





# Artist: Sequence

Lesson time: 30 Minutes

#### **LESSON OVERVIEW**

In this lesson students will take control of the Artist to complete simple drawings on the screen.

**TEACHING SUMMARY** 

**Getting Started** 

Introduction

**Activity: Artist: Sequence** 

**Artist: Sequence** 

**Extended Learning** 

**Extension Activities** 

# LESSON OBJECTIVES

#### Students will:

- · Create a program to complete an image using sequential steps
- Select an argument for a given command
- · Differentiate between defining and non-defining attributes of triangles, squares, and rectangles
- Draw triangles, squares, and rectangles to reflect defining attributes
- Explain the difference between squares and rectangles and support it with evidence consisting of the commands used to draw the different shapes
- · Compare and contrast squares and rectangles by their number of sides and side lengths
- Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles) to create a composite shape, such as two squares to compose a rectangle and two rectangles to compose a square
- Compose new shapes from composite shapes
- Draw partitions into a rectangle and describe the partitions using the words halves, fourths, quarters, half of, fourth of, and quarter
  of
- Describe a whole rectangle as two halves or four quarters
- Explain that decomposing into more equal shares creates smaller shares

## **GETTING STARTED**

#### Introduction

Brainstorm with students ways to tell someone else how to draw a picture:

- How would you do that with a computer?
- In these puzzles you will be moving a character who leaves a line everywhere it goes.

# **ACTIVITY**

### **Artist: Sequence**

In the Artist levels students will no longer be constrained to 90 degree angles. Having protractors available can be help students better visualize the angles they need.

# **EXTENDED LEARNING**

Use these activities to enhance student learning. They can be used as outside of class activities or other enrichment.

# The Copy Machine

- · Give students two pieces of paper
- On one sheet draw a simple image, using straight lines only.
- On the second sheet draw instructions for recreating that image commands to move straight and turn at various angles.
- Trade instruction sheets and attempt to recreate the image using only the provided instructions.



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