

NOT SO WIMPY

UNIT 5:
COMPARING
FRACTIONS

4th GRADE
MATH CURRICULUM

15 DAYS OF COMPARING
FRACTIONS MATH LESSON PLANS,
POWERPOINTS, ACTIVITIES,
AND ASSESSMENT





UNIT 5: COMPARING FRACTIONS *at a glance*

Day 1 Decomposing Fractions	Day 2 Equivalent Fractions with Tape Diagrams	Day 3 Equivalent Fractions with Area Models	Day 4 Equivalent Fractions with Area Models and Multiplication	Day 5 Equivalent Fraction with Area Models and Division
Day 6 Using Benchmarks to Compare Fractions	Day 7 Using Benchmarks to Compare Fractions	Day 8 Finding Common Units to Compare Fractions	Day 9 Finding Common Denominators to Compare Fractions	Day 10 Finding Common Denominators to Compare Fractions
Day 11 Ordering Fractions	Day 12 Ordering Fractions	Day 13 Word Problems	Day 14 Review	Day 15 Assessment

UNIT COVERS THE FOLLOWING COMMON CORE MATH STANDARDS: 4.NF.1, 4.NF.2

es:

INCLUDES A PACING GUIDE TO SEE
YOUR ENTIRE WEEK AT A GLANCE

5.11 ORDERING FRACTIONS

I CAN STATEMENT

I can order fractions using comparison strategies.

MATERIALS

5.11 PowerPoint
5.11 printouts
multiplication chart

VOCABULARY

Fraction
numerator
denominator

MINI LESSON

Lesson completing the fact fluency slides.

Questions with students on ordering fractions.

Vocabulary terms: fraction

1/2, 2/4ths, and 1/4th.

Encourage students to use a multiplication chart of 4 and 5.

When all students are in order, have them order fractions.

How can you compare fractions with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

with

NOT SO WIMPY TEACHER

5.10 COMMON DENOMINATORS

I CAN STATEMENT

I can find common denominators to compare fractions.

MATERIALS

5.10 PowerPoint
5.10 printouts

VOCABULARY

Fraction
numerator
denominator

MINI LESSON

Spend the first five minutes of the lesson completing the fact fluency slides. Students will use basic multiplication facts to multiply larger numbers. Using the PPT, complete the warm-up questions with students. These questions are a review of comparing fractions with common units.

Using the PPT, review the following vocabulary terms: fraction, numerator, and denominator. Review how to use multiplication to find a common denominator for 3 fourths and 2 thirds. Allow the students to turn and talk to find a common multiple between three and four.

Multiply each fraction to get a denominator of 12. Then, compare the fractions. Continue using the PPT to model the skill.

INTERVENTION

For students that struggle finding a common multiple, show them that you can always find a common multiple by multiplying each denominator by the other denominator.

EXTENSION

Challenge students to complete the Level Up sheet to allow an opportunity to solve more rigorous problems involving division.

WRAP UP

Allow students time to complete the exit ticket. After everyone is finished, grade the exit ticket together and allow time for student feedback.

NOT SO WIMPY TEACHER

5.6 USING BENCHMARKS

I CAN STATEMENT

I can compare fractions using benchmarks.

MATERIALS

5.6 PowerPoint
5.6 printouts
fraction strips

VOCABULARY

Fraction
numerator
denominator
benchmark

MINI LESSON

Spend the first five minutes of the lesson completing the fact fluency slides. Students will brainstorm as many equations as they can that are equal to 36. Using the PPT, complete the warm-up question with students. This question is a review of equivalent fractions. Using the PPT, review the following vocabulary terms: fraction, numerator, and denominator. Introduce students to the term "benchmark." Tell them that today we will focus on using benchmarks to compare fractions.

Model how to use 1/2 as a benchmark to compare 1/4 and 2/3. Plot a point on the number line before 1/2 to mark one fourth. Plot a point after 1/2 on the number line to mark 2 thirds. Have students compare the position of each point on the number line in order to compare the fractions. Continue modeling the skill using the PPT.

INTERVENTION

Have students use the 1/2 fraction strip as the benchmark to compare against the other fractions.

EXTENSION

Ask students which other fractions are easy for them to visualize to use as benchmarks. Have them compare fractions using other benchmarks.

