

Grade Level / Content Area:	Grade 3-5/Math - Fractions
Standards:	CCSS.MATH.CONTENT.3.NF.A.3.D
Concept/Topic to Teach:	Compare Fractions with Like Denominators

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 difference in comparing fractions with like denominators versus fractions with like numerators (the value of the fraction goes up as the numerator goes up when considering fractions with like denominators – goes down as the denominator goes up when considering like numerators).

Objectives;

- The students will be able to identify which fraction (with the same denominator) is larger.
- The students will be able to order fractions with like denominators from smallest to largest and largest to smallest.
- Students will understand what smaller and larger numerators do to the value of a fraction with the same denominator 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

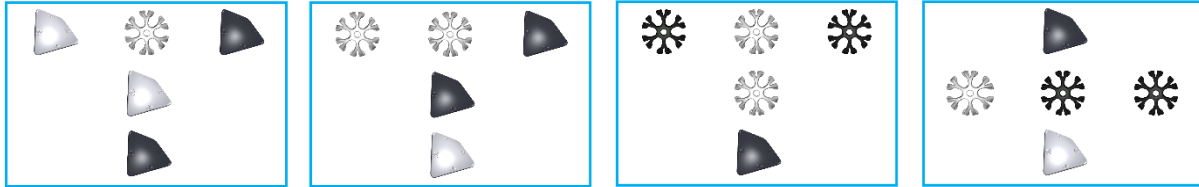
Independent Practice;

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

- From the HyPars Educational Kit parts, have each student make one group of connectors and a second group containing HyPars – explain that the number of HyPars will be the denominators of the fractions they are about to demonstrate. Ask the students what fraction of Connectors are in their groups of parts (the HyPars represent the denominators of the fractions they are about to demonstrate).
- Have the students assemble (connect) their Connectors and HyPars into an assembly.
- Ask the students to tell what fraction of their assembly is Connectors.
- Upon confirmation of each student understanding the fractions of the first assembly correctly, have the students do a second example assembly using the same number of Connectors and a different number of HyPars (we're comparing fractions with like numerators). Have the students assemble this second group of Connectors and HyPars.
- Ask the students which of their two assemblies has the larger fraction of Connectors.
- Ask the students to disassemble their assemblies and return them to the HyPars Educational Kits.

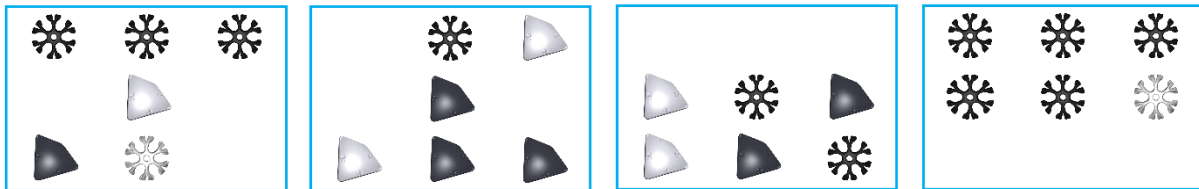
Compare Fractions with Like Denominators Worksheet

1. Write the fraction of Connectors below each Figure, then order them from smallest (#1) to largest (#4) by writing 1 through 4 on the dashed lines below the Figures.



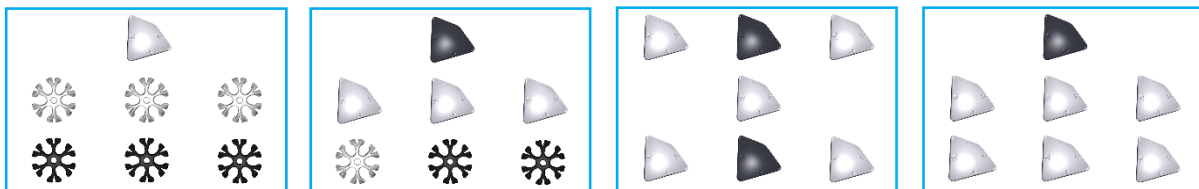
1a) ____ 1e) ____ 1b) ____ 1f) ____ 1c) ____ 1g) ____ 1d) ____ 1h) ____

2. Write the fraction of black Connectors below each Figure, then order them from smallest (#1) to largest (#4) by writing 1 through 4 on the dashed lines below the Figures.



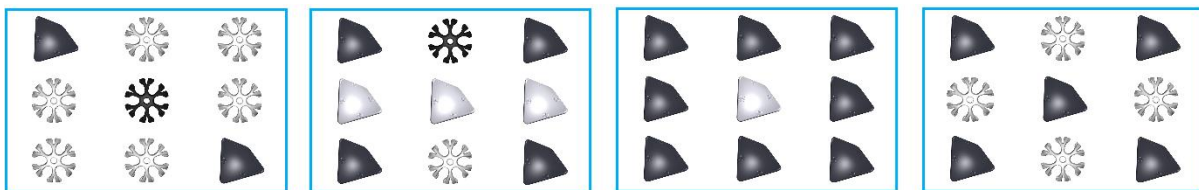
2a) ____ 2e) ____ 2b) ____ 2f) ____ 2c) ____ 2g) ____ 2d) ____ 2h) ____

3. Write the fraction of white HyPars below each Figure, then order them from largest (#1) to smallest (#4) by writing 1 through 4 on the dashed lines below the Figures.



