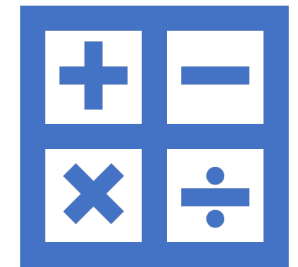


Dynamic Numeracy Stations:

Fraction, Decimal, Percent



Nadine Keyworth
@mrskeyworth
nkeyworth@sd35.bc.ca

Katherine Mulski
kmulski@sd35.bc.ca



How we set up Rotations

Use as a post-assessment in Grades 4/5/

Use as a pre-assessment in Grades 6/7/8 – what do they know, what areas do they need review on.

Station 1 / Anchor Activity
Riddles available from Ted.com

I Can Discuss Mathematical Concepts or
Reason with others Cooperatively

I Can use reasoning and logic to explore,
analyze and apply mathematical ideas.

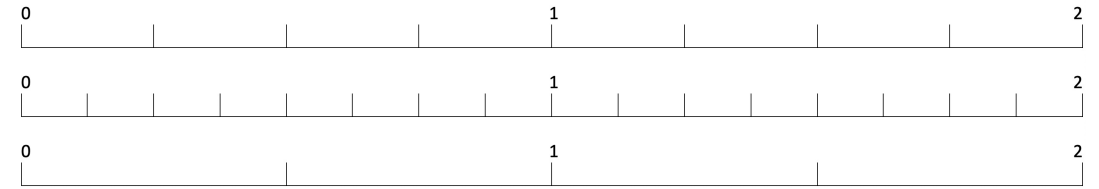
Station 2

I can Order and Compare Fractions and Decimals 0 to 2

I Can Represent Mathematical ideas in concrete and symbolic forms

- Number line is divided into sections, three possible options this can be changed based on the grade or ability.
- Ordering as a group on the number line (all concrete) – take a picture on group iPad for accountability
- Complete ordering hand out (these can be laminated and then have a picture taken of them as well)
- Early Finishers: Create their own compare problems; Play math game

$1\frac{1}{2}$	1.22	$1\frac{5}{9}$	1.80	1.99	$1\frac{1}{5}$	$1\frac{3}{6}$	$1\frac{3}{8}$	1.70	$1\frac{7}{8}$
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Cut and enlarge the number lines; then laminate

Comparing and Ordering Decimals and Fractions

Part 1: Order the Fractions and Decimals on the number line.

Part 2: Fill in the blanks with the correct comparison symbol: $<$, $>$ or $=$

$$\frac{1}{2} \text{ ___ } \frac{1}{4}$$

$$\frac{1}{3} \text{ ___ } \frac{1}{10}$$

$$\frac{2}{5} \text{ ___ } \frac{1}{4}$$

$$\frac{1}{3} \text{ ___ } \frac{3}{10}$$

$$0.5 \text{ ___ } 0.6$$

$$0.22 \text{ ___ } 0.23$$

$$0.99 \text{ ___ } 0.95$$

$$0.6 \text{ ___ } 0.75$$

Station 3 – They Said / We Said Cards

Adding / Subtracting / Multiplying / Dividing Decimals

Bennett and his dog, Penny, spend the day at the dog spa. Penny gets her nails trimmed for \$12.99, shampoo and conditioner treatment for \$34.96, and blowdry for \$3.99.

Nora says that Bennett spent \$51.49 at the spa, before taxes and tip.

Lea says that Bennett spent \$51.94 at the spa, before taxes and tip.

Nora spent \$65.05 on dog food in one week. Poe spent \$104.56 on dog food in one week.

Pit says that they spent a total of \$168.61 on dog food in one week.

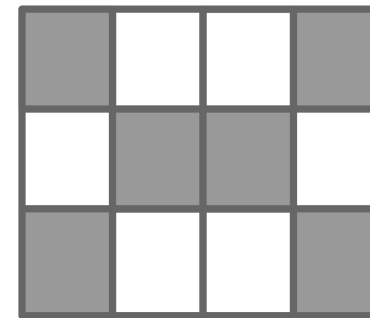
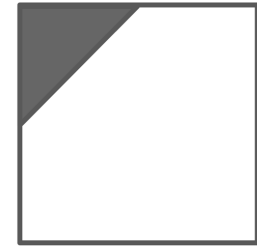
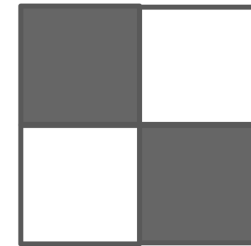
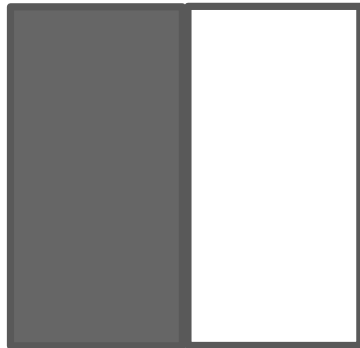
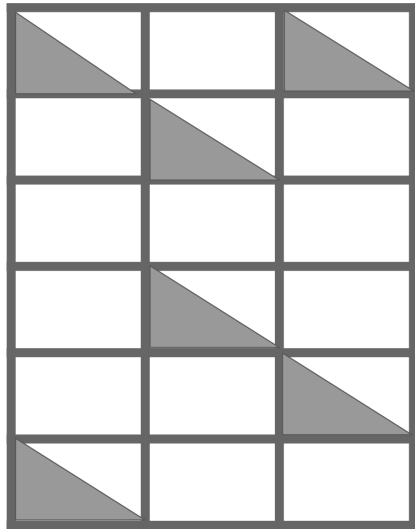
Zero says that they spent a total of \$169.61 on dog food in one week.

