RUN A PIZZA PLACE FRACTION PROJECT

EASY-PREP

PRINT & DIGITAL

14 FUN TASKS

A "REAL LIFE" MATH PROJECT

RUN A PIZZA PLACE: A Fraction Project

Incorporate practical, real-life application of 3rd and 4th grade fraction concepts including:
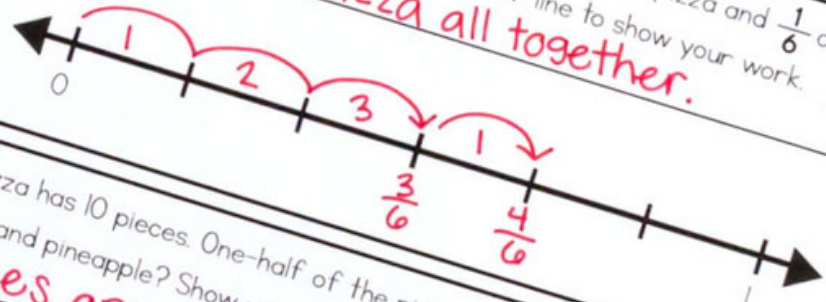
- fractions on a number line
- identifying and comparing
- simple equivalent fractions
- visual models
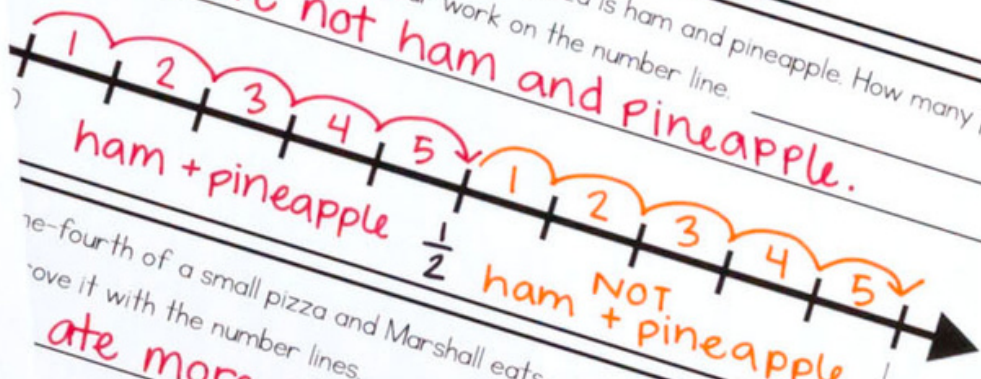

TASK #9

PIZZAS ON A NUMBER LINE

The Smith family ordered two pizzas. They ate $\frac{3}{6}$ of one pizza and $\frac{1}{6}$ of the second one. How much pizza did they eat in all? Use a number line to show your work.

They ate $\frac{4}{6}$ of a pizza all together.

A medium pizza has 10 pieces. One-half of the pizza is ham and pineapple. How many pieces are NOT ham and pineapple? Show your work on the number line.

5 pieces are not ham and pineapple.

ham + pineapple $\frac{1}{2}$ NOT ham + pineapple

One-fourth of a small pizza and Marshall eats one-sixth of a small pizza. Who ate more pizza. Prove it with the number lines.

ate more pizza.

$\frac{1}{4}$ Maria

Marshall

This number line represents

TASK #11

WHO ATE MORE?

You'll serve 9 tables in all today. Let's take a look at what they are eating!

table for lunch. Fill in the chart to show how much of their pizza is left.

Use the chart to answer the questions:

Which table ate the most pizza?

Table #5

Which table ate the least pizza?

Table #2

Order the fractions of pizza eaten from least (smallest) to greatest (largest)

$\frac{3}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, $\frac{8}{10}$, $\frac{9}{10}$

How much more pizza did Table #5 eat than Table #2? Write a fraction.

