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Math Conversion Anchor Chart/Poster PackStruggling with measurement conversions? This vibrant pack of four anchor charts (also perfect as posters!) provides clear explanations and helpful examples for mastering mass, length, capacity, volume, and time conversions. Designed for grades 4-7, these visually engaging guides will simplify learn$5.29Price $5.29$5.98Original Price $5.98Save $0.69Clint & Alyson Dowda Lets talk about how to teach estimation and measurement in a hands-on and visual way to third-grade students. Heres how I want to break this down:What students need to know about measurement in third gradeHow to teach metric measurement and conversionHow to promote student understanding of metric unitsExamples of fun metric measurement activitiesIf you prefer to hear me talk through all of this, here is a video with all of this content.[0:43] What do students need to know about measurement in third grade? Even though we are just interested in what third graders need to know about measurement, I want to mention the progression of this standard so we know what comes before and after third grade. Before third grade, students are introduced to measurement tools (like rulers, yardsticks, and meter sticks) and have estimated and compared lengths. The third-grade standards expect students to estimate and read measurements. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. Here are the details of what this includes: Students can relate units to common items. I want them to know, whenever I ask, that a paperclip is approximately a gram, a handbook is approximately a kilogram, a drop of water would be a milliliter and then a large water bottle would be a liter. Students need to read exact measurements. I want them to experience measuring items in real life in addition to reading a measurement from a drawing. They need to be able to read measurements that fall on or between the lines of a ruler or scale. Students need to approximate measurements and determine if a measurement that is given would be reasonable or not reasonable (For instance, if a swimming pool were filled with water, would it be more reasonable that it would have two liters of water or 300 liters of water?). Students can solve multi-step word problems that have to do with measurement and estimation. With this foundation, in fourth grade, they will be ready to convert larger units of measurement to smaller units. In fifth grade, they will be able to convert between any units of measurement. [1:33] How do you introduce measurement to third-grade students?In third grade, we are talking primarily about estimation and exact measurements. Im going to take you through the CRA Model: the Concrete, Representational, and Abstract approach to teaching math.Concrete refers to hands-on activities using manipulatives that the students can touch.Representational activities allow students to take what they have learned in concrete form and expand upon it by creating drawings or other visual depictions of the concept.Abstract activities typically involve equations and algorithms.When it comes to estimation and measurement, concrete activities can include using liquid containers as well as balances, scales, and weights. Representational activities can focus on using pictures, and abstract activities can be presented as word problems. [2:40] Milestones of the third-grade measurement standardNext, Ill point out the milestones, or the big parts of this standard that we need to break down and ensure our students can perform. [4:09] Relate Units to Common ItemsThe focus of this standard that students and teachers most struggle with is grams, kilograms, liters, and milliliters. Since the U.S. has limited use of the metric system, students have trouble understanding how much each of these is. So I start by using an anchor chart (shown below) which relates the mass of one gram to one paperclip, the mass of one kilogram to a heavy book, and 1000 grams to one kilogram. It also includes that a few drops of water is about one milliliter and a large bottle of water is about one liter.Once students have real-world items to relate the measurements to, I start asking them which unit would be the most appropriate to use for measuring a given item. For example, I might ask if the mass of an apple would be more appropriately shared as kilograms or grams. This concept lends itself nicely to games because it's not difficult for them but they do need repetition. I like to give them practice using task cards or Tic-Tac-Toe because choosing appropriate units is a simple idea. Once they can answer these questions, they begin to find success with estimating measurements when given choices (e.g., is a pen more likely to be 90 kg or 90 g?). If they cant get this foundation, however, they will struggle with everything else related to measurement.[6:10] Read Exact MeasurementsThe next part of the standard is for students to read measurements. I've used a lot of hands-on materials for this and have found its important to have different sized containers for measuring liters and milliliters as well as a few platform scales, balances, and weight sets (all pictured below) for students to share. Ive found that students struggle the most with how to read scales, balances, and beakers, so the more hands-on practice they can get, the better. Begin with giving students measurements to read where the balance or beaker contents land on a labeled line for the scale.In addition to measuring items, they also need practice using these tools to show a precise measurement that's given. For instance, give students opportunities to fill a beaker to 250 milliliters. Its just like what theyve done before but reversed.As students get some practice with measuring real items, I might give them