

Math

Adding and Subtracting Like Fractions

5th Grade

State Standard(s): 5.NF.1 Use equivalent fractions as a strategy to add and subtract fractions.

Student Learning Objective(s): The student will be able to add and subtract fractions with like denominators.

- **Resources and Materials:**

- [Google Slides](#)
- [Photo 1](#)
- [Photo 2](#)
- White boards and markers
- [Fraction strips](#) (if students need help visualizing the fractions)
- [Worksheet](#)
- [Answer key](#)

- **Lesson:**

Anticipatory Set:

To grab the students' attention, I will show two funny comic strips about fractions. [Photo 1](#), [Photo 2](#)

Input:

"What is a numerator?" **the top number of a fraction.** *"What is a denominator?"* **the bottom number of a fraction.** *"What are like denominators?"* **when two fractions have the same denominator.** *"Who can tell me what else they already know about fractions?"* student answers vary.

Modeling:

I will show the scenarios on the screen from the [Google Slides](#).

1. Jerry ate $\frac{1}{5}$ of the cake. Peter ate $\frac{2}{5}$ of a cake. How much cake did they eat in all?
 - a. *"What operation are we going to use to solve this problem?"* **addition**
 - b. Remind the students that when adding like fractions, or fractions with the same denominator, you only need to add the top numbers, or numerators.
 - c. Remind the students that fractions are just parts of a whole. *"If Jerry and Peter ate parts from the same cake, how many slices was the cake cut into?"* **5**
 - d. Work this problem out on the board. *"If I take $\frac{1}{5}$ and add $\frac{2}{5}$, I get $\frac{3}{5}$. The denominators do not change because we are adding within a whole. The cake was cut into fifths."*
2. Jane has $\frac{5}{6}$ of a cake left. She gives $\frac{3}{6}$ to her brother. How much cake does Jane have now?
 - a. *"What operation are we going to use to solve this problem?"* **subtraction**
 - b. Remind the students that when subtracting like fractions, or fractions with the same denominator, you only need to subtract the top numbers, or numerators.
 - c. Remind the students that fractions are just parts of a whole. *"If Jane and her brother shared parts from the same cake, how many slices was the cake cut into?"* **6**

- d. Work this problem out on the board. *"If I take $\frac{5}{6}$ and subtract $\frac{3}{6}$, I get $\frac{2}{6}$. The denominators do not change because we are subtracting within a whole. The cake was cut into sixths."*

Check for Understanding:

"When adding or subtracting like fractions, you only need to add or subtract the ____?" **top numbers or numerators**

"Show me on your fingers how confident you feel about this concept so far. 5 fingers means you could teach this to someone else, 1 finger means you don't understand and you need more practice."

Guided Practice:

The students will now take out their whiteboards and markers and will practice a few more problems with their table groups.

With teacher guidance.

1. Caleb ate $\frac{2}{8}$ of a cake. Braydon ate $\frac{3}{8}$ of a cake. How much cake did they eat in all?
Include visual
2. Sarah eats $\frac{3}{7}$ of a brownie. Tom eats $\frac{3}{7}$ of a brownie. How much of the brownie did they eat in all?
Do not include visual
3. $\frac{7}{9} - \frac{3}{9}$
Include visual

Without teacher guidance.

4. $\frac{4}{7} + \frac{2}{7}$
Do not include visual
5. $\frac{9}{12} + \frac{2}{12}$
Do not include visual
6. $\frac{8}{14} - \frac{5}{14}$
Do not include visual
7. $\frac{5}{9} - \frac{3}{9}$
Do not include visual

Independent Practice:

The students will now complete the short [worksheet](#) on their own. [Answer key](#)

Closure:

Have the students turn in their papers to be checked to see who may still be struggling.