$\frac{6}{10}$

of pizza left over from one of the tables. Write the

Table # 1   Table # 3   Table # 4

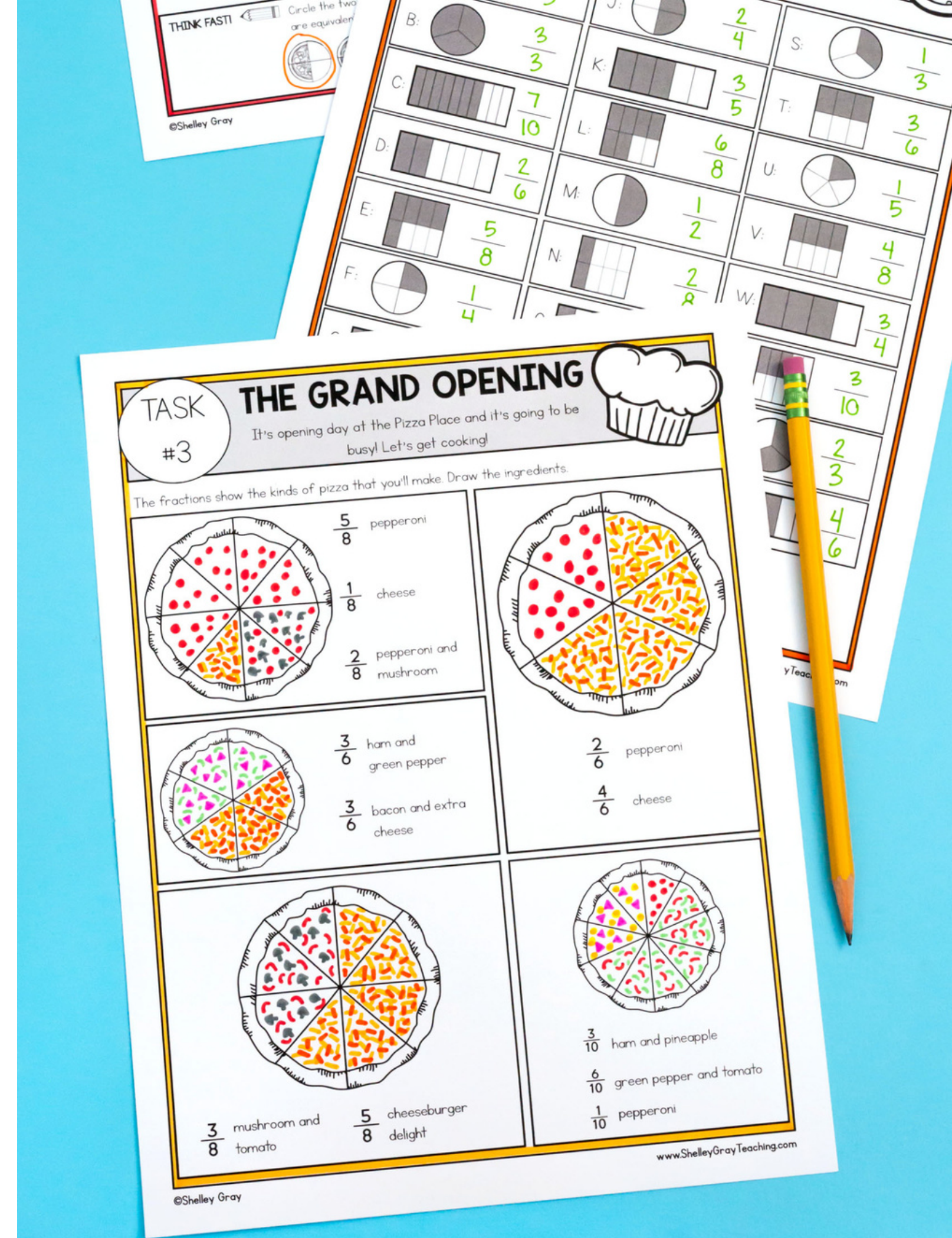that show **equivalent** (equal) fractions. How do you know that they

they take up the same amount of pizza

Fractions are **fun** and **easy-to-understand** when the content is relevant and engaging!

This high-interest, jam-packed fraction project will **bring fractions to life** for your students, helping them understand what fractions really mean and how they are used in the **real world.**

"WOW! THIS PROJECT COVERS IT ALL. MY STUDENTS WERE SO FRUSTRATED WITH FRACTIONS; THIS PACKET ALLOWED ME TO BREAK DIFFERENT DOMAINS DOWN INTO DETAIL AND EXPLANATION. WE ENJOYED DOING THIS AS A CLASS OVER TIME. IT IS ALSO FUN TO SEE THEM CREATE THEIR OWN PIZZA POSTER." - *MARIA*

YOUR STUDENTS WILL...

Brainstorm a restaurant name and design a poster to advertise.

Represent fractions on visual models and interpret fraction data.

Work with fractions and money to complete the missing menu prices.

Work with fractions in different forms and identify numerators.

Represent fractions in word form, number form and with visual models & work with simple equivalent fractions.

Identify fractions using visual models and compare to one-half.

Problem-solve using fractions, compare, and represent in word and number form.

Add simple fractions.

Represent fractions on a number line.

TASK #7 — PIZZA PROBLEMS!

In any business or job, you will run into problems that need to be solved! Let's take a look at a few of the problems that you encounter this week.
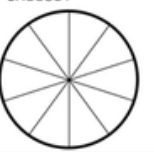
A large pizza has 12 slices. Your customer wants $\frac{1}{4}$ with pepperoni and the rest with ham. How many pieces have pepperoni? How many pieces have ham?

You usually put 3 cups of cheese on a ... cheese. How much cheese will you put ...

You cut a pizza into 10 slices. Five-tent... the pieces are bacon and mushroom. ... cheese?