a drawing of an empty beaker and ask them to draw what 400 milliliters of water looks like. They need to begin representing measurements by drawing pictures. [8:22] Read Approximate MeasurementsThen go on to questions where measurements do not land on a labeled line. Once you've introduced students to this, they really need time to explore these tools and these measurements on their own. I would give students charts to complete with classroom items written on them and then they would have to go around the room and measure them. If you do this, leave spaces for students to come up with their own items from the classroom that they would choose to measure.After they have a good understanding of this from the hands-on approach, then we move to the representational approach. This is where students read capacity or mass from a drawing. The representational phase is when we start pulling in pictures and they are no longer relying on the actual physical measuring of real-life items in front of them. [9:43] Solve Word ProblemsThe last stage for teaching measurement is abstract, where students do not have manipulatives or drawings to rely on. Instead, they may just be given word problems about measurement to solve. It's a good idea to bridge the gap to abstract and have students start with one-step word problems. In those early stages, I still include a picture so students can still reinforce that skill of having to read a scale. Once they get more advanced, move away from pictures and just ask word problems that involve multiple steps. I also like to ask word problems that require students to pull information from tables, like the one shown below.This is how I progress students from the introduction of grams, liters, kilograms, and milliliters all the way up to multi-step word problems. [10:43] How to support struggling and advanced students with measurementIf students are having trouble with measurement, there are a couple areas that tend to be the main culprits. [10:53] Student Misconceptions About Units of MeasurementOne possibility is that students never really understood the relationship between unit vocabulary and common items. Extra practice with this skill is most appropriate, along with giving them a visual reference like the anchor chart I shared above. [11:02] Student Struggles with Reading and Approximating Scale LabelsThe biggest struggle tends to be trouble with reading and approximating scale labels. Students can typically read something when it comes up to a line that is labeled, but when a measurement falls between lines, that can be difficult. [11:20] Student Difficulties with Solving One-Step Word ProblemsLastly, students might need some assistance solving word problems. In that case, provide blank copies of scales, beakers, etc. and encourage students to draw pictures to represent what is happening in the problem. Pull in the hands-on manipulatives, if needed, to intervene for solving those word problems. [11:36] How to Challenge Advanced Students in MeasurementIf you have students who are doing really well and need a little bit of a challenge, I like to ask word problems that they have to pull information from tables like the one pictured above. You can also press high-achieving students to read measurements that are fractions so students are not always reading measurements to a whole number. [11:57] Measurement Activities ExamplesI dont know about you, but I had a tough time finding good resources to use in my classroom for this standard - so I had to make a lot of my own. I have put together some of my favorite activities below in case you might be interested in these student-approved activities for measurement! This PowerPoint resource takes you through an entire lesson, from start to finish, about grams and kilograms. It has students do everything that I talked about above. This resource includes student notes, along with the PowerPoint that they fill out as they go. It has an exit ticket, and it includes a SCOOT game with different levels of questions. You can use them as task cards or as a SCOOT game. Either is lots of fun. I personally put these cards around my classroom and students use it as a SCOOT game, so they go around the room with clipboards and answer the questions. I have three different levels of practice worksheets that are fun mazes: I also have ready-to-use, fun measurement centers and games:A tic-tac-toe where students have to choose what would be the appropriate measurement;A whole-class interactive game that has students racing to compete with each other about measurements in a zooVolume and Mass BINGO - you will never see students so excited to read exact measurements on scales and beakers! If you want ALL of these at a discounted price, you cancheck out this bundle with all 11 resources!Lastly, I have a FREE printable handout with big ideas from this post so you can print it and put it in a lesson plan book to remind you of all this good stuff. Please download it and let me know what you think! Picture this: your upper elementary students faced with the challenges of measurement conversion. Its a tricky concept, no doubt! Whether youre navigating the world of customary measurements, metric conversions, or a bit of both, one things for surepractice makes perfect!Having cheat sheets of conversion formulas and patterns can be helpful, but the way my students learn best is through practice! Here are some ways to teach measurement conversion for 4th and 5th grade students. Use anchor charts. Eventually, your students may have this skill memorized but start by having anchor charts with common conversions posted online or in-person for all of your learners to see.These charts will help your students understand conversions for customary and metric units. Here is an example of an anchor chart I use with my