WRAP UP

Allow students time to complete the exit ticket. After everyone is finished, grade the exit ticket together and allow time for student feedback.

NOT SO WIMPY TEACHER

INCLUDES WHOLE GROUP LESSON PLANS!



5.3 MEET THE TEACHER

MATERIALS FOR TEACHER: journal pages for teacher and students, scissors, pencil

MATERIALS FOR STUDENTS: journals, scissors, glue, pencils

APPROACHING
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Complete the first problem with the students. Have students walk you through how to solve the problem. Have students solve the remaining problem on their own. Have students check together.

ON TRACK
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Model how to solve the first problem with the students. Have students work in pairs to solve the remaining problems. Pairs sit quietly until everyone is finished. Check each other's answers as a group.

MASTERED
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Have students complete the sheet on their own. Then, have partner students up to check their answers. Have them correct any mistakes with their partners.

NOTES:

NOT SO WIMPY TEACHER

5.5 MEET THE TEACHER

MATERIALS FOR TEACHER: journal pages for teacher and students, scissors, glue, pencil

MATERIALS FOR STUDENTS: journals, scissors, glue, pencils

APPROACHING
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Complete the first problem with the students. Have students walk you through how to solve the problem. Have students solve the remaining problem on their own. Have students check together.

ON TRACK
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Model how to solve the first problem with the students. Have students work in pairs to solve the remaining problems. Pairs sit quietly until everyone is finished. Check each other's answers as a group.

MASTERED
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Have students complete the sheet on their own. Then, have partner students up to check their answers. Have them correct any mistakes with their partners.

NOTES:

NOT SO WIMPY TEACHER

5.11 MEET THE TEACHER

MATERIALS FOR TEACHER: journal pages for teacher and students, scissors, glue, pencil

MATERIALS FOR STUDENTS: journals, scissors, glue, pencils

APPROACHING
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Complete the first problem with the students. Have students walk you through how to solve the problem. Have students solve the remaining problem on their own. Have students check together.

ON TRACK
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Model how to solve the first problem with the students. Have students work in pairs to solve the remaining problems. Pairs sit quietly until everyone is finished. Check each other's answers as a group.

MASTERED
Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.
Have students complete the sheet on their own. Then, have partner students up to check their answers. Have them correct any mistakes with their partners.

NOTES:

NOT SO WIMPY TEACHER

INCLUDES SMALL GROUP/ MEET WITH TEACHER LESSON PLANS

Name: _____

Unit 5 Lesson 6 Problem Set

Directions: Use the benchmark $\frac{1}{2}$ to compare the fractions using $>$, $<$, or $=$.

1. $\frac{3}{4}$ ○ $\frac{6}{8}$

Name: _____

Unit 5 Lesson 6 Homework

Directions: Use the benchmark $\frac{1}{2}$ to compare the fractions using $>$, $<$, or $=$.

1. $\frac{3}{4}$ > $\frac{1}{2}$

Name: _____

Unit 5 Lesson 9 Problem Set

Directions: Compare the fractions using $>$, $<$, or $=$.

1. $\frac{5}{9}$ ○ $\frac{7}{9}$

2. $\frac{9}{4}$ ○ $\frac{7}{4}$

Directions: Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

3. $\frac{2}{3}$ ○ $\frac{6}{9}$

4. $\frac{5}{7}$ ○ $\frac{2}{6}$

5. $\frac{6}{9}$ ○ $\frac{8}{10}$

6. $\frac{4}{6}$ ○ $\frac{3}{9}$

Name: _____

Unit 5 Lesson 6 Exit Ticket

Directions: Use the benchmark $\frac{1}{2}$ to compare the fractions using $>$, $<$, or $=$.

1. $\frac{5}{8}$ ○ $\frac{3}{5}$

Name: _____

Unit 5 Lesson 9 Exit Ticket

Directions: Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

1. $\frac{5}{8}$ ○ $\frac{3}{5}$

Name: _____

Unit 5 Lesson 10 Exit Ticket

Directions: Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

1. $\frac{8}{9}$ ○ $\frac{10}{12}$

Name: _____

Unit 5 Lesson 9 Homework

Directions: Compare the fractions using $>$, $<$, or $=$.

