

Grade Level / Content Area:	Grade 3-5/Math - Fractions
Standards:	CCSS.MATH.CONTENT.5.NF.A.1
Concept/Topic to Teach:	Add Unlike Fractions

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 the need to reduce fractions to a common denominator (try to use the lowest common denominator) to be able to add them. Review how to reduce fractions to their lowest common denominator – needed herein.

Objectives;

- The students will be able to reduce fractions to their lowest common denominator.
- The students will be able to add unlike fractions.

II. Instruction

Input and Modeling; Go through the first example from the work sheet together. Explain the importance of listening to or reading the question 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 discuss how 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 $\frac{1}{2}$ connectors and $\frac{1}{2}$ HyPars. Ask the students to make a second group consisting of $\frac{1}{3}$ Connectors and $\frac{2}{3}$ HyPars. Ask the students to add $\frac{1}{2}$ and $\frac{1}{3}$ by reducing them to their lowest common denominator first. Ask the students to assemble a third group of parts that represent the sum $\frac{1}{2}$ and $\frac{1}{3}$. 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 $\frac{1}{2}$ and $\frac{1}{4}$.
- Have the students assemble (connect) their Connectors and HyPars into an assembly.
- Have the students disassemble their assemblies and put the parts away back into their HyPars Educational Kits.

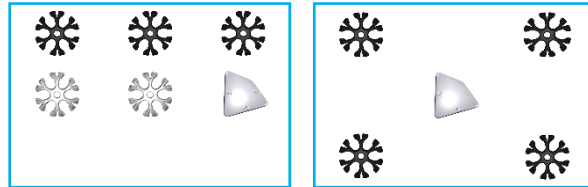
Add Unlike Fractions

- 1) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

1a) Circle the Figure that has a fraction of Connectors equivalent to the answer.

$$\frac{1}{2} + \frac{1}{3} =$$

_____ = _____
 Lowest Common Denominators Answer

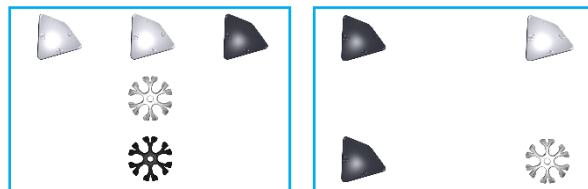


- 2) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

2a) Circle the Figure that has a fraction of HyPars equivalent to the answer.

$$\frac{1}{2} + \frac{1}{4} =$$

_____ = _____
 Lowest Common Denominator Answer



- 3) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

3a) Circle the Figure that has a fraction of HyPars equivalent to the answer.

$$\frac{1}{3} + \frac{1}{4} =$$

_____ = _____
 Lowest Common Denominator Answer



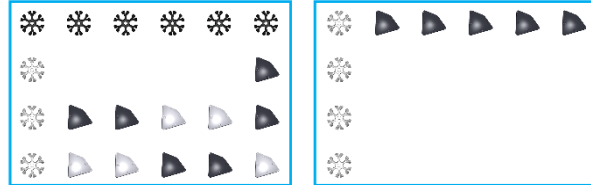
Add Unlike Fractions

- 4) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

4a) Circle the Figure that has a fraction of Connectors equivalent to the answer.

$$\frac{1}{4} + \frac{1}{5} =$$

_____ = _____
 Lowest Common Denominators Answer

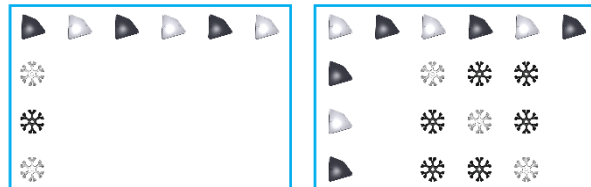


- 5) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

5a) Circle the Figure that has a fraction of HyPars equivalent to the answer.

$$\frac{1}{3} + \frac{1}{6} =$$

_____ _____
 Lowest Common Denominator Answer



- 6) Solve the fraction addition problem by reducing them to their lowest common denominators first (re-write equation on the line) then,

6a) Circle the Figure that has a fraction of black HyPars equivalent to the answer.

$$\frac{1}{4} + \frac{1}{6} =$$

_____ _____
 Lowest Common Denominator Answer