students. I created a customary measurement anchor chart and a metric measurement anchor chart. Below is a smaller version of my Customary Measurement Anchor Chart.Click HERE to grab and download this Anchor Chart for FREE. You can use anchor charts and cheat sheets all day long, but until you help students connect measurement conversion to real life, it doesnt make a lot of sense!Measurement conversion is one of the most important math concepts for your students to learn. And, of course its used in cooking! Start by having your students convert recipe ingredients from cups to ounces.Another relevant use for this important skill is understanding distance. I have a lot of students who love to run! Track and field events are often measured in yards. Have your students convert yards to feet and then miles to see the distance they are running. Measuring short lengths is also important too. Making scale models for class or building things at home is so much easier when students understand how to convert customary and metric lengths. Practice Measurement Conversion. Once students have the formulas and conversion charts available, its important to practice! I love to have students practice in a chart form where they can notice the patterns in the numbers. Many students may be able to see that multiplication is the operation that is used to go from smaller units of measurement to larger units, while division is used to go from larger units of measurement to smaller units of measurement.CLICK HEREto download this FREEBIE I made just for you.Using Measurement Conversion Worksheets can be awesome practice for your 4th and 5th grade students. The unit I created on TPT comes with everything you need to help your students with customary and metric conversion for 4th and 5th grade students.It includes the following A Student Journal Cover to organize into a mini booklet for your studentsAnchor Charts for Metric and Customary Units of Measurement (2) Customary Length,Weight and CapacityFeet to Yards Conversion Practice (2) Feet to Miles Conversion Practice (2)Pounds to Ounces (2) Tons to Pounds (2)Cups to Fluid Ounces (2) Quarts to Gallons (2)Metric Length and MassKilometers to MetersKilograms to GramsTemperatureCustomary Length to Metric LengthMeasurement Word Problems2 different activities (with 1 additional page that is differentiated with multiple-choice options for students that need extra support)True and False I like to pair these worksheets to practice measurement conversion for 4th and 5th grade students along with hands-on, relevant measurement activities in the classroom and at home. Incorporating recipes, track and field activities, and even finding temperatures in different parts of the world are ways to practice measurement conversion.Using resources like these measurement conversion worksheets that focus on customary and metric measurement conversion will help your students understand different types of measurements and their applications in real life.How will you use these measurement conversion resources in your upper elementary math classroom? You can always COUNT ON ME for engaging, differentiated math resources to help every student shine!Creating an engaging environment for upper elementary classrooms can be a daunting task. A great way to combat these tasks is by introducing anchor charts into your classroom. Anchor charts allow students and teachers alike to visualize their learning. Anchor charts are important for students of all ages. In 5th grade, teachers throughout the US put an emphasis on using dozens of anchor charts to give students the right amount of visual support throughout their learning. Weve put together a collection of a few perfect anchor chart ideas to be used in your 5th grade classroom! This colorful chart will give students a convenient check-in space when they need a reminder of how to multiply multi-digit numbers! It also has a great pneumonic device to help them remember without looking. Learn More: Crafting Connections This organized anchor chart will provide students with not only a reference throughout their learning of decimals but also with a visual. Learn More: Miss Macs Classroom Here is a great example of an anchor chart that can be continuously used throughout an entire unit. Teachers can use student ideas and brainstorming to fill in the different operations as they are taught! Learn More: Gilliams 5th Grade Go-Getters Volume is always a fun lesson! Whether you teach it visually with videos & anchor charts or interactively with hands-on, its hard to pass up this handy chart. Learn More: Teaching With a Mountainview Teachers cant go wrong by having conversion anchor charts in their classrooms. These are some of the best, especially when students just need a quick check or reminder! Learn More: Teachers Pay Teachers We all remember learning the order of operations! Dont forget to engrain it in your kiddos. Use this handy chart in any classroom. Learn More: My Math Resources Fractions can be fun with these colorful chart ideas AND interactive notebook printouts! Learn More: Teachers Pay Teachers Turn tricky word problems into a thing of the past with a CUBES anchor chart. Simply design and display your own CUBES chart in your classroom to provide your kiddos with an educational resource that they can always refer to. Each letter on your visual aid will guide them through an easy strategy that they can use to solve challenging math problems. Learn More: Caffeine Queen Teacher An anchor chart like this can easily give room for student ideas and class collaboration. Sticky notes are great for anchor charts! Learn More: Elementary Nest Learning to Compare and Contrast is a key component of 5th grade. Using an anchor chart like this can be a constant reminder of what to look for when students are working