

Grade Level / Content Area:	Grade 3-5 / Math - Fractions
Standards:	CCSS.MATH.CONTENT.3.NF.A.3.C CCSS.MATH.CONTENT.4.NF.A.1
Concept/Topic to Teach:	Fractions Equivalent to Whole Numbers

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. Explain and illustrate on the board how a fraction can equal a whole number (1 in the case of the examples in the worksheets – higher numbers during adding fractions lesson).

Objectives;

- The students will be able to recognize that all fractions with the same numerator and denominator are equal to 1.
- The students will understand when a fraction is equal to 1 by explaining a problem they've completed to the teacher.

II. Instruction

Input and Modeling; Go through the first two examples 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;

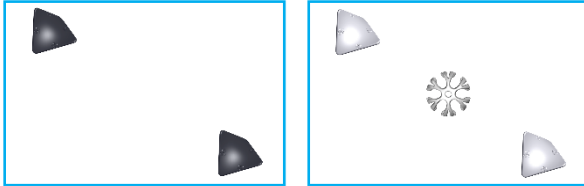
Pass out the HyPars Educational kits to the students and explain these parts will be used to begin to learn more about fractions.

- From the HyPars Educational Kit parts, have each student make one group of connectors and a second group containing a different number of HyPars – explain that the number of Connectors plus the number of HyPars (i.e. the whole set of parts) will be both the numerator and the denominator of the fractions they are about to demonstrate. Ask the students what fraction of Connectors plus HyPars are in their sets of parts.
- Have the students assemble (connect) their Connectors and HyPars into an assembly.
- Ask the students to tell what fraction of their assembly is Connectors plus HyPars (i.e. the whole set of parts – the answer will be equivalent to 1).
- Upon confirmation of each student understanding the fraction of the first assembly correctly, have the students do a second example assembly using the different number of Connectors and a different number of HyPars. Ask the students to identify what fraction of Connectors plus HyPars (i.e. the whole set of parts – the answer will be equivalent to 1) they have chosen this second time. Have the students assemble this second group of Connectors and HyPars.

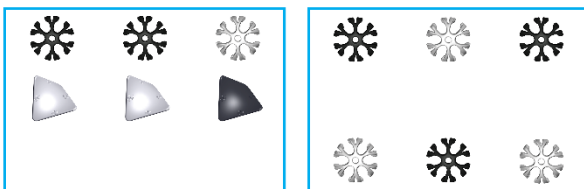
- Have the students disassemble their assemblies and put the parts away back into their HyPars Educational Kits.

Fractions Equivalent to Whole Numbers Worksheet

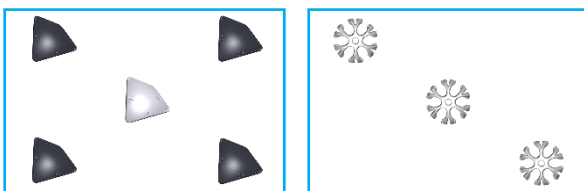
- 1) Circle the Figure which illustrates a fraction of HyPars equal to 1?
- 2) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{2}$



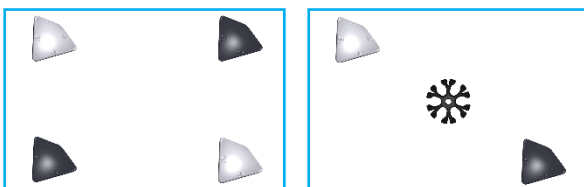
- 3) Circle the Figure which illustrates a fraction of Connectors equal to 1?
- 4) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{6}$



- 5) Which Figure illustrates a fraction of Connectors equal to 1?
- 6) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{3}$



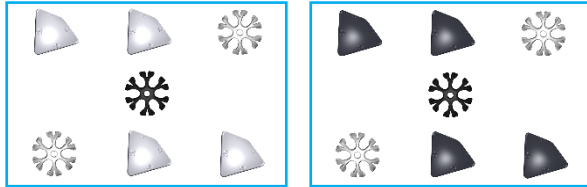
- 7) Which Figure illustrates a fraction of white plus black HyPars equal to 1?
- 8) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{4}$



Fractions Equivalent to Whole Numbers Worksheet

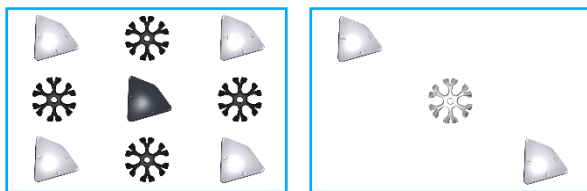
9) Circle the Figure which illustrates a fraction of black HyPars plus Connectors equal to 1?

10) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{7}$.



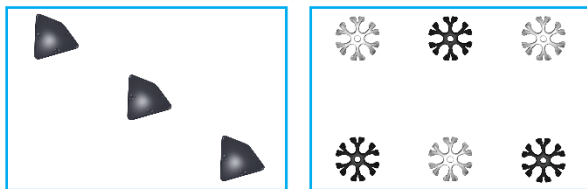
11) Circle the Figure which illustrates a fraction of HyPars plus black Connectors equal to 1?

12) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{9}$.



13) Circle the Figure which illustrates a fraction of white plus black Connectors equal to 1?

14) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{6}$.



15) Circle the Figure which illustrates a fraction of HyPars plus white Connectors equal to 1?

16) Fill in the top number for the fraction in this equation; $1 = \frac{\quad}{5}$.