2. $\frac{4}{3}$ ○ $\frac{2}{3}$

4. $\frac{3}{2}$ ○ $\frac{8}{2}$

Directions: Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

$\frac{3}{10} \times 2 = \frac{6}{20}$

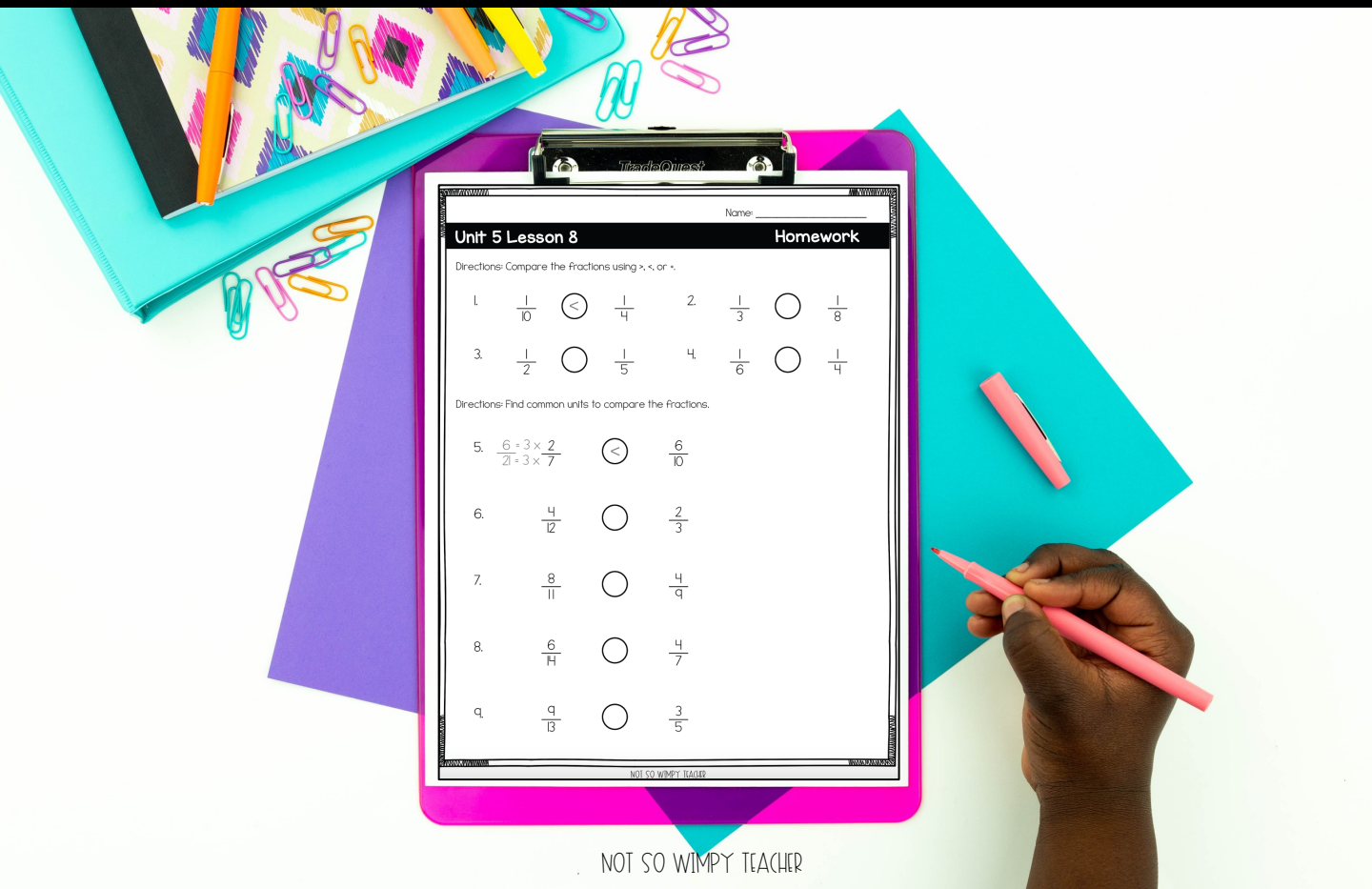
$\frac{8}{10} \times 2 = \frac{16}{20}$

$\frac{8}{10}$

$\frac{4}{7}$

$\frac{6}{7}$

INCLUDES PROBLEM SETS, HOMEWORK, AND EXIT TICKETS FOR EACH DAY



5.6 Using Benchmarks

I can compare fractions

Fact Fluency

QUICK THINK!