independently. Learn More: Jenn Keller Grasping the concept of figurative language can be tricky at first, but with this wonderful anchor chart, your 5th graders will become masters of metaphors, alliteration, and similes in no time! Learn More:Teach Simple Media is crazy these days! Heres an anchor chart to get across online ideas! Learn More: Pinterest This is a great reference anchor chart to have up around the classroom or in student interactive notebooks! Learn More: Teaching With a Mountain View A great 5th grade writing idea resource type is arms and cups! Students love this pneumonic device when perfecting their writing. Learn More: lisahuff PBworks My students love quick writes, but often have trouble starting out their thoughts independently. This anchor chart helped them immensely! Learn More: Teaching With a Mountain View All of my students absolutely love writing on Post It notes. Why not give them some more direction on WHY we use them? Learn More: Ela in The Middle What better way to introduce science than brainstorming its importance? Learn More: Around The Kampfire A simple States of Matter chart, like the one shown here, will make learning about scientific concepts a breeze. Turn it into a collaborative project, by inviting your class to provide you with ideas of what they think should be added to the chart. Learn More: Pinterest Writing ideas stretch through all subjects in 5th grade! Heres a perfect anchor chart thats simple enough to quickly make. Learn More: Katie Rutledge Activate your art skills (or your students) with this great Cloud Anchor chart! Learn More: Cuddle Bugs Teaching Food chains & Webs are so much fun to teach! Engage students with this super simple anchor chart and get their brains churning for more information. Learn More: Mrs. Martin 47 Reading from a textbook can most definitely get a little boring for your curious kids. So why not spice up your classroom with a Social Studies anchor chart? Learn More: TCi Tired of teaching measurement lessons from the textbook, and using a boring metric conversion worksheet to practice? Teaching metric conversions in 5th grade does NOT have to be monotonous and mundane! Heres an outline of my classroom lessons and activities to teach metric measurements, sure to boost engagement and save you some planning time. I love to introduce new content with a video. It gets my students attention and helps to set the stage for the lesson! I use a different video as an activator each day of our converting measurements unit. To introduce the metric system and converting metric measurements, here are some of my favorites: Textbook notes are boring. Do they have a time and a place? Yes. But I am a firm believer in using interactive notes in my math classroom whenever possible. I find that my students are WAY more likely to go back into their notebook and reference notes if theyre easily found and usable AKA interactive. To teach metric conversions in 5th grade, I use simple flipbook notes, that are perfect for students to reference again and again to practice converting metric measurements. I start with introducing the simplicity of the metric system, which usually blows my students minds! We talk a LOT about prefixes, and what they mean, and the base units. I show them the chart, we talk about place value and what it means when we jump to the right and left on the chart. I also reference our activator videos a ton! Your discussions around this will vary, depending on the background knowledge of your students! Then, we do LOTS of practice as a whole group. I model as many times as possible, while also giving real-life examples and providing context as to what each measurement will look like. You could even have students start to create their own practice problems to share with the class, or solve with a partner! Click here to grab these interactive notes. While my students have the interactive notes readily available in their notebooks, I still always like to have a reference point for them somewhere in the classroom. This helps when students (inevitably) forget their notebooks. It also helps those students who would rather look up on the wall, than pull out their notebooks each time. Secretly, I think seeing it day in and day out on the wall helps students internalize the information better as well! It cant hurt, right? I use this set of metric system posters when teaching metric conversions in my 5th grade classroom. I created these to be simple and easy to reference, but include all of the necessary information for students. Theyre black and white, so you can print them on any colored paper for your classroom. I typically hang them in order across the front of the room to be used when converting metric measurements. You could also print them, and place them in order on the floor of your classroom to have students hop across while practicing converting metric measurements! Click here to grab a set of these metric system posters. Searching for math practice activities can be so time consuming. Lots of times, I end up doing some practice problems from the textbook or using a metric conversion worksheet as independent practice. Let me be clear there is absolutely nothing wrong with that. I also, however, love to mix up our math practice when I can. Here are two options to use for metric conversion practice that will have your students engaged with metric conversions, with little to no extra prep on your end. First up these metric conversion color by number activities. I adore using coloring activities in math class because they provide excellent repetition and practice of new concepts AND they let students break up the monotony with a little coloring. My students always loved the challenge of getting their picture correct as well, and who doesnt love to give their kids a little