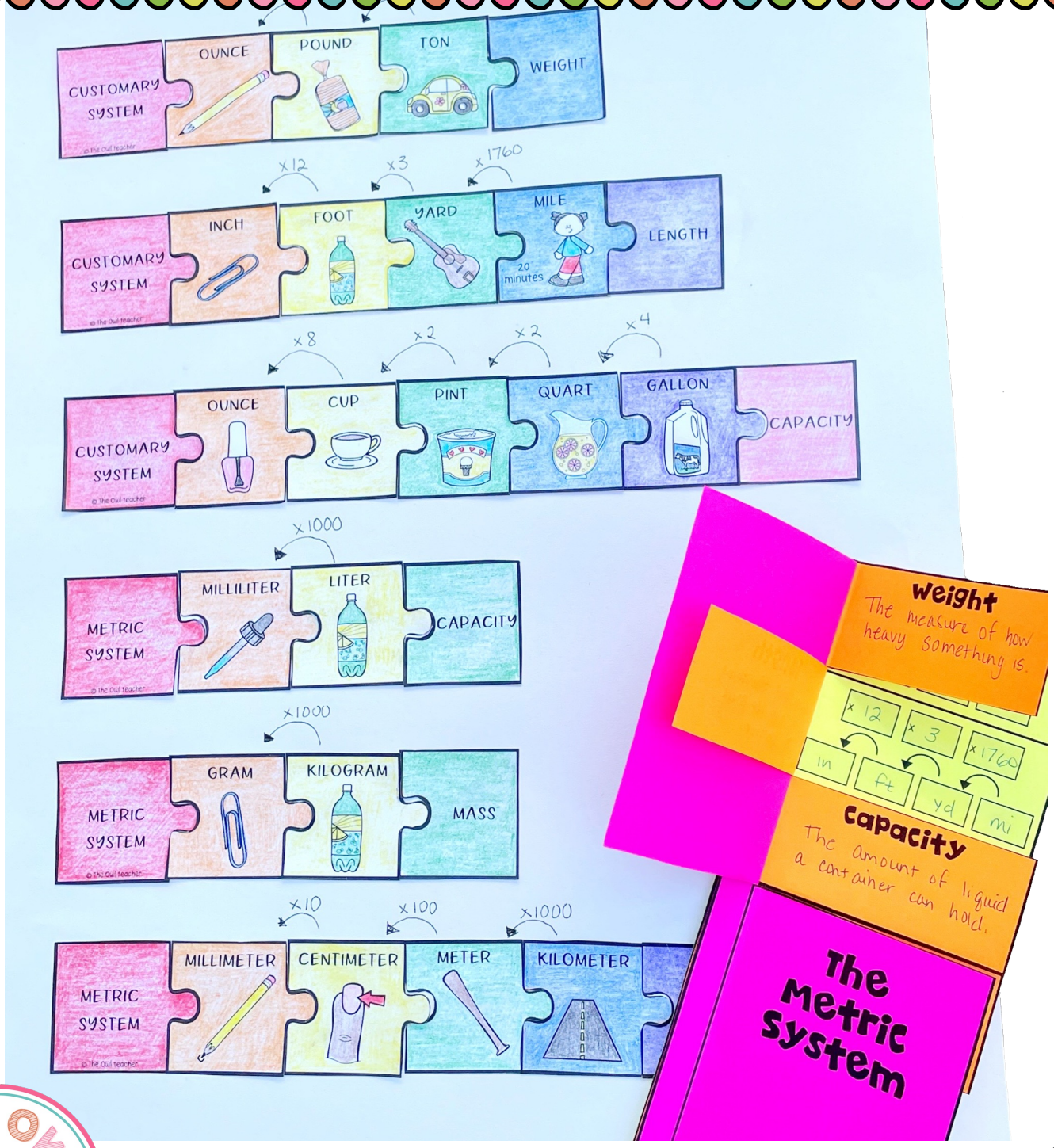
MATH WORKSHOP

MEASUREMENT



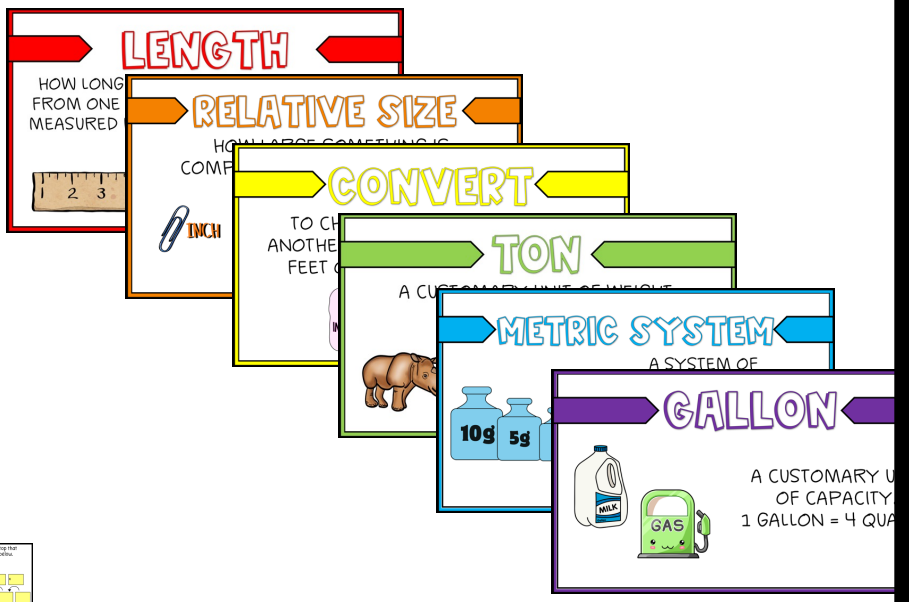
the OWL TEACHER

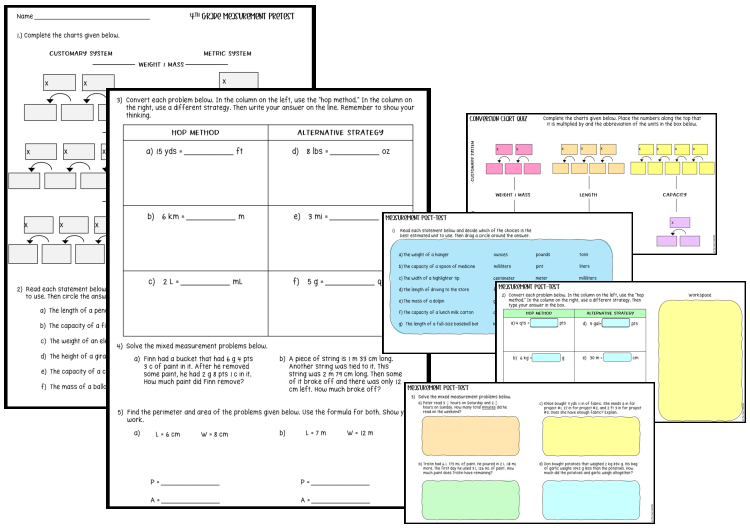
PRINTABLE & DIGITAL

4TH GRADE

VOCABULARY CARDS

CCSS aligned vocabulary cards for use during the lessons, your word walls, and so much more. These are also included in the digital version so you can project them on your board.



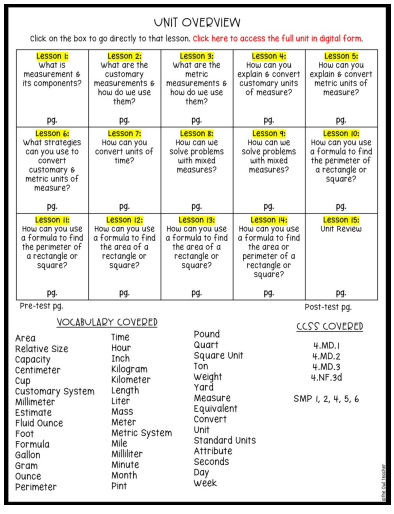


PRE-TESTS & POST TESTS

Pre-tests and Post-tests are provided so that you can determine what your students know and don't know. This also helps determine growth after the unit is complete.

UNIT OVERVIEW

A suggested unit overview and pacing is provided, though it's not necessary to follow it. This is to help make planning easy on you. It is also set up so you can just click on the lesson and it'll take you directly to it.



UNIT OVERVIEW

Click on the box to go directly to that lesson. Click here to access the full unit in digital form.