Write as many equations as you can that add up to the number below.

Warm Up

Write two fractions equivalent to $\frac{3}{6}$ below.

$$\frac{3}{6}$$

Using Benchmarks

Vocabulary:

When we **compare** fractions, we are deciding which fraction is **less**, or if they are **equal**!

Using Benchmarks

1 fourth is less than 2 thirds.

$$\frac{1}{4} < \frac{2}{3}$$



Centers

	MON.	TUES.	WED.	THURS.
GROUP 1	Meet the Teacher	Independent	Meet the Teacher	Independent
	Technology	Math Facts	Technology	Math Facts
GROUP 2	Independent	Meet the Teacher	Independent	Meet the Teacher
	Technology	Math Facts	Technology	Technology
	Math Facts	Technology	Math Facts	Math Facts
	Independent	Meet the Teacher	Independent	Independent
	Technology	Math Facts	Technology	Technology
	Meet the Teacher	Independent	Meet the Teacher	Meet the Teacher

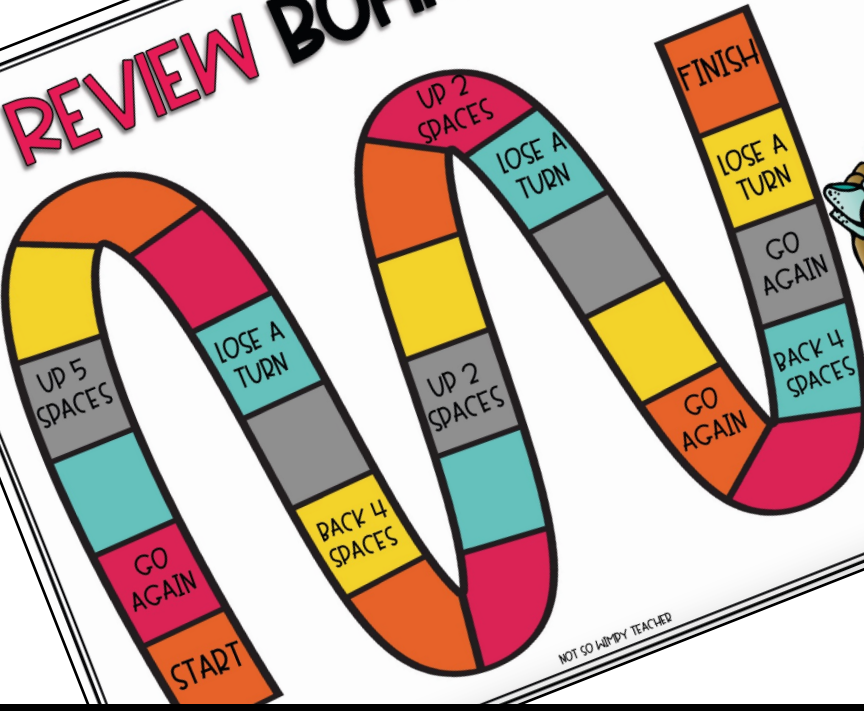
Exit Ticket

Directions: Use the benchmark $\frac{1}{2}$ to compare the fractions using $>$, $<$, or $=$.

1. $\frac{6}{9}$ \bigcirc $\frac{3}{9}$

INCLUDES DAILY POWERPOINTS FOR TEACHING MATH SKILLS.

REVIEW BOARD GAME



CARD 5:
Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

$$\frac{4}{7} \bigcirc \frac{3}{4}$$

CARD 12:
Use area models and division to generate equivalent fractions.

$$\frac{6 \div 2}{12 \div 2} = \frac{\square}{\square}$$

CARD 20:
A fourth-grade class entered a walk-a-thon. On Monday, they walked $\frac{2}{3}$ of a mile. On Wednesday, they walked $\frac{1}{8}$ of a mile. On Friday, they walked $\frac{2}{4}$ of a mile. Put them in order in which they walked.

games and task cards are INCLUDED FOR END OF UNIT REVIEW

COMPARING FRACTIONS TASK CARDS

COMPARING FRACTIONS

Name: _____

Directions: Read each card and record your answer in the box.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.

Use a tape diagram to decompose the fractions as the sum of unit fractions.