extra motivation? If you want to boost the engagement even more cut up the problems and tape them around the room. Then have kids walk around with their coloring sheet as their answer sheet! Its the perfect independent or partner practice activity. Grab the set of converting metric units of measurement coloring activities by clicking here. I also have a set of Valentines Day converting measurement color by code activities, here! Another review activity thats sure to boost engagement while teaching metric conversions in 5th grade, is a board game! This obviously takes a little more prep on the front end. But, once its prepped you can use it year after year! I actually use this board game that covers both customary and metric conversions to review at the end of the unit. Basically, students draw a card and answer the converting measurements problem. If they get it right, they move to the next space on the board with the same color as the card they drew. (Think Candyland!) Board games are perfect for a partner activity or a small group station activity around the room. You can even project the game board on a smartboard, and pass out the game cards to your students, just like task cards! Click here for this board game to review converting customary and metric units of measure. I absolutely love using a project instead of a traditional assessment to close out a math unit. Converting metric measurements in 5th grade is the PERFECT unit for a culminating project. I use this project to assess my entire 5th-grade measurement unit since it covers both customary and metric conversions. The project I use, described in more detail here, has students design a new store for the local mall. Theyll have to convert measurements to choose the best space, build a sign, purchase materials, hire employees, etc. I love it because it shows converting metric measurements in a real-life application! You could JUST have your students do the metric conversion practice pages in this project if you havent yet covered customary conversions. Ive also split the project up and had my students work on one page at a time, to keep it manageable. Typically, Ill give my students the whole packet, and go over the directions. Then, I have them work independently on each page. I tell them that they cannot move to the next page until Ive checked the page they completed. This helps me assess their understanding as their work their way through, rather than having them complete the entire project incorrectly. I check the page, stamp the bottom, and send them on their way to work on the next page of the project! Click here to check out the entire converting measurements project pictured below that I use with my students. There you have it! My go-to activities for teaching metric conversions in my fifth grade classroom. This is always one of my favorite units to teach because there are so many opportunities for engaging practice! If you want to grab all of these resources in one simple bundle, click here. Not yet teaching measurement? Head here for my other math blog posts. Happy teaching! I can convert measurements within the same measuring system. 5.MD.15th graders are expected to convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. goodsensorylearning.com LearnZillion lesson LearnZillion lesson MathPlayground.com Youtube link LearnZillion lesson Sheppard Software measurement menu Quia Measurement Millionaire BBC measurement game BBC length & weight game MathFox metric system game Horrendous Soup - A metric system game at Mr. Nussbaum LearnZillion lesson StudyZone.org lesson Study Jams Customary Units of Length step-by-step We use cookies on our website to give you the most relevant experience by remembering your preferences and repeat visits. By clicking Accept, you consent to the use of ALL the cookies.Manage consentLaura Bauder Lets talk about how to teach measurement conversions to 4th and 5th grade students. Heres how I want to break this down:What students need to know about measurement in fourth and fifth gradesHow you introduce measurement to studentsStudent misconceptions about measurementHow to differentiate instruction for converting customary and metric measurementsMeasurement activities examplesIf you prefer to hear me talk through all of this, here is a video with all of this content.Lets review the progression of standards. In third grade, students begin by learning the different units of measurement. They learn how to estimate measurements and how to read measurements on a scale. In fourth grade, students are expected to begin converting measurements. They start by converting from larger to smaller units. In fifth grade, students are expected to convert all units of measurement within the same system. The best approach to teaching measurement conversions is to use the CRA model. This model is based on the idea that we start with concrete activities, where students use hands-on and manipulative approaches to math. Then we move to representational activities, where students rely on pictures and drawings as visual representations of the math concepts. Finally, we move to abstract activities, where students are using equations and algebra for measurement conversions.When we talk about concrete activities, we can have students use liquid containers, balances, scales, weights - anything that allows them to touch and sense what they are actually doing when they are converting measurements. They need to see it on a scale first before they can visually represent it. We can use fraction bars or unifix cubes to keep things concrete.Moving to representational activities, we can bring in graphic organizers, pictures of bars, and number lines. We are going to dive into these activities in more detail below. When we get to abstract activities, we can focus on algorithms that