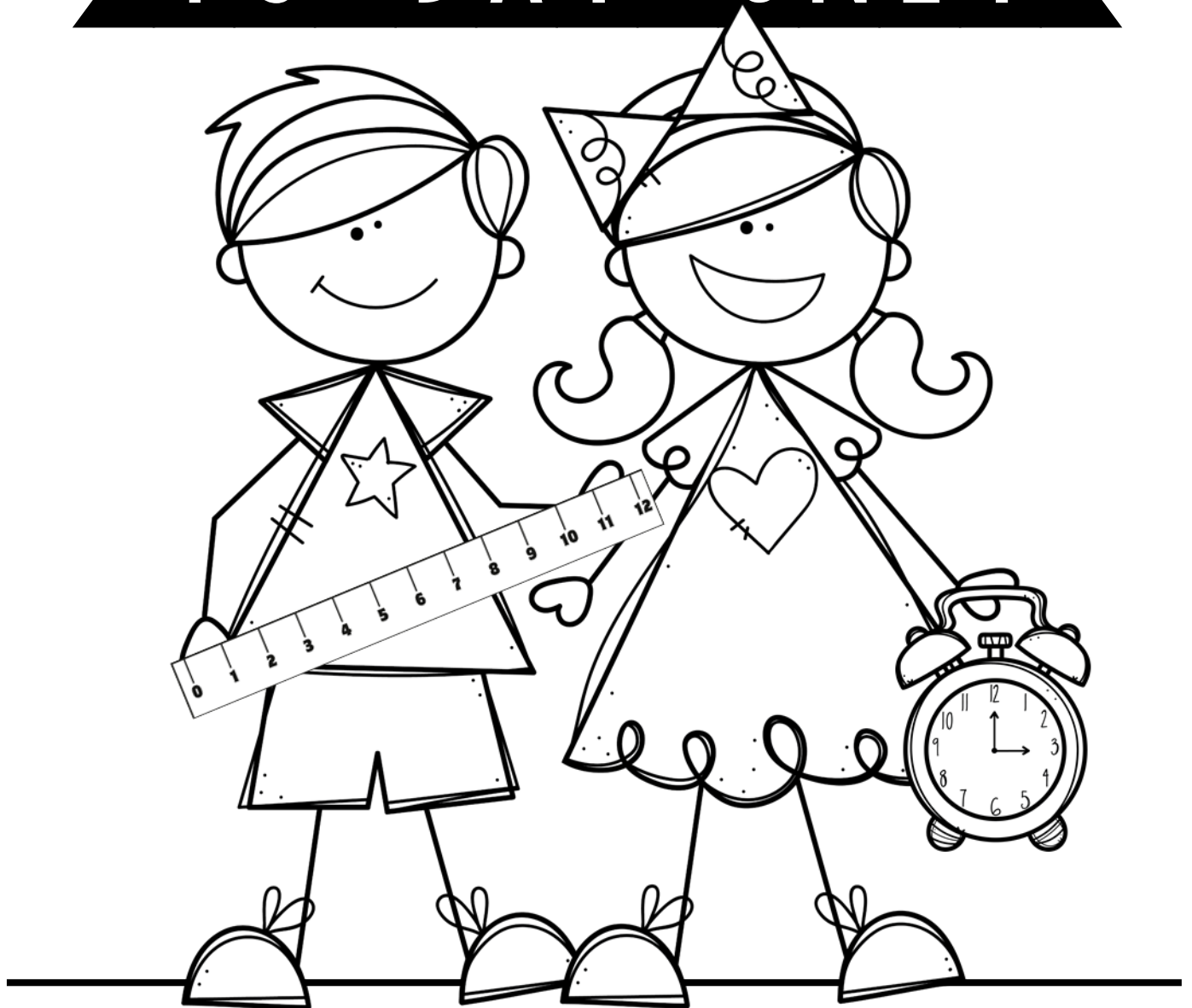


4<sup>th</sup> Grade TEKS ALIGNED  
MEASUREMENT

15 \* DAY \* UNIT



# Measurement Week 1 Overview



Day 1	Day 2	Day 3	Day 4	Day 5
Perimeter & Area 4.5C & 4.5D	Perimeter & Area 4.5C & 4.5D	Perimeter & Area 4.5D	Perimeter & Area 4.5D	Perimeter & Area 4.5D
Introduction to perimeter and area	Using a ruler to measure for perimeter and area		Multi-step perimeter and area problems	
<p><b>Vocabulary to define in Notebook:</b> Perimeter, Formula for Perimeter, Area, Formula for Area</p> <p><b>Notebook:</b> Perimeter &amp; Area</p> <p><b>Journal Prompts:</b> 4.5C #1a 4.5C #3a</p> <p><b>Game:</b> Perimeter &amp; Area Bump</p> <p><b>Exit Slip:</b> 4.5C #1</p>	<p><b>Notebook:</b> 1. Get to know your STAAR chart Part 1</p> <p><b>Printables:</b> Perimeter &amp; Area</p> <p><b>Journal Prompts:</b> 4.5C #2a 4.5C #4a</p> <p><b>Game:</b> Perimeter &amp; Area Bump</p> <p><b>Exit Slip:</b> 4.5C #3</p>	<p><b>Notebook:</b> 1. Get to know your STAAR chart Part 2 2. Understanding Fractions of Inches</p> <p><b>Printables:</b> A Perfect Space For My Dog</p> <p><b>Journal Prompt:</b> 4.5D #1a 4.5D #2a</p> <p><b>Exit Slip:</b> 4.5D #1</p>	<p><b>Notebook:</b> Complex Perimeter</p> <p><b>Printables:</b> 1. The Perfect Garden 2. Perplexing Perimeter and Area #1</p> <p><b>Game:</b> Roll &amp; Spin Rectangles</p> <p><b>Exit Slip:</b> 4.5D #3</p>	<p><b>Notebook:</b> Complex Perimeter 2</p> <p><b>Printables:</b> Perplexing Perimeter and Area #2</p> <p><b>Game:</b> Perimeter &amp; Area Battle</p> <p><b>Exit Slip:</b> 4.5D #5</p>

# Measurement Week 2 Overview



Day 6	Day 7	Day 8	Day 9	Day 10
<b>Relative Size &amp; Conversions</b> 4.8A, B	<b>Problem Solving</b> 4.8B, C	<b>Relative Size, Conversions &amp; Problem Solving</b> 4.8A, B, C	<b>Relative Size, Conversions &amp; Problem Solving</b> 4.8A, B, C	<b>Relative Size, Conversions &amp; Problem Solving</b> 4.8A, B, C