Lesson 1: What is measurement & its components? pg.	Lesson 2: What are the customary measurements & how do we use them? pg.	Lesson 3: What are the metric measurements & how do we use them? pg.	Lesson 4: How can you explain & convert customary units of measure? pg.	Lesson 5: How can you explain & convert metric units of measure? pg.
Lesson 6: What strategies can you use to convert customary & metric units of measure? pg.	Lesson 7: How can you convert units of time? pg.	Lesson 8: How can we solve problems with mixed measures? pg.	Lesson 9: How can we solve problems with mixed measures? pg.	Lesson 10: How can you use a formula to find the perimeter of a rectangle or square? pg.
Lesson 11: How can you use a formula to find the perimeter of a rectangle or square? pg.	Lesson 12: How can you use a formula to find the area of a rectangle or square? pg.	Lesson 13: How can you use a formula to find the area of a rectangle or square? pg.	Lesson 14: How can you use a formula to find the area or perimeter of a rectangle or square? pg.	Lesson 15: Unit Review pg.

Pre-test pg. Post-test pg.

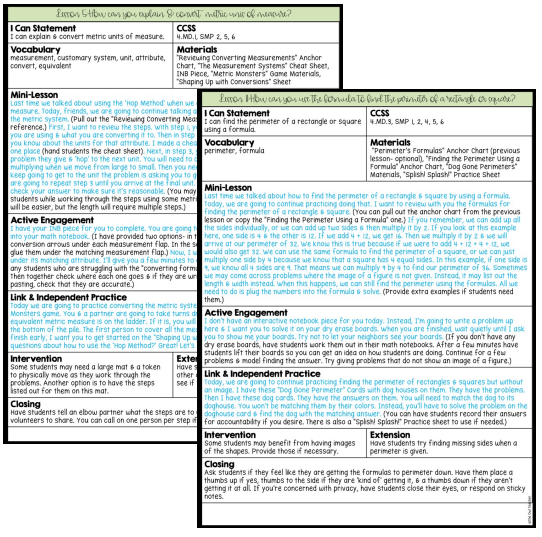
VOCABULARY COVERED

Area, Relative Size, Capacity, Centimeter, Cup, Customary System, Millimeter, Estimate, Fluid Ounce, Foot, Formula, Gallon, Gram, Ounce, Perimeter, Time, Hour, Inch, Kilogram, Kilometer, Length, Liter, Mass, Meter, Metric System, Mile, Milliliter, Minute, Month, Pint, Pound, Quart, Square Unit, Ton, Weight, Yard, Measure, Equivalent, Convert, Unit, Standard Units, Attribute, Seconds, Day, Week

CCSS COVERED

4.MD.1
4.MD.2
4.MD.3
4.NF.3d

SMP 1, 2, 4, 5, 6



Lesson 9: How can you explain & convert metric units of measure?

I Can Statement
I can explain & convert metric units of measure.

CCSS
4.MD.1, SMP 2, 5, 6

Vocabulary
measurement, customary system, unit, attribute, convert, equivalent

Materials
"Reviewing Converting Measurements" Anchor Chart, "The Measurement Systems" Cheat Sheet, INB Piece, "Metric Monsters" Game Materials, "Shaping Up with Conversions" Sheet

Mini-Lesson
Last time we talked about using the "Hop Method" when we ...
measure. Today, friends, we are going to continue talking a...
the metric system. (Pull out the "Reviewing Converting Meas...
reference.) First, I want to review the steps. With step 1, y...
you are using & what you are converting it to. Then in step ...
you know about the units for that attribute. I made a chea...
one place (hand students the cheat sheet). Next, in step 3, ...
problem they give & "hop" to the next unit. You will need to ...
multiplying when we move from large to small. Then you ne...
keep going to get to the unit the problem is asking you to g...
are going to repeat step 3 until you arrive at the final unit. ...
check your answer to make sure it's reasonable. (You may ...
students while working through the steps using some metric ...
will be easier, but the length will require multiple steps.)

Active Engagement
I have your INB piece for you to complete. You are going t...
into your math notebook. (I have provided two options- in t...
conversion arrows under each measurement flap. In the s...
glue them under the matching measurement flap.) Now, I w...
under its matching attribute. I'll give you a few minutes to ...
any students who are struggling with the "converting Forma...
Then together check where each one goes & if they are un...
pasting, check that they are accurate.)