students can use as well as solving word problems.Lets start with making customary conversions concrete for students. Ill begin with blank tables for customary length, weight capacity, and time. Students can help list the measurements from smallest to largest.It should be a review for them that the smallest unit for customary length would be an inch, then a foot, then a yard, then a mile. Next, we can give students rulers and have them focus on just one of these given units at a time. At this stage, students typically can already tell you that there are 12 inches in one foot. As a good hands-on activity, you can give them a chance to put rulers together and see that two feet are 24 inches, three feet are 36 inches, four feet are 48 inches, and so on. This gives them the opportunity to explore and discover these measurement conversions on their own. I like to have them record these answers in a new table somewhere else. 1 ft = 12 in2 ft = 24 in3 ft = 36 in4 ft = 48 inThe next thing I would ask students to do is to begin noticing patterns. I anticipate they will begin to notice that they are increasing by one as they go down the left side of the table (1, 2, 3, 4) and on the right side they are multiplying by 12 (1x12, 2x12, 3x12, 4x12). I want them to record that once they have established those patterns. Anytime we are converting from feet to inches, we will multiply the number of feet by 12. We will notate that on the original table as well. I like to have the students draw an arrow between foot and inch, and write in that they will multiply by 12.For fourth graders, the standard is only for them to move up this chart and convert measurements from a larger unit to a smaller unit. All they will be doing, therefore, is multiplying. Fifth graders, however, need to be able to convert from smaller to larger as well. We want them to see the pattern is that they are dividing by 12 when they are converting from inches to feet. So, we record that on their tables as well.I then repeat this process for whatever tools I have available in my classroom. If you have yardsticks, for instance, you can have the students go through the same process and determine how many feet are in one yard, two yards, three yards, and so on. They can record this in their charts just like they did before, allowing them to discover that when they move from yards to feet they are multiplying by three. Again, for fifth grade, they have to move from feet to yards as well. If you do not have a lot of measurement tools on hand, a creative solution for exploration would be to use fraction bars or unifix cubes. Sometimes unifix cubes are also called connecting cubes, and you might have easier access to those or you could borrow them from a lower grade level. With the fraction bars, we can establish that a larger unit is one whole and the smaller unit is going to be a fraction tile. For instance, if we are talking about feet and inches, then the whole is going to represent the foot and it takes 12 inches to make one whole foot. We can then use twelfths to represent the inches. The students can then physically count the twelfths, and figure out how many feet there are.With the connecting cubes, you can establish that 12 units equals one foot. It probably wont actually measure one foot in length, but it represents how many inches it takes to create one whole foot. Three cubes (as feet) could equal one yard. Note that, whenever we use the unifix cubes or fraction bars, they are best just for an introduction and they are only good for moving across one unit of measurement.Next, we can move on to talking about multiple units of measurement. The next thing that I would have students do with the rulers, yardsticks, and whatever tools we have available, is I would ask them to consider how many inches are in a foot and how many feet are in a yard. By putting the measurement tools together, I would want them to discover that there are 36 inches in one yard. A lot of students may come in already recognizing that or picking it up very quickly. The challenge is that I want them to refer back to their charts and have them show 36 with what they already have. I want them to see that when we multiply something times three, and then again, times 12, we are also multiplying the original number by 36.So, whenever we are using this chart and we need to convert across more than one unit, we can multiply the numbers together to tell us what we need to do. You can continue doing tables just like this with measuring cups for capacity, clocks for time balances, and scales for weight. There are some measurements that you will just have to tell students: how many feet are in a mile or how many pounds are in a ton, for example. You likely wont have the resources for them to discover that on their own.One quick tip I want to share for capacity involves what I call the Gallons Chart. Honestly, I myself never remembered measurement conversions for capacity until I started using this chart to teach my students. In the chart above, you can see the gallon is represented with the big G. There are four quarts in a gallon, two pints in a court, and two cups in a pint. This is an incredibly visual way for students to remember capacity because some of those numbers can be a little bit funny. I still think of this chart whenever I have to solve something for capacity in my own life. If you are interested in getting this chart for interactive notebooks as a full page printout or even as a poster for your classroom, I have those listed here. By the end of completing these tables, your students will have tables that look something like this:As a reminder, fourth graders do not need the division piece on these tables. Fifth graders do. Students can keep their originals, but sometimes they arent set up in a way to be an