

Tips for Teaching Fractions

Research shows that children form positive emotional biases towards educational topics if we take the time to make those teaching moments warm and friendly. I know, I know, I've been a frazzled teacher also. I know how much of a strain it can be at times just to get the paperwork done in preparation for teaching. I can hear someone out there right now groaning, "Oh, so I'm supposed to write lesson plans AND be engaging, too?"

But let's give it a whirl. I think that just like any other skill, the more we practice, the more natural the process becomes. Being engaging while teaching might be a real pain at first, but once we begin thinking that way, ideas will flow more and more readily from our imaginations. And the outcome will be priceless for our kids.

How Can We Turn Dry Stuff into Fun Stuff?

Ok, so I'm trying to think of the driest topic I've ever had to teach. Let's see. I think learning about fractions might rank up there pretty close to learning correct use of apostrophes. So how can we make that topic engaging?

Guidelines for Planning Your Engaging Lesson

1. Use a story to explain elements of learning
2. Relate each part of the lesson to known objects
3. Act it out whenever possible
4. Feel free to be ridiculous...kids love it

Fraction Story

To explain fractions, say, "You want to make cookies. You are going to work on a table. You store your baking tools under the table. How many baking tools do you have stored?" Show this image:



Children will answer "Seven."

Say, "You decide to use a large bowl, a small measuring cup, and a large spoon. You put these on top of the table where you will be working."

Ask, "How many of the seven tools you had stored will you use to make the cookies?" Show this image:



Children will answer, "Three."

This story and these images will help a child understand the concept of what the number UNDER the line means as well as the number over the line in a fraction.

Notice in the illustration that we left gray placeholders for the tools the child will use to make cookies. The reason for this is that many children don't understand that the number under the table signifies how many you have in all, while the number above the line signifies how many you will use. A common mistake children make is in removing items from under the table and reducing the bottom number by that many. So instead of making the fraction like this: $\frac{3}{7}$, they would make $\frac{3}{4}$. Explain that you have to leave space under the table to replace the baking tools when you are finished and that the number under the table always represents how many tools you own in all.

For visual and tactile learners, using a story and visual such as this will help them understand and remember the concept of basic fractions. Of course you can make the story funny by enumerating really goofy ingredients.

Try Acting It Out

Act out making fractions using a student desk, play dishes and plastic food. Put the dishes under one desk and make a fraction for how many dishes you have under the line and how many you will use over the line. Next make a fraction using the plastic food. How many foods do you have in all? How many are you going to use in your soup?

Children love to use whiteboards and markers and make up their own fraction stories. A great follow-up to this lesson is to partner up the children and let them take turns making fraction stories. If you are working with only one child, take turns with her making up stories using real objects or drawing them as you tell the story.