<b>Customary Length</b>	<b>Customary Length</b>	<b>Metric Length</b>	<b>Customary &amp; Metric Capacity</b>	<b>Weight &amp; Mass</b>
<p><b>Vocabulary to define in Notebook:</b> Customary Units Metric Units</p> <p><b>Notebook:</b> 1. Get to know your STAAR chart Part 3 2. Customary Length 3. Thinking About Miles &amp; km 4. Measurement Conversions</p> <p><b>Printables:</b> 1. Approximate Customary Length</p> <p><b>Exit Slip:</b> 4.8A #1</p>	<p><b>Student Tool:</b> Laminated Conversions made Easy page</p> <p><b>Printables:</b> 1. Customary Conversions 2. Problem Solving with Conversions</p> <p><b>Game:</b> Greatest Length Wins: Customary Version</p> <p><b>Exit Slips:</b> 4.8B #1 &amp; 4.8C #4</p> <p>*Send home <b>Capacity Show and Tell</b> letter</p>	<p><b>Notebook:</b> 1. Metric Length 2. Problem Solving with Conversions</p> <p><b>Printables:</b> 1. Approximate Metric Length 2. Metric Conversions &amp; Problem Solving</p> <p><b>Game:</b> Emoji Sliders: Length Edition (Metric &amp; Customary Lengths)</p> <p><b>Exit Slip:</b> 4.8A #2 &amp; 4.8C #6</p>	<p><b>Vocabulary to define in Notebook:</b> Capacity</p> <p><b>Activity:</b> Capacity Show &amp; Tell</p> <p><b>Notebook:</b> 1. Customary &amp; Metric Capacity 2. Problem Solving with Conversions 2</p> <p><b>Printables:</b> 1. Approximate Customary &amp; Metric Capacity 2. Customary &amp; Metric Capacity Problem Solving</p> <p><b>Game:</b> The Gallon Game</p> <p><b>Exit Slips:</b> 4.8B #3 &amp; 4.8C #3</p>	<p><b>Notebook:</b> 1. Customary Weight 2. Metric Mass</p> <p><b>Stations:</b></p> <p><b>Hands-on:</b> 1. Marvelous Mass 2. Guess my Weight</p> <p><b>Printables:</b> 1. Approximate Customary &amp; Metric Capacity 2. Customary &amp; Metric Capacity Problem Solving</p> <p><b>Journal Prompt:</b> 4.8A #2b</p> <p><b>Game:</b> Any game from this unit</p> <p><b>Exit Slips:</b> 4.8B #4 &amp; 4.8C #5</p>