easy reference later on. So I usually go head and give them a clean copy to put in their notebooks, and I also print it as a poster and hang it on the wall so they have a tool for reference. This anchor chart is essential as we move into the representational phase of the CRA model. With a little practice, most students can easily use this as a reference to complete problems and tables.For instance, if given a question about converting pounds to ounces or ounces to pounds, they should be able to use this table and see what they will be multiplying or dividing by. With multiplication, I want to point out a differentiation opportunity. Some students might prefer to draw out pictures. Lets say were asking students to find how many feet are in three yards. We can draw out boxes similar to the fraction bars I referenced earlier. They can break the bars into yards and see visually that nine feet equal three yards. It can be a great way to represent problems if they arent quite independent with the conversion chart yet. Lastly, lets talk about how students can solve customary conversion problems abstractly. We are going to set them up to create equivalent fractions. For instance, if we say five pints equals how many cups, we can set that up as an equivalent fraction. We know two cups are in one pint, and we want to know how many cups are in five pints. We have to make sure students understand that we keep the cups as the numerator and the pints as the denominator. If they are solving problems like this, it doesnt matter which they choose for the numerator versus the denominator, but the units have to be consistent. If students are really good at equivalent fractions, this will be a great model for them to follow. They can set it up as 2 cups/1 pint = X cups/5 pints. To get from 1 to 5, they have to multiply by 5. 2x5=10, so we can see that 5 pints equals 10 cups. This equivalent fraction model is abstract and it doesnt rely on the visual representations of the charts. Its a great option, especially for advanced students who want to save time.So far we have only discussed customary conversions, so I wanted to talk about metric conversions as well. You can have students go through a similar process, where they can use measurement tools to figure out the conversion. Instead of using tables like we created for customary units, however, I like to use a model that looks a bit different.I teach students a silly phrase to remember the prefixes for metric conversions. There are a lot of different options, but I use Kangaroos Have Dandruff But Dont Care Much. K H D b D C MWith metric, the same prefixes of course work for meters, liters, and grams. I always underline b because that is the base unit (meters, liters, or grams). At least in the beginning, I like to have students write those things out. Then I will remind students that if we have a number, for instance the number 10, then placing a decimal point at the end does not change the value. In addition, they need to understand that I can put as many zeros after a decimal as I would like and it still doesnt change the value. I can also put as many zeros in front of my whole number without changing the value.Just like before, sometimes I will have students draw arrows showing that as we move to the right we are multiplying by 10. As we move to the left, we are dividing by 10. After I have students try some of these conversions out, I teach them the decimal shortcut.Lets say I have 10 meters and I want to know how many centimeters there are. I tell students that we need to see how many jumps and in what direction we need to move on our chart for meters to centimeters. Meters is our base unit, so the decimal would be after the 10. I move two spaces to the right to get to centimeters on my chart, so the new decimal would be here: 1000 centimeters = 1 meter. I probably wouldnt start with the number 10 for them, because that extra zero can be a little tricky. I would probably start with a single-digit number for students. Once they learn the decimal trick, the problem is that they tend to get especially confused when we move the decimal to the left and the answer is less than one whole. For instance, if we were asking 10 meters = X kilometers, we would move the decimal to the left 3 spots. I will often have them place their decimal before they start their jumps, because otherwise they will go too far. They will get confused and want to put the decimal in front of the K instead of after. So we place the decimal and then count the jumps as 1, 2, 3. The answer, in this case, would be 10m=0.01km.That is a good opportunity to have a conversation with students about how we could add zeros after the decimal without changing value. 0.01km=0.010km. I also want students to get into the habit of putting a zero in front of the decimal point. The decimal moving strategy is the most time-saving and efficient way to solve metric conversions.Milestones, or what we want to make sure students can do when they are converting measurements, look pretty much the same for fourth and fifth grades. First, they need to be able to relate units to common items that they are familiar with. If they dont have a sense of the items and what size things are, they are going to struggle with doing the measurements and the conversions.Next, they need to be able to convert measurements. Again, fourth grade only needs to be able to move from larger units to smaller units. They need to be able to record measurements on a table. Lastly, especially in fifth grade, we need them to be able to do multi-step word problems using more than one operation.If you find your students are having trouble with any of the activities I have described, they may need to review relating unit sizes to common items. Converting units is what most students are going to struggle