

For Creative Minds

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We use fractions all the time

You might break a cookie in **half** to share with a friend.

Football and soccer games are played in **quarters**.

If you sleep for eight hours, you sleep away **one third** of the day.

A **quarter** is worth $\frac{1}{4}$ or one quarter of the value of a dollar.

Your mom or dad may stop to get gas when the fuel gauge is $\frac{1}{4}$.

Each time you cut food into smaller pieces, you are cutting it into **fractions**.

Can you think of other common fractions that you use daily?



Measuring and fractions in recipes

One of the most common measures when cooking is "one cup." A recipe might ask for 1 cup of water or flour, but then again, it might ask for $\frac{3}{4}$ (.75) or $1\frac{1}{2}$ (1.5) cups of flour.

- What you need for this activity:
- A complete set of measuring cups
- Raw rice (easier to clean up than flour)
- A large bowl or pot over which to measure to catch "spillage"



Using the rice and the various measuring tools, answer the following questions. Try to guess the answer before "testing" it by pouring the smaller cup amount into a larger cup.

If you use the $\frac{1}{4}$ (.25) cup, how many times would you need to fill it to equal one cup?

If you use the $\frac{1}{2}$ (.5) cup, how many times would you need to fill it to equal one cup?

Do you see a pattern?

If you had a $\frac{1}{3}$ (.33) cup measure, how many times do you think you would have to fill it to equal 1 cup? What about $\frac{1}{5}$ (.20) cup?

Which measuring cups would you use to measure $1\frac{1}{2}$ cups of something?

If you used only $\frac{1}{2}$ cup measuring cups to get the $1\frac{1}{2}$ cups, how many times would you fill it?

If you used only the $\frac{1}{4}$ cup measuring cups to get the $1\frac{1}{2}$ cups, how many times would you fill it?

$\frac{7}{9}$

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{2}{3}$

$\frac{7}{9}$

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{7}{9}$

Match the fraction to the picture



Which fraction shows how many muffins are present?

1. _____



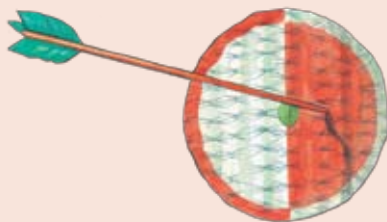
What is the fraction missing from the lily pad?

2. _____



What fraction of the cake is strawberry flavored?

3. _____



What fraction of the target is the red side?

4. _____



Which fraction shows how much of the lily pad is present?

5. _____

a.

$\frac{2}{3}$ OR
.66

b.

$\frac{1}{3}$ OR
.33

c.

$\frac{1}{2}$ OR
.5

d.

$\frac{1}{4}$ OR
.25

e.

$\frac{3}{4}$ OR
.75

answers: 1.e, 2.d, 3.b, 4.c,

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{2}{3}$

$\frac{7}{9}$

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{2}{3}$

$\frac{7}{9}$

A Pizza Party!

You will need two uncut pizzas. Using a pizza wheel, cut one pizza into eight pieces and cut the other pizza into six pieces.



If you are hungry, would you prefer a slice from the one divided into six ($\frac{1}{6}$ or **.166**) or eight ($\frac{1}{8}$ or **.125**)? Why?

Would you prefer two slices of the eight ($\frac{2}{8} = \frac{1}{4}$ or **.25**) or one of the six ($\frac{1}{6}$ or **.166**)? Why?

If you are REALLY hungry, would you prefer four slices of the eight ($\frac{4}{8}$) or three of the six ($\frac{3}{6}$)? Why or why not? Is there an easier way to say those fractions? What is the decimal equivalent?

EAT AND ENJOY YOUR PIZZA - WHATEVER FRACTION SIZE YOU HAVE!

$\frac{7}{9}$

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{2}{3}$

$\frac{7}{9}$

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{7}{9}$