1

Compare the fractions using $>$, $<$, or $=$ by finding a common denominator.

$$\frac{4}{7} \bigcirc \frac{3}{4}$$

5

Summer and her two friends each ordered a pizza. Summer ate $\frac{1}{3}$ of her pizza. Mason ate $\frac{3}{5}$ of his pizza and Pam ate $\frac{4}{6}$ of her pizza. Who ate the most pizza?

11

Use area models and division to generate equivalent fractions.

$$\frac{9 \div 3}{12 \div 3} = \frac{\square}{\square}$$

21



Unit 5

Directions: Identify the represented fraction. Write the fraction in the blank.

1. 2. _____

Directions: Write the fraction that is represented by the shaded area using >, <, or =.

4. _____

5. _____

Unit 5 Name: _____

Directions: Use a tape diagram to decompose the fractions as the tape diagram shows. Write the addition sentence that represents the decomposed fraction.

1. $\frac{7}{8}$ 2. $\frac{5}{3}$

Unit 5 Assessment Name: _____

Directions: Compare the fractions using >, <, or =.

17. $\frac{7}{2}$ ○ $\frac{7}{12}$ 18. $\frac{6}{14}$ ○ $\frac{6}{7}$

Directions: Find common units to compare the fractions.

19. $\frac{4}{12}$ ○ $\frac{2}{3}$

20. $\frac{6}{9}$ ○ $\frac{4}{7}$

Unit 5 Pre-assessment

Directions: Identify the represented fraction. Write the fraction in the blank.

1. $\frac{3}{7}$ 2. $\frac{5}{8}$

Directions: Write the fraction that is represented by the shaded area using >, <, or =.

4. $\frac{1}{3}$ >

5. $\frac{1}{6}$ <

6. $\frac{3}{7}$ <

Directions: Compare each set of fractions using >, <, or =.

7. $\frac{4}{8}$ > $\frac{2}{8}$ 8. $\frac{3}{6}$

9. $\frac{7}{12}$ < $\frac{7}{9}$ 10. $\frac{9}{3}$

Skill	Decomposing Fractions	Equivalent Fractions	Comparing Fractions with Benchmarks	Comparing Fractions with Like Numerators	Finding Common Units to Compare	Finding a Common Denominator to Compare	Ordering Fractions	Word Problems	
Student	1-2	3-10	11-14	15-18	19-21	22-24	25-26	27-28	TOTAL
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28
	___/2	___/8	___/4	___/4	___/3	___/3	___/2	___/2	___/28

Assessment Answer Key Name: _____

Directions: Compare the fractions using >, <, or =.

18. $\frac{6}{14}$ < $\frac{6}{7}$

Directions: Find common units to compare the fractions.

19. $\frac{4}{12} = \frac{4 \div 4}{12 \div 4} = \frac{1}{3}$

20. $\frac{6}{9} = \frac{6 \div 3}{9 \div 3} = \frac{2}{3}$

21. $\frac{4}{7} = \frac{4 \times 2}{7 \times 2} = \frac{8}{14}$

Directions: Use area models to generate equivalent fractions.

5. $\frac{4}{2} = \frac{8}{4}$ $\frac{8}{4}$

6. $\frac{9}{5} = \frac{18}{10}$ $\frac{18}{10}$

Directions: Compare the fractions using >, <, or = by finding a common denominator.

22. $\frac{5}{8}$ < $\frac{3 \times 2}{4 \times 2} = \frac{6}{8}$

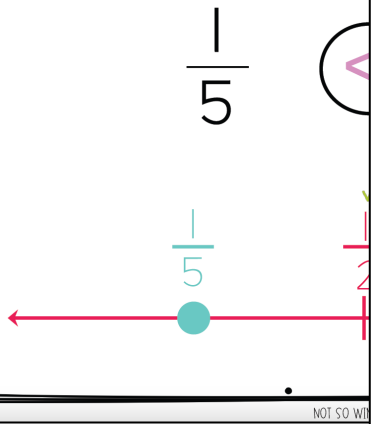
23. $\frac{35}{42} = \frac{7 \times 5}{7 \times 6} = \frac{5}{6}$ > $\frac{4 \times 6}{7 \times 6} = \frac{24}{42}$

24. $\frac{28}{35} = \frac{7 \times 4}{7 \times 5} = \frac{4}{5}$ > $\frac{3 \times 5}{7 \times 5} = \frac{15}{35}$

INCLUDES PRE- AND POST-ASSESSMENTS, ANSWER KEYS AND A RUBRIC FOR TRACKING STUDENT PROGRESS

USING BENCHMARKS

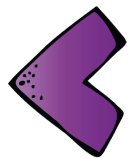
We use benchmarks to compare fractions.



