

The Big Idea:

Trail mix is fun to make, but it's even better to eat! The original trail mixes were made thousands of years ago by people who were always moving from place to place, and it included berries, fruits, nuts, and dried meats. There's no one recipe because people all make it their own way. And there's more than one way to measure an amount with different measuring cups. No matter how you make it, though, one thing's for sure: it's yummy!

You Will Need:

- ★ 5 -6 ingredients, e.g. Cheerios, sunflower seeds, pretzel sticks, raisins, semisweet chips, mini marshmallows. It's up to you!
- ★ Several 1-cup and ¼-cup measuring cups
- \star Several tablespoons and teaspoons
- ★ Medium bowls (1 per participant)
- ★ Paper cups or small bowls (4 per participant)

The Math Behind the Scenes:

Making trail mix is a great way to explore counting, measurement, and fractions. Kids can compare volumes and learn how cups, tablespoons, and teaspoons relate, building "real-world" skills they can use in the kitchen!

Trail Mix and Munch

★ Each kid uses a tablespoon to fill 4 paper cups with 4 ingredients of their choice:

- 5 Tablespoons of ingredient A
- 3 Tablespoons of ingredient B
- 4 Tablespoons of ingredient C
- 6 Tablespoons of ingredient D

★ Once you're done measuring, discuss these riddles. Try as many as you can!

- Kindergarteners: Which cup has the most? The least?
- Grade 1: One ingredient is **exactly half** the amount of another ingredient. Which ingredients are they?
- Grade 2: How many tablespoons do you have in all?
- Grade 3: 4 tablespoons equals ¼ cup. How many cups of trail mix can you mix all together?
- Grade 4: What fraction of the whole is ingredient D? How about ingredient B?
- Grade 5: See if you can convert those fractions to decimals!

★ Now the yummy part – time to make trail mix!

- Spoon **1 tablespoon at a time** of ingredients A, B and C into a bowl, followed by **2 teaspoons of D**.
- One more riddle: If you follow this pattern, which ingredient will run out first? (Hint: 1 tablespoon equals 3 teaspoons!)
- Do the math together then finish to see if you're right!

★ Enjoy your trail mix! If you like, experiment with other ratios of ingredients to come up with your favorite recipe.