

Grade Level / Content Area:	Grade 3-5 / Math - Fractions
Standards:	CCSS.MATH.CONTENT.4.NF.B.3.D
Concept/Topic to Teach:	Add Fractions with a Common Denominator

I. Getting students set to learn Fractions

Introduction/Review; What is a Fraction? *A comparison of one part to the whole set of parts.* Discuss the work with fractions the class has recently done.

Anticipatory Set; Demonstrate what is the numerator and what is the denominator of a fraction. Discuss how addition of fractions with a common denominator is simply addition of the two numerators over the common denominator.

Objectives;

- The students will be able to add simple fractions with a common denominator.
- The students will be able to identify a Figure illustrating the same fraction as their answer.

II. Instruction

Input and Modeling; Go through the first example from the work sheet together. Explain the importance of listening to or reading the problem carefully before attempting to answer it. Ask the students to complete the remainder of the first worksheet page.

III. Checking for understanding

Checking Understanding; Review the student's completed first worksheet pages and explain any errors.

Guided Practice; Have the students complete the second page of the worksheet.

IV. Independent practice – Hands-On Learning

Independent Practice;

Pass out the HyPars Educational kits to the students and explain these parts will be used to continue to learn more about fractions.

- From the HyPars Educational Kit parts, have each student make one group consisting of $\frac{1}{4}$ connectors and $\frac{3}{4}$ HyPars. Ask the students to make a second group consisting of $\frac{2}{4}$ Connectors and $\frac{2}{4}$ HyPars. Ask the students to add $\frac{1}{4}$ and $\frac{2}{4}$ and create a new third group of parts illustrating the answer. Ask the students why the third group is not just putting the first two groups together.
- Have the students assemble (connect) their Connectors and HyPars into an assembly.
- Upon confirmation of each student understanding the fractions of the first assembly correctly, have the students do a second example using the fractions $\frac{1}{5}$ and $\frac{2}{5}$. Again, ask the students why the third group is not just putting the first two groups together.
- Have the students assemble (connect) their new group of Connectors and HyPars into an assembly.
- Have the students disassemble their assemblies and put the parts away back into their HyPars Educational Kits.

Add Fractions with a Common Denominator

- 1) Solve the fraction addition problem by adding the numerators and using the common denominator then,
1a) circle the Figure that has a fraction of Connectors equivalent to the answer's numerator.

$$\frac{1}{4} + \frac{2}{4} = \underline{\hspace{2cm}}$$

- 2) Solve the fraction addition problem by adding the numerators and using the common denominator then,
2a) circle the Figure that has a fraction of HyPars equivalent to the answer's numerator.

$$\frac{1}{5} + \frac{2}{5} = \underline{\hspace{2cm}}$$

- 3) Solve the fraction addition problem by adding the numerators and using the common denominator then,
3a) circle the Figure that has a fraction of black Connectors equivalent to the answer's numerator.

$$\frac{1}{6} + \frac{2}{6} = \underline{\hspace{2cm}}$$

- 4) Solve the fraction addition problem by adding the numerators and using the common denominator then,
4a) circle the Figure that has a fraction of black HyPars equivalent to the answer's numerator.

$$\frac{1}{7} + \frac{2}{7} = \underline{\hspace{2cm}}$$

Add Fractions with a Common Denominator

- 5) Solve the fraction addition problem by adding the numerators and using the common denominator then,
5a) circle the Figure that has a fraction of Connectors equivalent to the answer's numerator.

$$\frac{1}{8} + \frac{6}{8} = \underline{\hspace{2cm}}$$

- 6) Solve the fraction addition problem by adding the numerators and using the common denominator then,
6a) circle the Figure that has a fraction of HyPars equivalent to the answer's numerator.

$$\frac{1}{9} + \frac{5}{9} = \underline{\hspace{2cm}}$$

- 7) Solve the fraction addition problem by adding the numerators and using the common denominator then,
7a) circle the Figure that has a fraction of black Connectors equivalent to the answer's numerator.

$$\frac{5}{11} + \frac{3}{11} = \underline{\hspace{2cm}}$$

- 8) Solve the fraction addition problem by adding the numerators and using the common denominator then,
8a) circle the Figure that has a fraction of black HyPars equivalent to the answer's numerator.

$$\frac{1}{7} + \frac{5}{7} = \underline{\hspace{2cm}}$$