3a) ____ 3e) ____ 3b) ____ 3f) ____ 3c) ____ 3g) ____ 3d) ____ 3h) ____

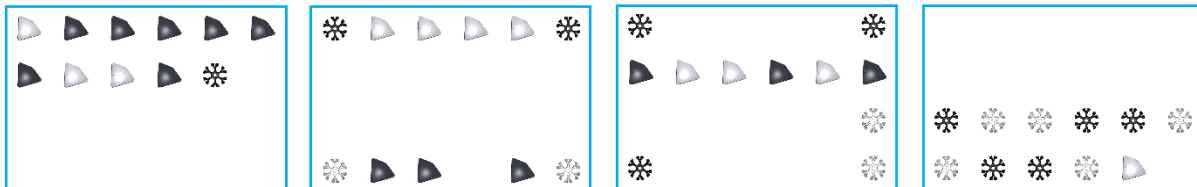
4. Write the fraction of black HyPars below each Figure, then order them from largest (#1) to smallest (#4) by writing 1 through 4 on the dashed lines below the Figures.



4a) ____ 4e) ____ 4b) ____ 4f) ____ 4c) ____ 4g) ____ 4d) ____ 4h) ____

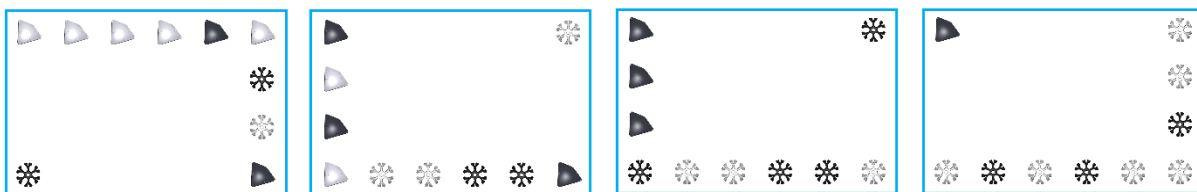
Compare Fractions with Like Denominators Worksheet

5. Write the fraction of Connectors below each Figure, then order them from smallest (#1) to largest (#4) by writing 1 through 4 on the dashed lines below the Figures.



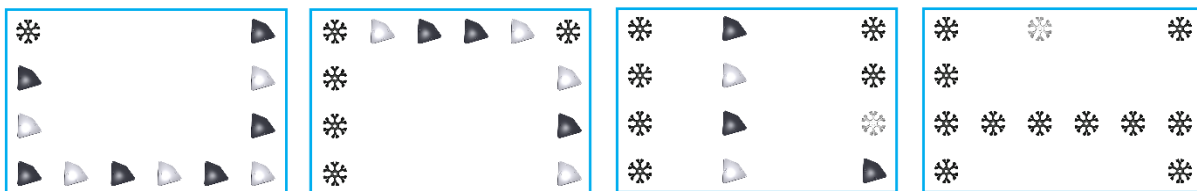
5a) _____ 5e) _____ 5b) _____ 5f) _____ 5c) _____ 5g) _____ 5d) _____ 5h) _____

6. Write the fraction of HyPars below each Figure, then order them from smallest (#1) to largest (#4) by writing 1 through 4 on the dashed lines below the Figures.



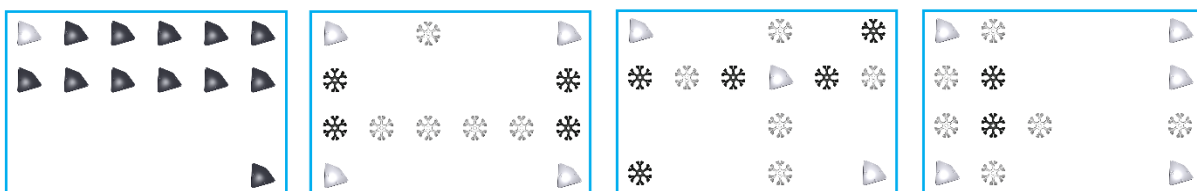
6a) _____ 6e) _____ 6b) _____ 6f) _____ 6c) _____ 6g) _____ 6d) _____ 6h) _____

7. Write the fraction of black Connectors below each Figure, then order them from largest (#1) to smallest (#4) by writing 1 through 4 on the dashed lines below the Figures.



7a) _____ 7e) _____ 7b) _____ 7f) _____ 7c) _____ 7g) _____ 7d) _____ 7h) _____

8. Write the fraction of white HyPars below each Figure, then order them from largest (#1) to smallest (#4) by writing 1 through 4 on the dashed lines below the Figures.



8a) _____ 8e) _____ 8b) _____ 8f) _____ 8c) _____ 8g) _____ 8d) _____ 8h) _____