using the words *right*, *left*, *up*, and *down*. They also find and describe different paths from one location to another.

Background Information

Students should be familiar with the words *up*, *down*, *right*, and *left*.

Materials and Equipment

- Square grid paper (one-inch)
- Small stickers with pictures of houses or other types of buildings
- Colored pencils for students to draw houses if stickers are not available
- Square grid paper for the overhead projector
- Overhead projector
- Grid paper of Our Town (page 158)

Procedure

A. Motivation and introduction

1. Ask each student to describe to a partner how he or she walks to school or the bus stop.
2. On an overhead projector show one-inch grid paper or hang large grid paper on a bulletin board. At an intersection of two lines on the grid paper, show a house and then ask one student to describe how he or she walked to school (or the bus stop) and then place a picture of a school (or the bus stop) at the intersection of two lines.
3. Identify and practice the directional words that students use such as *up*, *down*, *right*, *left*, or *across*. List all of these words on the chalkboard. Suggest these words to the students to help them describe their walks if necessary.

B. Development (including discussion points and feedback)

1. Divide the class into heterogeneous groups of three to four students. Distribute a piece of one-inch grid paper and four stickers to each group. Instruct students to place stickers of different buildings at the intersections of lines on the grid to create their “town.” (Make sure that they understand that the intersection is the place where two lines cross each other. Illustrate this.)
2. Tell student groups to describe how to travel from one location to another. Each student should write down a description for three different trips on the grid (traveling to and from different buildings or structures). Students should share what they have written with the other members of their group.
3. On the grid paper on the overhead projector, the teacher should show the “town” of one group. Select two buildings and ask students to find as many different paths as they can to travel from one building to another. Use colored pens to show the different paths on the overhead grid paper.
4. Have each group select two buildings in its town and find as many different paths as possible.

5. Have each group show its town to the class.
6. Ask students to share the words that they used to describe how they moved from one location to another. Again, list these words for the students to see (left, right, up, down).

C. Summary and closure

1. Ask students to talk with a partner and write down three things they learned (did) today.
2. Ask several students to share their responses, and build on their responses to include:
 - Used directional terms: up, down, left, right
 - Located buildings on grid
 - Identified and described paths to go from one house to another.
3. Ask students why it would be important for them to know this.

D. Assignment

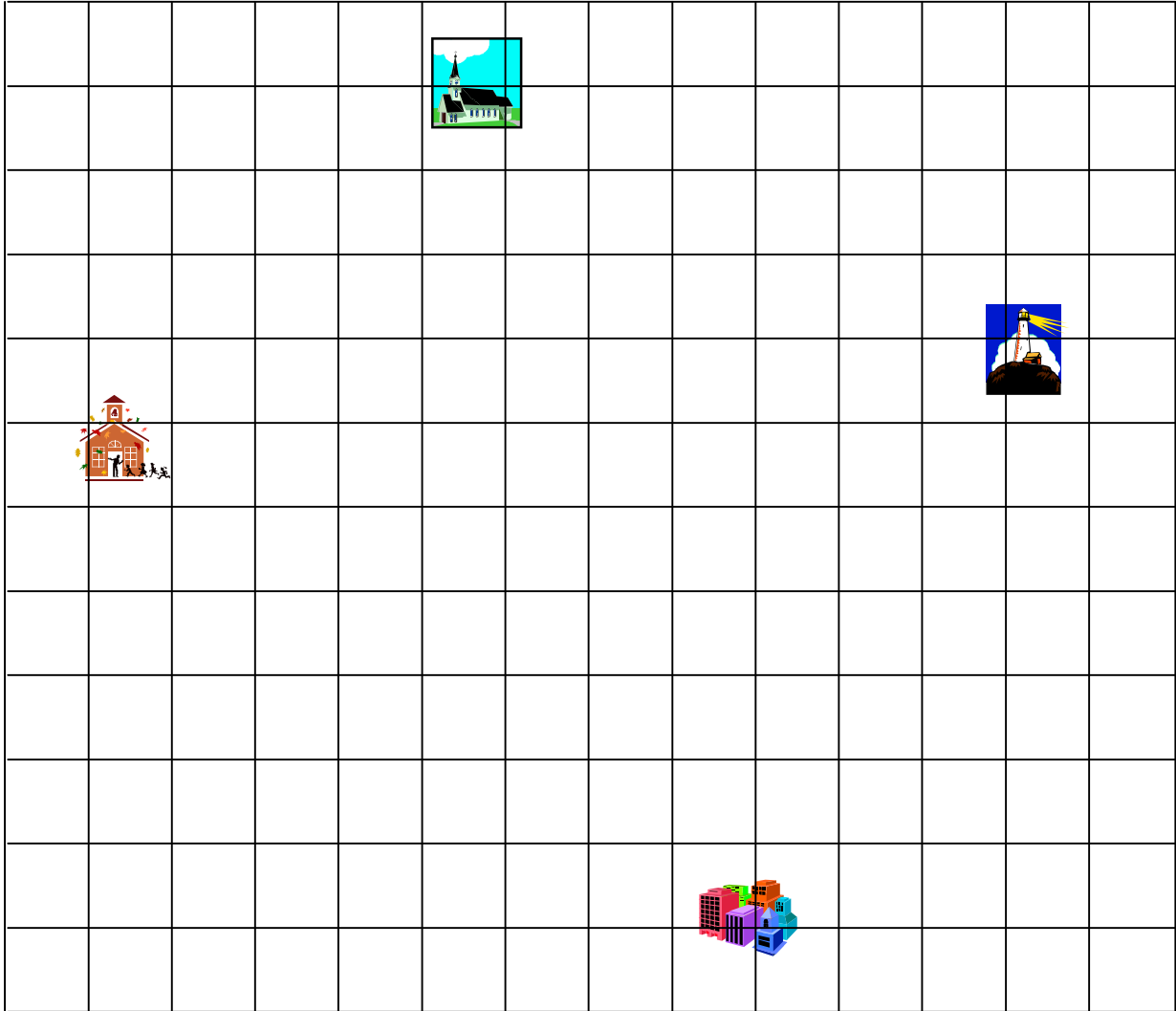
Give students the worksheet “Our Town” (page 158). Tell students to write out directions for traveling from school to the city. Tell students to find as many possible paths as they can from the church to the school.

Assessment _____

- Observe the students during the activity to make sure they are using the directional/positional terms correctly.
- Check homework to determine whether each individual child understands the terms and can trace paths from one location to another.

Worksheet:

Our Town



1. Write out the directions for traveling from school to the city.

2. Find and trace as many paths as you can from the church to the school.