I Can ) describe the relationship between two decimal place-value positions.

## Investigate

Materials color pencils straightedge

Thousandths are smaller parts than hundredths. If one hundredth is divided into ten equal parts, each part is one **thousandth**.

Use the model at the right to show tenths, hundredths, and thousandths.

- **A.** Divide the larger square into 10 equal columns or rectangles. Shade one rectangle. What part of the whole is the shaded rectangle? Write that part as a decimal and a fraction.
- **B.** Divide each rectangle into 10 equal squares. Use a second color to shade in one of the squares. What part of the whole is the shaded square? Write that part as a decimal and a fraction.
- Divide the enlarged hundredths square into 10 equal columns or С. rectangles. If each hundredths square is divided into ten equal rectangles, how many parts will the model have?

Use a third color to shade one rectangle of the enlarged hundredths square. What part of the whole is the shaded rectangle? Write that part as a decimal and a fraction.

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Florida's B.E.S.T.
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Number Sense & Operations 5.NSO1.1, 5.NSO1.2, 5.NSO1.3

**CHAPTER 3** 

Lesson 1

Mathematical Thinking & Reasoning MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.6.1







There are 10 times as many hundredths as there are tenths. Explain how the model shows this.

## **Draw Conclusions**

**1.** Explain what each shaded part of your model in the Investigate section shows. What fraction can you write that relates each shaded

part to the next greater shaded part?

**2.** MTR Identify and describe a part of your model that shows one thousandth. Explain how you know.

## **Make Connections**

The relationship of a digit in different place-value positions is the same with decimals as it is with whole numbers. You can use your understanding of place-value patterns and a place-value chart to write decimals that are 10 times as much as or  $\frac{1}{10}$  of a decimal.



## Use the steps below to complete the table.

- **STEP 1** Write the given decimal in a place-value chart.
- **STEP 2** Use the place-value chart to write a decimal that is 10 times as much as the given decimal.
- **STEP 3** Use the place-value chart to write a decimal that is  $\frac{1}{10}$  of the given decimal.

Decimal	10 times as much as	$\frac{1}{10}$ of
0.03		
0.1		
0.07		



MTR Engage in discussions on 4.1 mathematical thinking.

Explain the pattern you see when you move one decimal place value to the right and one decimal place value to the left.