# Measurement Week 3 Overview



Day 11 Converting Units of Time & Elapsed Time 4.8B, C	Day 12 Elapsed Time 4.8C	Day 13 Review	Day 14 Review	Day 15 Review & Assess
<p><b>Notebook:</b></p> <ol style="list-style-type: none"> <li>Converting Time</li> <li>Elapsed Time: 2 ways</li> </ol> <p><b>Printables:</b> Time: Problem Solving</p> <p><b>Game:</b> Time Machine</p> <p><b>Exit Slip:</b> 4.8C #1</p>	<p><b>Notebook:</b> Elapsed Time 2 Ways (More than 1 hour)</p> <p><b>Printables:</b> Time for Fun</p> <p><b>Games:</b> Elapsed Time &amp; Advanced Elapsed Time</p> <p><b>Exit Slip:</b> 4.8C #2</p>	<p><b>Activity:</b> Measurement Review Task Cards</p> <p><b>Printables:</b> Problem Solving with Time</p> <p><b>Game:</b> Any game from this unit</p> <p><b>Exit Slips:</b> 4.8C #7 &amp; 4.8C #8</p>	<p><b>Activity:</b> Use prescriptive content pages as needed with small groups and for stations. Pair them with a game board to increase student engagement.</p> <p><b>Printables:</b></p> <ol style="list-style-type: none"> <li>My Secret Clubhouse</li> <li>Party Punch</li> </ol> <p><b>Game:</b> Students can also play other games from the unit to review</p>	<p>Continue reviewing as time allows using materials from Day 14</p> <p><b>Test:</b> Measurement Assessment #1</p>

# Day 1: Intro to Perimeter and Area

**TEK: 4.5C** use models to determine the formulas for the perimeter of a rectangle ( $l+w+l+w$  or  $2L+2w$ ), including the special form for perimeter of a square ( $4s$ ) and the area of a rectangle ( $l \times w$ )  
**4.5D** solve problems related to perimeter and area of rectangles where dimensions are whole numbers

ESSENTIAL MEASUREMENT VOCABULARY	
Term	Picture or Example
Perimeter	
Formula for perimeter	
Area	
Formula for Area	

**PERIMETER and AREA**

Perimeter *is the* \_\_\_\_\_ *of the* \_\_\_\_\_

Area *is the* \_\_\_\_\_ *of the* \_\_\_\_\_

**3.1C** Easy way to find the perimeter of a rectangle

**3.2C** Easiest way to find the area of a rectangle

**3.3C** Easiest way to find the perimeter of a square

**3.4C** Easiest way to find the area of a square

**4.5C #1a** Use models to determine the formulas for the perimeter and area of rectangles and squares.

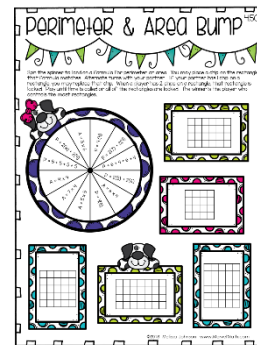
**4.5C #1b** Use models to determine the formulas for the perimeter and area of rectangles and squares.

**4.5C #2a** Use models to determine the formulas for the perimeter and area of rectangles and squares.

**4.5C #2b** Use models to determine the formulas for the perimeter and area of rectangles and squares.

**4.5C #3a** Use models to determine the formulas for the perimeter and area of rectangles and squares.

**4.5C #3b** Use models to determine the formulas for the perimeter and area of rectangles and squares.



Name \_\_\_\_\_

**4.5C #1**

Use models to determine the formulas for perimeter and area of rectangles and squares.

Take a turn on a miniature basketball court. The model below shows the length and width of the court.

1. Create a formula to find the area of the basketball court.

2. Create a formula to find the perimeter of the basketball court.

Students should be familiar with perimeter and area from 3<sup>rd</sup> grade. In 4<sup>th</sup> grade students are progressing from finding the area of a rectangle that is represented as a grid of tiles to finding the area of rectangles with side lengths that are numerical values. This lesson is designed to bridge students from the 3<sup>rd</sup> grade to the 4<sup>th</sup> grade TEKS. Finding area and finding perimeter are not necessarily difficult in themselves for students. From experience, students often miss problems because they forget which formula to use for each. 4.5C is a TEK that aims at building conceptual understanding of perimeter and area for students. When students understand how and why the formulas work, they will be prepared for 4.5D which has students solve problems with perimeter and area.

