3.6 Conversion Models

Student activity · use a ratio table and explain place value

1. One length, different units

A meter is 100 centimeters. Complete the table. Explain why a smaller unit produces a larger numerical measure.

Meters	Centimeters
1	100
2	_____
0.5	_____
2.5	_____

_____

_____

2. Track the value of each digit

Think of 2.5 × 100 as 2 × 100 + 0.5 × 100. Complete: 200 + ____ = ____. Each digit takes a place worth 100 times as much. The length stays the same; its unit changes.

Hundreds	Tens	Ones	Tenths
		2	5
_____	_____	_____	

Explain what happens to the value represented by the digit 5.

_____

_____

3. A new unit relationship

1 yard = 3 feet and 1 foot = 12 inches. A ribbon is 2.5 yards long. Find its length in inches using two conversions. Check by converting back.

_____

_____

_____