



Introduction to Equivalent Fractions & Comparing Fractions



Purpose This Bridge activity introduces students to comparing fractions and determining whether or not they are equivalent. It is designed to activate prior knowledge and get students thinking about the size of fractions.

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| <input checked="" type="checkbox"/> Introduction | <input type="checkbox"/> Addition | <input type="checkbox"/> Manipulatives | <input type="checkbox"/> Teacher-Facilitated |
| <input type="checkbox"/> Investigation | <input type="checkbox"/> Subtraction | <input type="checkbox"/> Pictorial Model | <input type="checkbox"/> Tutoring/Intervention |
| <input type="checkbox"/> Practice | <input type="checkbox"/> Multiplication | <input type="checkbox"/> Properties of Operations | <input checked="" type="checkbox"/> Small group |
| <input type="checkbox"/> Posttest | <input type="checkbox"/> Division | <input type="checkbox"/> Choose a Method | <input type="checkbox"/> Centers |
| | | | <input type="checkbox"/> Challenge! |



Setting Up For Instruction

- Make 1 copy of **Would You Rather...? Example** so it can be projected using classroom technology.
- Make 1 copy of **Would You Rather...? Cards** for every 3–4 students. Cut them out and place them in baggies.
- Make 1 copy of **Would You Rather...?** for each student.
- Gather **fraction manipulatives** for students to use as needed.



How-To Guide

1. Put students in groups of 3–4.
2. Project **Would You Rather...? Example**. Ask students to discuss which situation they would prefer and then share their reasoning. Focus on examining their reasoning rather than on marking answers right or wrong. This exercise isn't designed to be graded. See Listening to Reasoning below.
3. Hand out materials.
4. Show students where the **fraction manipulatives** are so they can use them as needed.
5. Ask students to mix up the cards and lay them face down on the table.
6. Students draw 1 card at a time, discuss the problem situation, and write their reasoning on **Would You Rather...?**



Thought Extenders

- What is your reasoning?
- Can you draw a diagram to help you explain your reasoning?

Preguntas para ampliar el conocimiento

- ¿Cuál es tu razonamiento?
- ¿Puedes dibujar un diagrama para ayudar a explicar tu razonamiento?





+ Listening to Reasoning (4.IG)

This activity is filled with gross and silly comparisons that invite students to think carefully about the fractions in the problems.

In the example problem, students are asked to consider whether they would rather eat $\frac{1}{4}$ of a cup or $\frac{1}{3}$ of a cup of grasshoppers. In your classroom discussion, the “why” of their answer is much more important than which amount they would eat. Here are a few scenarios:

Correct Reasoning

- Student says $\frac{1}{4}$ of a cup because grasshoppers are crunchy (yuck!) and $\frac{1}{4}$ of a cup is less than $\frac{1}{3}$ of a cup.
- Student says $\frac{1}{3}$ of a cup because her grandmother fixes them as a snack and they are delicious. $\frac{1}{3}$ is more than $\frac{1}{4}$. (FYI, grasshoppers are a common food in markets around the world. They are protein rich!)

Incorrect Reasoning

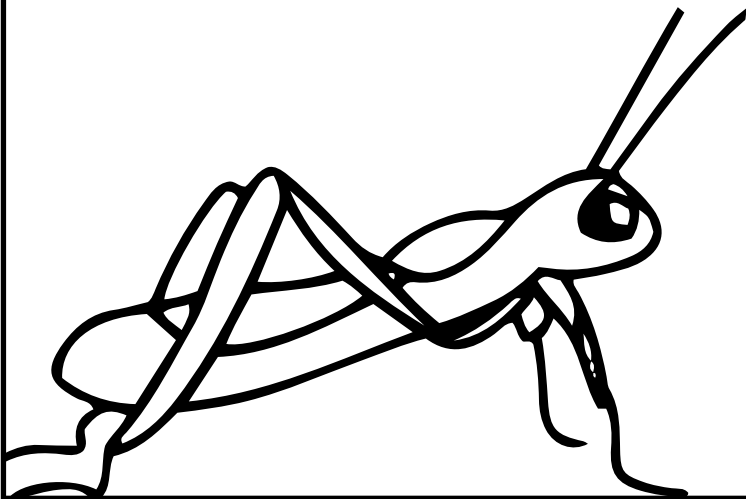
- Student says $\frac{1}{4}$ of a cup because he loves the crunch of grasshoppers. This student is demonstrating that he thinks $\frac{1}{4}$ is larger than $\frac{1}{3}$. An answer like this clues you in to the fact that he needs a tutoring session to work with fraction manipulatives to compare fractions.
- Student says $\frac{1}{3}$ of a cup because they smell bad when her grandmother cooks them. An answer like this clues you in that she also needs a tutoring session to work with manipulatives to compare fractions.