THINK FAST! Pizza is your favorite ... or $\frac{1}{6}$ of a pizza? W...

TASK #10 — A PIZZA PART...

Today you're hosting a birthday party at you... Let's get planning!

Here are the facts:

There are 10 people at the pizza party. 8 of them are kids and two are... as a fraction:

What fraction of the people are kids? — Fraction as a number: Fraction in words:

What fraction of th... — Fract... Fract...

Each person will eat 3 pieces of pizza. How many pieces will we need al...

We will make large pizzas for this group. A large pizza has 12 pieces. H... we make?

You'll be putting out 2 pitchers of lemonade, 1 pitcher of iced tea, and 2... the party. Represent each type of drink as a fraction of the total pitchers.

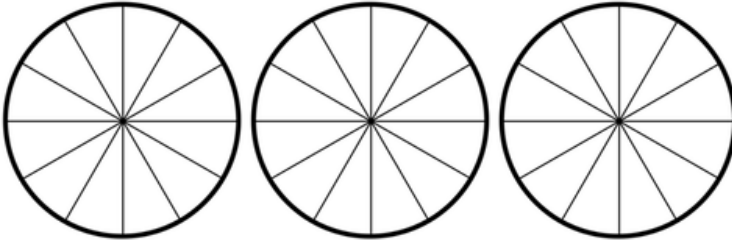Pitchers of Lemonade (as a fraction):

Pitchers of Iced Tea (as a fraction):

Pitchers of Water (as a fraction):

THINK FAST! Write three fractions that are greater (more) than two-fifths.

Now let's make the pizzas!

Here are the three pizzas that we'll make. Decide how much of each kind of pizza you should make. Then choose a color to represent each kind of pizza and shade the diagrams to match.

$\frac{}{12}$ pepperoni $\frac{}{12}$ ham and pineapple

$\frac{}{12}$ cheese $\frac{}{12}$ deluxe

Write each of the fractions from above in words:

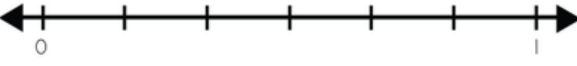| Type of Pizza	Fraction in Number Form	Fraction in Words
Pepperoni		
Cheese		
Ham and Pineapple		
Deluxe		

What's left?

The shaded parts represent the pizza that is left over after the party. Write a fraction to represent the amount of pizza that is left.
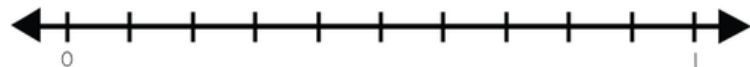
TASK #9 — PIZZAS ON A NUMBER LINE

The Smith family ordered two pizzas. They ate $\frac{3}{6}$ of one pizza and $\frac{1}{6}$ of the second one. How much pizza did they eat in all? Use a number line to show your work. _____

A medium pizza has 10 pieces. One-half of the pizza is ham and pineapple. How many pieces are NOT ham and pineapple? Show your work on the number line. _____

Maria eats one-fourth of a small pizza and Marshall eats one-sixth of a small pizza. Who ate more pizza? Prove it with the number lines. _____

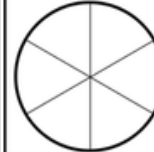Which of the pizzas does this number line represent? Circle it.

TASK #8 — DOUBLE THE INGREDIENTS

A large pizza uses twice the amount of each ingredient as a small pizza. Double each amount on the chart to show the amount for a large pizza.

Ingredient	Amount for a Small Pizza	Double the fraction.	Amount for a Large Pizza
Sauce	$\frac{1}{2}$ cup	$\frac{1}{2} + \frac{1}{2} = 1$ cup	1 cup
Cheese	$1\frac{1}{2}$ cups		
Pepperoni	$\frac{1}{3}$ cup		
Ham	$\frac{1}{2}$ cup		
Mushrooms	$\frac{2}{5}$ cup		
Pineapple	$\frac{1}{4}$ cup		
Green peppers	$\frac{1}{4}$ cup		
Tomatoes	$\frac{2}{6}$ cup		

Oh no! You ran out of cheese! You need 1 cup and you only have $\frac{4}{6}$ of a cup. How much more cheese do you need?

Decompose, compare and order, and compare using number lines.

Represent "1" as a fraction.

Work with numerators, denominators, and number lines to compare.

"THIS UNIT WAS A REAL HIT WITH MY GRADE 4 CLASS. STUDENTS WERE **TOTALLY ENGAGED**, EVEN THOSE WHO DON'T TYPICALLY LIKE MATH ALL THAT MUCH. WHAT A GREAT WAY OF PUTTING **REAL WORLD PERSPECTIVES** INTO MATH IN A RELATABLE WAY FOR STUDENTS. **THEY LOVED IT!** THANK YOU!
-ANDRIANA"

Are you ready to take fractions to the next level for your students?