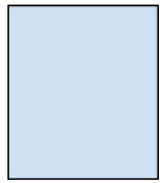
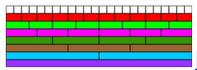
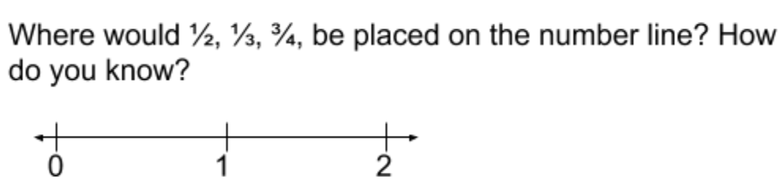
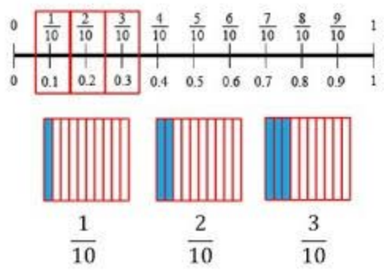
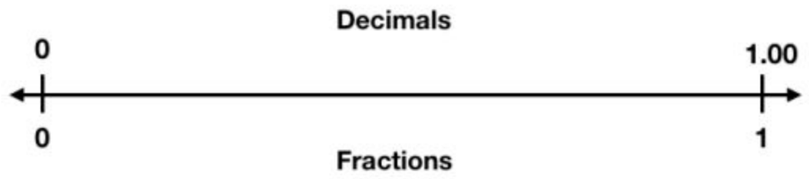
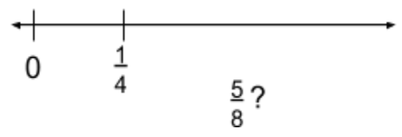
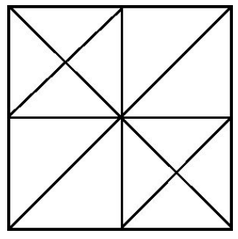
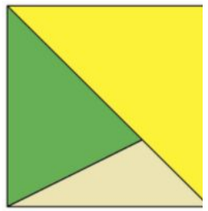
Number Sense B 5+ (fractions) INA Support Document

Content Covered: Fraction Concepts

These skills are foundational skills for students to develop as flexible thinkers. Students must be able to understand the value of number and how to decompose it to form flexible strategies to improve computational fluency.
Many of the questions in the fraction portion of the INA overlap into all areas of fraction concepts.

Concepts	**Questions**	**Instructional Strategies to help build students foundational skills**	**Task Examples- The tasks are listed in one content area but they cover all or most of the fraction concepts.**
Two equivalent fractions are two ways to represent the same amount (if they have the same size of whole)	1, 2, 10 Collaborative Task	**Number of the day- Representing a fraction in many ways** Have the students use manipulatives to represent the fraction that you present as the number in as many ways as possible. Make sure that they are always referencing the whole. One the students have represented have them make visual connections to the abstract values in their math journals or notebooks. This could also be done on whiteboards. **Number talk:** Number Talk Examples and Overview **and** Sherry Parrish Descriptive Video of Number Talks. Can you shade ____ part of the whole? How many different ways can you make ____? 	**Fraction Match-** Match different representations of fractions to each other.  Fraction Wall- Using the image above, how many different ways can you find of writing ½?
Comparing and ordering of fractions and decimals	4, 5, 6, 9, 12 Performance task 1	**Number Talk** Using the fraction Subitizing cards lead number talks with cards similar to the card below.  **Clothesline Math** Use the following cards to explore the value of decimals and fractions **https://drive.google.com/file/d/1BAxYQP5O1mAN4Y9yQJHA5MWI3AEnpIdF/view?usp=sharing** **Choral Counting - Choral counting explanation and examples** Counting in unit fractions. • Choose the benchmark fractions to count in. • Choose different numbers to start from instead of zero each time. • Ensure that when students are counting that it is tied to a visual.	**Spiralling Decimals-** Ordering decimals using a non-linear model. **Des-Farms -**

		 **Number Talk** Given value of the decimal and the fraction place them on the number line. Explain your thinking. Think of another decimal and fraction and where you would put them on the number line. Ex. ¼ and 0.35  	
Estimating fractions with benchmarks	7, 11	**Number Talks** Where should ____ be placed on the? How do you know?  	
Equal partitioning		**Student Focus:** ● When naming fractions they must have the correct amount of **<u>equal</u>** parts ● Equal parts do NOT have to look the same, they just need the same area. ● When looking at and comparing parts of a whole, the size of the whole must be the same size. **Number Talk (Fraction Talks)** - Fraction Talks Summary  **Question examples:** (Find questions in the summary.) What fractions can be shaded? What are the different ways to shade ⅛? What are the different ways to represent those fractions?	**Fair Feast** - Here is a picnic that Petros and Michael are going to share equally. Can you tell us what each of them will have? **Chocolate** - *"If the chocolate on the table I sit at is to be shared out equally when I sit down, which would be the best table to sit at?"* **Fractional Triangles-** Given the square that is divided up into triangle how can you make quarters? Halves? **Byrony's Triangle** - After folding a sheet a paper, what fraction of the original square of paper is the shaded triangle? **Cupcake Task-** How will you share the cupcakes? Peter Liljedahl **3 Act Task -** Cheese and Crackers 3 Act Math tip sheet

		 **Question examples:** (Find questions in the summary.) What part of the fraction is a half? Could you draw a line to make a quarter? Click for more images **Number Talk** Compare 0.4 and 6/10. What are the different ways the values can be represented?	**3 Act Task-** Cover It Up