with, so its really helpful for them to have reminders and little tools they can use to reference what they need to multiply or divide by to get to the next unit. Keeping those handy is going to be a great intervention for students who are struggling. Making sure they know how to read and use that chart is critical.Instead of giving students a whole chart, you might want to focus on one particular part of it. Some students may never move to the algorithm piece that I talked about. They may just live in the representational phase where they rely on the chart quite often. Most students will be able to answer grade-level questions by doing that.If you have students who need a little bit of a challenge, it is not uncommon in converting measurements for us to use decimals (especially with the metric system). Perhaps you can also throw in some fractions for enrichment. They will have to convert fractions to decimals in order to convert their measurements, so that is a great area for them to practice.I put together a couple of different activity packs that will work for you whether you teach fourth or fifth grade.I have a fourth grade pack that only includes converting measurements from larger units to smaller units.I have a fifth grade pack where they convert larger to smaller units and smaller to larger units.Each of these has the same content just differentiated for grade level. For each, there are five worksheet mazes. There is one maze about customary length, one about customary weight, one about customary capacity, one about customary time, and one that focuses on metric. There are five mazes in each bundle.There is also an anchor chart for each bundle, showcasing the customary conversions and the metric conversions.For each bundle, there are two tic-tac-toe games: one is metric and one is customary units.Then, there are two task cards in each of these units - again, one customary and one metric. Lastly, each bundle has two BINGO games: one customary and one metric.If you are interested in those bundles, you can find them here:I also have a FREE handout for you. It includes everything I shared here as far as the progression of the standards, the different strategies and techniques you can use for the CRA model, a list of the milestones, and ideas about differentiation and where to focus for intervention or enrichment. I like to have those printed and in with my lesson plan books. Get the free handout here.I hope this post was helpful in informing your instruction - thanks for reading! Get Ready for Stunning Anchor Charts!This pack includes a comprehensive Customary and Metric Conversion anchor chart, perfect for grades 3-6! These charts are designed to support student learning by highlighting key concepts and helping students meet their learning goals.Why Anchor Charts? Anchor charts are an essential tool in any classroom. They serve as a visual reminder of concepts and learning objectives, and they can help students stay focused on their learning targets. When students actively engage in filling out or creating their own anchor charts, they take ownership of the learning process.Individual anchor charts with both black-and-white templates and completed colored versionsPDF format for easy printingPrint on regular-sized paper (shrink to 88% for notebook-friendly versions)Poster-size printing for bulletin boards (original size: 24 x 32)Print as an enlarged poster using Adobe (onto four individual pages, then tape together)Project and trace onto chart paper to customize as neededPrint and send home as a helpful reference toolWhether youre displaying them as you cover specific topics or creating a year-long word wall, these charts are the perfect addition to your classroom!Each anchor chart comes with a finished version as well as an outline template so you can collaborate with your students to fill in key information together! _____Fifth Grade Guided Math Bundle5th Grade- Guided Math Notes Bundle [Paper & Digital]_____ Clint & Alyson Dowda Here are some of my favorite books for teachers and instructional coaches.Please note that this page contains affiliate links. As an Amazon Associate, I earn from qualifying purchases. If you choose to purchase after clicking a link, I may receive a commission at no extra cost to you. Classroom Management Instructional StrategiesTeaching Literacy Teaching MathTechnologyInstructional Coaching I quickly found out how important a solid anchor chart is after teaching measurement in my own classroom. There is also value in having the units displayed differently. This is a wonderful resource that students can use as a fold able or simply glue in to their math interactive notebook. You can cut this anchor chart in half and give the student the customary measurement chart as you teach, and then the metric system as you teach it. Or just keep as is. This chart includes the most commonly used units of conversion in measurement. It includes measurements of weight, capacity, and length. I hope this printable aids your classroom as much as it has mine! Let me know what you think. I love your feedback. Especially to hear how you used it, what you might change or even add to it to make it a more effective tool. THANKSThis product has been updated to include 2 more Measurement Anchor Charts, 3 Customary and Metric Posters total.This measurement chart also includes a wonderful easy to read illustration of King Gallon. My students love the story of King Gallon to remember how to convert units of capacity. Then we enjoy using the story of King Henry to remember how to use the metric system. We use King Henrys crown to remember how to move the decimal.

Metric anchor charts. Measurement conversion anchor chart 5th grade. Conversion anchor chart 5th grade. 5th grade converting measurements. Metric conversion for 5th grade.