Link & Independent Practice
Today we are going to practice converting the metric syste...
Monsters game. You & a partner are going to take turns d...
equivalent metric measure is on the ladder. If it is, you wil...
the bottom of the pile. The first person to cover all the me...
finish early, I want you to get started on the "Shaping Up w...
questions about how to use the "Hop Method?" Great! Let's ...

Intervention
Some students may need a large mat & a token to physically move as they work through the problems. Another option is to have the steps listed out for them on this mat.

Extension
Have s...
other ...
see if ...

Closing
Have students tell an elbow partner what the steps are to ...
volunteers to share. You can call on one person per step if ...

Lesson 10: How can you use the formula to find the perimeter of a rectangle or square?

I Can Statement
I can find the perimeter of a rectangle or square using a formula.

CCSS
4.MD.3, SMP 1, 2, 4, 5, 6

Vocabulary
perimeter, formula

Materials
"Perimeter's Formulas" Anchor Chart (previous lesson- optional), "Finding the Perimeter Using a Formula" Anchor Chart, "Dog Bone Perimeters" Materials, "Splish! Splash!" Practice Sheet

Mini-Lesson
Last time we talked about how to find the perimeter of a rectangle & square by using a formula. Today, we are going to continue practicing doing that. I want to review with you the formulas for finding the perimeter of a rectangle & square. (You can pull out the anchor chart from the previous lesson or copy the "Finding the Perimeter Using a Formula" one.) (If you remember, we can add up all the sides individually, or we can add up two sides & then multiply it by 2. If you look at this example here, one side is 4 & the other is 12. If we add 4 + 12, we get 16. Then we multiply it by 2 & we will arrive at our perimeter of 32. We know this is true because if we were to add 4 + 12 + 4 + 12, we would also get 32. We can use the same formula to find the perimeter of a square, or we can just multiply one side by 4 because we know that a square has 4 equal sides. In this example, if one side is 9, we know all 4 sides are 9. That means we can multiply 9 by 4 to find our perimeter of 36. Sometimes we may come across problems where the image of a figure is not given. Instead, it may list out the length & width instead. When this happens, we can still find the perimeter using the formulas. All we need to do is plug the numbers into the formula & solve. (Provide extra examples if students need them.)

Active Engagement
I don't have an interactive notebook piece for you today. Instead, I'm going to write a problem up here & I want you to solve it on your dry erase boards. When you are finished, wait quietly until I ask you to show me your boards. Try not to let your neighbors see your boards. (If you don't have any dry erase boards, have students work them out in their math notebooks. After a few minutes have students lift their boards so you can get an idea on how students are doing. Continue for a few problems & model finding the answer. Try giving problems that do not show an image of a figure.)

Link & Independent Practice
Today, we are going to continue practicing finding the perimeter of rectangles & squares but without an image. I have these "Dog Bone Perimeter" Cards with dog houses on them. They have the problems. Then I have these dog cards. They have the answers on them. You will need to match the dog to its doghouse. You won't be matching them by their colors. Instead, you'll have to solve the problem on the doghouse card & find the dog with the matching answer. (You can have students record their answers for accountability if you desire. There is also a "Splish! Splash!" Practice sheet to use if needed.)

Intervention
Some students may benefit from having images of the shapes. Provide those if necessary.

Extension
Have students try finding missing sides when a perimeter is given.

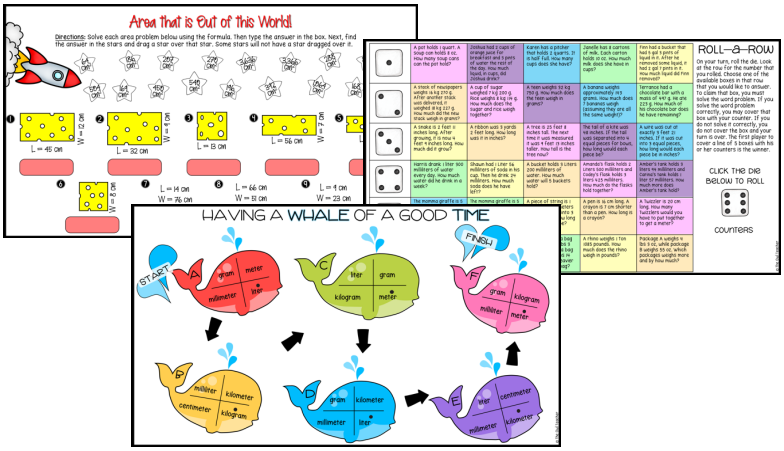
Closing
Ask students if they feel like they are getting the formulas to perimeter down. Have them place a thumbs up if yes, thumbs to the side if they are "kind of" getting it, & a thumbs down if they aren't getting it at all. If you're concerned with privacy, have students close their eyes, or respond on sticky notes.