Station 3 –
They Said /
We Said Cards
I Can Add,
Subtract,
Multiply and
Divide
Decimals

- They / He / She / We Cards with Recording sheet where students show work and thinking
- 10 Adding / Subtracting ; 5 Multiplying / Dividing
- Self-Correcting Key
- Early Finishers: Math Game

Station 4

Fraction Sort – I can sort fractions models and understand their values



Fraction Sort

I can visualize to
explore
mathematical
concepts

I can communicate
my mathematical
thinking

Sort the Models: Which one represents $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{6}$, none

Take a picture of each when completed

Assessment Activity:

Each student picks two models from the sort under each

Answers the question How do I know that this represents ____?
Understanding that a fraction is divided into equal, not necessarily congruent parts. Checking your class for common misunderstanding.

Follow up activity – Can you see _____ of the whole?



Station 5 – Money, Money, Money
Making change up to \$1000
I can make change up to \$1000

Money Task Cards – 30 in total in
variety of difficulty

Recording Sheet where work/
thinking is shown

Self-correcting Key for all
problems available

#23

Benny raises \$700 for the Terry Fox Foundation. He shares 50% of his raised money to his school team for sponsorship. How much does his team receive?

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Math Games – Two Suggestions

Decimal Place Value – We have uploaded instructions and scoresheets that you could laminate.

Fraction War – Students take turns playing "war" using a deck of cards and a pencil to act as the fraction line (or provided printable fraction cards).

The pair of students must then decide who has the larger fraction based on the four cards played. The winner gets to keep all the cards. Player with most cards at end wins.

Goal: to develop quick comparison of fraction values

Summative / Formative Assessment Ideas:

Use I Can Statements

Use Proficiency Scales Throughout

Name: _____

Date: _____

Knowledge Check-in: Ratios

1. I can write two-term ratios in three ways.

*	*	*	*	*
*	#	#	#	#
#	@	♥	♥	♥
♥	♦	♦	♦	♦

Write the ratio of ♥'s to *'s three ways: _____

Write the ratio of ♥'s to all symbols three ways: _____

I need more practice: _____

2. I can write three-term ratios in two ways.

*	*	*	*	*
*	#	#	#	#
#	@	♥	♥	♥
♥	♦	♦	♦	♦

Write the ratio of ♥'s to *'s to ♦'s two ways: _____

Write the ratio of ♥'s to #'s to all symbols two ways: _____

I need more practice: _____

3. I can write two-term and three-term ratios in lowest terms.

*	*	*	*	*
*	#	#	#	#
#	@	♥	♥	♥
♥	♦	♦	♦	♦

Write the ratio of ♥'s ♦'s in lowest terms: _____

Write the ratio of ♥'s to all symbols in lowest terms: _____

I need more practice: _____

Name: _____

Date: _____

Ratios & Rates Expression of Knowledge

Part A: I can write two-term and three-term ratios using ratio notation.

🦋	🦋	🦋	🕷️	🕷️
🐝	🐝	🐝	🐝	🐝
🐝	🐝	🐝	🐝	🐝

- Write the ratio of butterflies to ladybugs. _____
- Write the ratio of butterflies to bees to ladybugs. _____
- Write the ratio of spiders to all insects. _____
- Write the ratio of bees, to butterflies to all insects. _____

Teacher Assessment: _____ Emerging _____ Developing _____ Proficient _____

Part B: I can write two-term and three-term ratios in lowest terms.

🍌	🍌	🍏	🍏
🍌	🍌	🍏	🍏
🍓	🍓	🍏	🍏
🍓	🍓	🍏	🍏

Write each of the ratios in lowest terms:

- Apples to pineapples: _____
- Strawberries to all fruit: _____
- Apples to bananas to pineapples: _____
- Bananas to strawberries to all fruit: _____

Teacher Assessment: _____ Emerging _____ Developing _____ Proficient _____

Part C: I can use equivalent ratios to solve word problems. (Show all your work)

- The ratio of berries to oranges is 10:1. If there are 25 oranges, how many berries are there?
- Ashley is baking chocolate chip cookies for a bake sale. For every 3 cups of flour, she needs 2 cups of sugar. How many cups of sugar will she need if she has measured out 18 cups of flour?
- David makes 5 cups of punch by mixing 3 cups of cranberry juice with 2 cups of apple juice. How much cranberry juice and how much apple juice does David need to make 20 cups of punch?

Teacher Assessment: _____ Emerging _____

Developing _____

Proficient _____

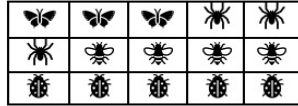
Extending _____

Name: _____

Date: _____

Ratios & Rates Expression of Knowledge

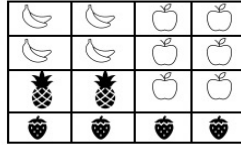
Part A: I can write two-term and three-term ratios using ratio notation.



1. Write the ratio of butterflies to ladybugs. _____
2. Write the ratio of butterflies to bees to ladybugs. _____
3. Write the ratio of spiders to all insects. _____
4. Write the ratio of bees, to butterflies to all insects. _____

Teacher Assessment: *Emerging* *Developing* *Proficient*

Part B: I can write two-term and three-term ratios in lowest terms.



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Teacher Assessment: *Emerging*

Developing

Proficient

Extending