Note: The “mask” problem asks students to compare two equivalent fractions. Any example of correct student reasoning should note that the fractions are equivalent, regardless of how they answer the “would you rather” portion.



¿PREFERIRÍAS...? EXAMPLE

¿Prefieres comer $\frac{1}{4}$ de una taza de saltamontes
○
comer $\frac{1}{3}$ de una taza de saltamontes?





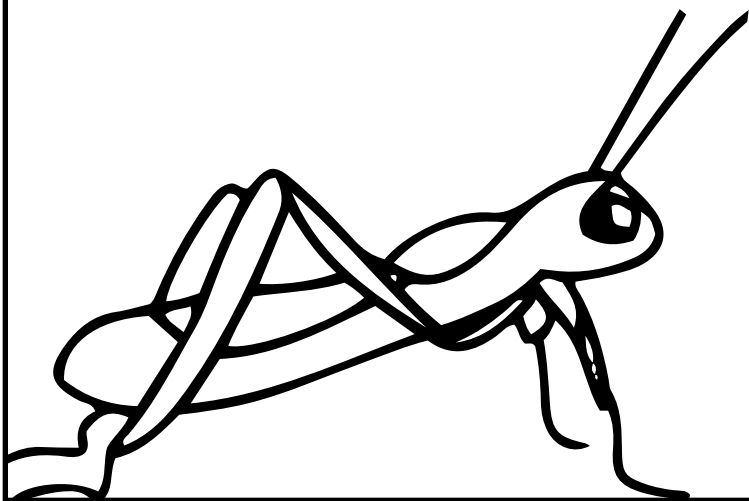
¿PREFERIRÍAS...? EXAMPLE ANSWER KEY

¿Prefieres comer $\frac{1}{4}$ de una taza de saltamontes
○
comer $\frac{1}{3}$ de una taza de saltamontes?

Busque respuestas como las siguientes:

Preferiría comer $\frac{1}{4}$ de una taza de saltamontes porque los saltamontes son asquerosos y $\frac{1}{4}$ es más pequeño que $\frac{1}{3}$.

Preferiría comer $\frac{1}{3}$ de una taza de saltamontes porque los saltamontes están llenos de proteínas y $\frac{1}{3}$ es más grande que $\frac{1}{4}$.





¿PREFERIRÍAS...? CARDS



¿Prefieres

comer $\frac{1}{4}$ de una taza de saltamontes



comer $\frac{1}{3}$ de una taza de saltamontes?

¿Prefieres

nadar en la basura durante $\frac{3}{5}$ de hora



nadar en la basura por $\frac{3}{6}$ de hora?



¿Prefieres

usar pantalones hechos de $\frac{3}{4}$ alas de mosca



usar pantalones hechos de $\frac{2}{4}$ de telarañas?

¿Prefieres

dejar que un zorrillo rocíe $\frac{1}{2}$ de tu casa



dejar que un zorrillo rocíe $\frac{1}{3}$ de tu casa?



¿Prefieres

acostarte en una cama cubierta con $\frac{4}{9}$ de uñas de los pies



acostarte en una cama cubierta con $\frac{4}{11}$ de uñas de los pies?

¿Prefieres

usar una máscara fea y maloliente $\frac{3}{6}$ del año



usar una máscara fea y maloliente $\frac{4}{8}$ del año?



¿Prefieres

bañarte en saliva de moscas durante $\frac{5}{6}$ de hora



bañarte en saliva de moscas durante $\frac{6}{7}$ de hora?

¿Prefieres

caminar sobre arena caliente por $\frac{2}{3}$ de hora



caminar sobre arena caliente por $\frac{3}{4}$ de hora?



¿PREFERIRÍAS...?

Nombre: _____

Instrucciones: Escoge una opción y escribe tu razonamiento usando las fracciones. Asegúrate de usar oraciones completas. También puedes hacer dibujos para ayudar a mostrar tu razonamiento.

¿Qué cantidad preferirías?	¿Por qué?
Saltamontes	
Basura	
Pantalones	
Zorrillo	
Uñas de los pies	
Máscara	
Arena caliente	
Baño	