## Lesson:

1. Introduce perimeter and area by defining **perimeter**, **formula for perimeter**, **area**, and **formula for area** in the vocabulary section of the notebook
2. Use the **Perimeter and Area** notebook page to extend understanding of how perimeter and area applies to squares.

## Practice:

Students can complete the **4.5C #1a** and **4.5C #3a** journal prompts. As an option, you could complete those prompts as a class and then assign students to complete **4.5C #1b** and **4.5C #3b** individually.

**Game:** Students can play **Perimeter & Area Bump** to practice today's lesson. It offers the most difficult work for the day, cleverly disguised as a game. If time is short, you can just model the game today since students will have time in tomorrow's lesson to play the game with a partner. The color versions of all of the games can be found in the No Prep games file in this bundle.

**Exit Slip:** Use the **4.5C #1** exit slip to assess student understanding. You will want to print out the Exit Slips key & tracking document that can be found in the Exit Slip folder in this bundle.

# Measurement Table of Contents

TOPIC	TEKS	Page(s)
Measurement Vocabulary	All	1-2
Perimeter and Area	4.5C, 4.5D	3
Get to Know Your STAAR Chart Parts 1-2	4.5C, 4.5D	4-5
Fractions of Inches	Needed for 4.5D	6
Complex Perimeter	4.5D	7
Complex Perimeter 2	4.5D	8
Get to Know Your STAAR Chart Part 3	4.8B	9
Measurement Conversions	4.8B	10
Problem Solving with Conversions	4.8C	11-12
Customary Length	4.8A	13
Miles & Kilometers	4.8A	14
Metric Length	4.8A	15
Customary & Metric Capacity	4.8A	16
Customary Weight	4.8A	17
Metric Mass	4.8A	18
Converting Time	4.8B	19
Elapsed Time: 2 Ways	4.8C	20
Elapsed Time: 2 Ways (more than 1 hr.)	4.8C	21

# Measurement Printables Table of Contents

TITLE	TOPIC	TEK	Page
A Perfect Space For My Dog	Perimeter & Area Explorations	4.5D	1
The Perfect Garden		4.5D	2
My Secret Clubhouse		4.5D	3
Perimeter & Area	Perimeter & Area with 2x2 multiplication	4.4D, 4.5D	4
Perplexing Perimeter & Area #1	Multi-step Perimeter & Area	4.5D	5
Perplexing Perimeter & Area #2		4.5D	6
Approximate Customary Length	Inches, Feet, Yards, Miles	4.8A	7
Customary Conversions		4.8B	8
Problem Solving with Conversions		4.8C	9
Approximate Metric Length	mm, cm, m, km	4.8A	10
Metric Conversions & Problem Solving		4.8B, 4.8C	11
Approximate Customary & Metric Capacity	Fl. oz, cup, pint, quart, gallon, mL & L	4.8A	12
Customary & Metric Capacity Problem Solving		4.8B, 4.8C	13
Party Punch	Capacity Exploration	4.8B, 4.8C	14
Approximate Weight & Mass	Ton, lb, oz, kg, g, mg	4.8A	15
Weight & Mass Problem Solving		4.8B, 4.8C	16
Time: Problem Solving	Converting minutes & hours, elapsed time that passes the next hour	4.8C	17
Time For Fun	Elapsed time that passes the next hour	4.8C	18
Best Day Ever		4.8C	19
Problem Solving with Elapsed Time	Elapsed time using clocks for a start time	4.8C	20



# 4<sup>th</sup> Grade TEKS Aligned MEASUREMENT



## NO \* PREP \* GAMES

Game	TEKS
Perimeter & Area Bump	4.5C
Perimeter & Area Battle	4.5D
Roll & Spin Rectangles	4.5D
Guess My Measure	4.8A
Boxing Up Conversions Students will use their STAAR chart for this game, which is available <a href="#">HERE</a> . Scroll down to Grade 4 and click on "Grade 4 Mathematics Reference Materials."	4.8B 4.8C
Time Machine	4.8C
Elapsed Time	4.8C
Advanced Elapsed Time	4.8C
Prickly Problems: 2-step Problem Solving with Conversions	4.8C