COMPARING FRACTIONS

Comparing fractions is determining if fractions are greater than, less than, or equal to each other.

$$\frac{1}{4} < \frac{2}{3}$$

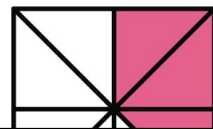


NOT SO WIMPY TEACHER

FOR USE WITH LESSONS 5.6-5.6

VOCABULARY CARDS AND ANCHOR CHARTS
FOR TEACHER AND STUDENTS TO
REFERENCE THROUGHOUT THE UNIT

FRACTION



DECOMPOSE

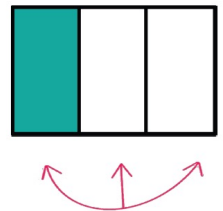
to break down into parts

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

DENOMINATOR

the number of parts in all

$$\frac{1}{3}$$



NOT SO WIMPY TEACHER

NOT SO WIMPY TEACHER

Unit 5 Lesson 11

Directions: Order each set of fractions from least to greatest by finding a common denominator.

- $\frac{3}{10}$ and $\frac{2}{5}$
 Answer: _____, _____
- $\frac{2}{4}$ and $\frac{5}{9}$
 Answer: _____, _____
- $\frac{2}{8}$ and $\frac{4}{6}$
 Answer: _____, _____
- $\frac{8}{9}$ and $\frac{3}{5}$
 Answer: _____, _____

5.12 ORDERING FRACTIONS

I CAN STATEMENT

I can order fractions using comparison strategies.

MATERIALS

5.12 PowerPoint
5.12 printouts
multiplication chart

VOCABULARY

fraction
numerator
denominator

MINI LESSON

Spend the first five minutes of the lesson completing the fact fluency slides. Students will use 3×9 to solve 4×9 .

Using the PPT, complete the warm-up question with students. This question is a review of comparing fractions.

Using the PPT, review the following vocabulary terms: fraction, numerator, and denominator.

Model how to order 9 sixths, 7 ninths, and 4 thirds from least to greatest by finding a common denominator. Encourage students to discuss what number is a common denominator of 3, 6, and 9.

Model how to multiply each fraction to have a common denominator. Then, model how to order the fractions from least to greatest.

INTERVENTION

Allow students to reference a multiplication table to easily find a common denominator.

EXTENSION

Does our strategy change when we order fractions from greatest to least?

WRAP UP

Complete the exit ticket. After everyone is finished.

Name: _____

Homework

Use the word problem solving strategy.

For a berry pie. The recipe calls for more blackberries. He is using 3 fourths of a cup of blackberries. How much more of a cup could he use for the pie?

Francis could use 1 third of a cup of blackberries in the pie.

For a party. She has a vanilla cake and a chocolate cake. The vanilla cake was cut into 12 slices. The chocolate cake was cut into 6 slices. 4 people ate a vanilla slice. How many slices of chocolate cake were eaten?

Books in her room. 4 tenths of the books are poetry books. List the book genres that are not poetry books.

Ordering Fractions

Rewrite each fraction to have the common denominator.

Ordering Fractions

Vocabulary Review:

A **fraction** is a part of a whole.

These 4 parts

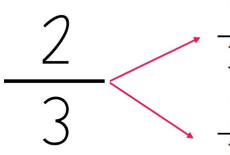


FRACTION



DECOMPOSE

to break down into parts



DENOMINATOR



FRACTION STRIPS

Visual representation of fraction strips for 1/2, 1/3, 1/4, and 1/5. Each strip is divided into equal parts corresponding to the denominator.

Directions: Cut along the scissor lines. Give the flaps into a journal. Under each flap, order the fractions from least to greatest.

FRACTIONS
Ordering Fractions

Flap 1: $\frac{4}{6}$ $\frac{7}{9}$ $\frac{2}{6}$

Flap 2: $\frac{8}{10}$ $\frac{3}{4}$ $\frac{2}{10}$

Multiplication Table

1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

each day of math is fully planned for you with all the tools you'll need!