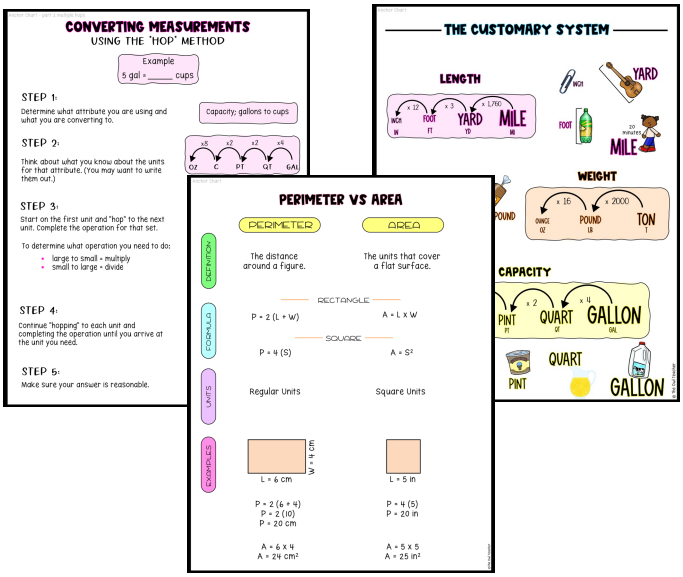
LESSON PLANS

Detailed and thorough lesson plans to help you work through the workshop model. It includes the "I Can" statement, CCSS, vocabulary, materials used, intervention ideas, and extensions.

DIGITAL VERSION

This unit includes a digital version. You can assign parts of the resource to your students whether you are at school or distance learning.



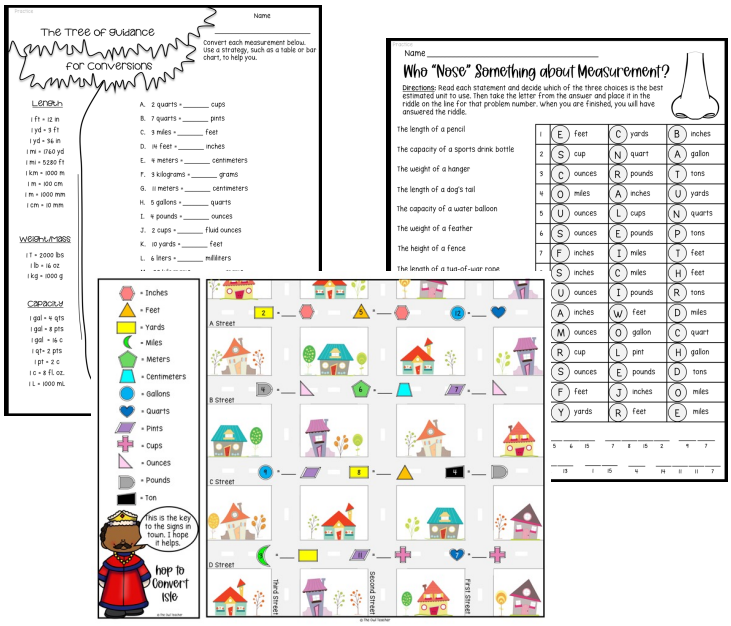


ANCHOR CHARTS

Detailed anchor charts that break things down for your students to help them understand important concepts.

ACTIVITIES

Hands-on, concrete activities that use manipulatives. Activities are created based on research and best practices. Students are engaged and enjoy math more.



PRACTICE WORKSHEETS

Worksheets are provided to give students a chance to practice the newly learned skills and to work their way to mastery. This also provides you the opportunity to check for understanding. Answer keys are included.

INCLUDES COLOR AND B/W VERSIONS!
INCLUDES ALTERNATE SPELLINGS