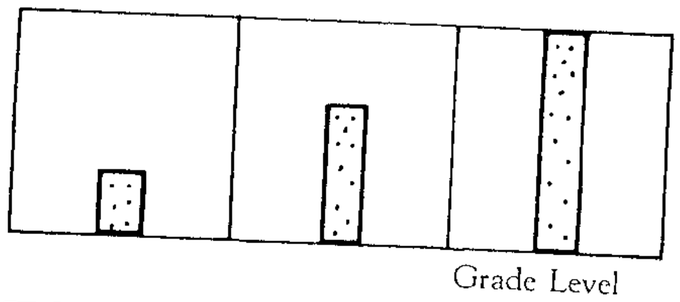
Making a Fraction Kit



Grade Level

TOOLS

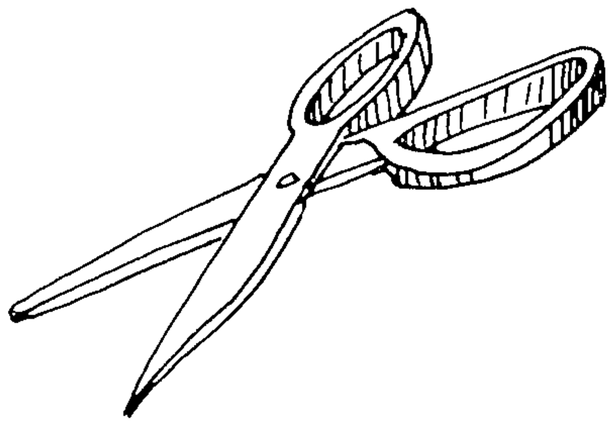
Pencil

Scissors

Strips of 3″×18″ construction paper

For Kit I you need 4 strips of different colors

For Kit II you need Kit I plus 3 more strips of different colors



Why

To see and understand the relative values of fractions by making physical representations

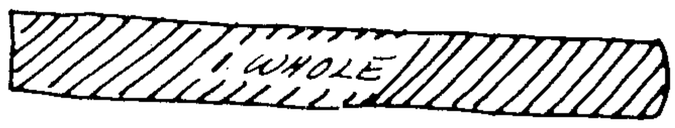
► *When young children are learning simple arithmetic, it is essential that they have many experiences with concrete materials, such as blocks, before they can truly understand the difference between three* ⬚⬚⬚ *and five* ⬚ ⬚ ⬚ ⬚ ⬚ *. In the same way, making a physical model of fractions provides reinforcement for understanding the relative values of fractions.* ◄

How

To Make Kit I

□ Take 5 strips of different colors. With your children, compare the strips to be sure they are all the same length. Talk about the fact that the strips each represent "1 WHOLE" and that you will be cutting some into fractional parts.

□ Label one strip "1 WHOLE." (Note: It is often convenient to use a black strip for your whole.)



□ Take another strip and fold it carefully in half.

□ Fold by first lining up the edges of the strip and then creasing the fold.

How many sections will you have when you open your folded strip?

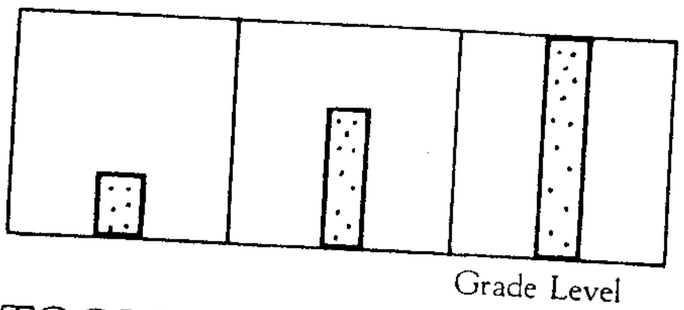
Open it and count.

□ Label each part 1/2 and cut on the fold line.

□ Take another strip and fold carefully in half two times.

Making a Fraction Kit

5.2



Grade Level

TOOLS

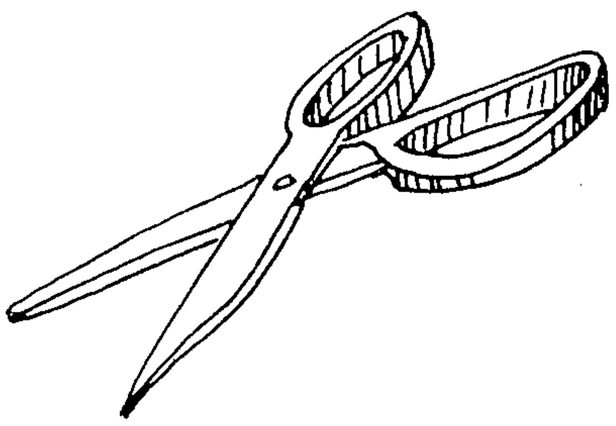
Pencil

Scissors

Strips of 3"×18" construction paper

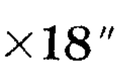
For Kit I you need 4 strips of different colors

For Kit II you need Kit I plus 3 more strips of different colors



Why

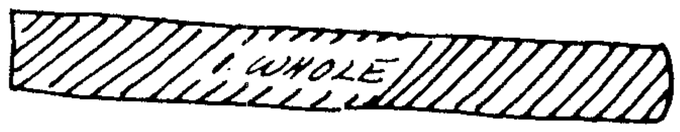
To see and understand the relative values of fractions by making physical representations

► *When young children are learning simple arithmetic, it is essential that they have many experiences with concrete materials, such as blocks, before they can truly understand the difference between three*  *and five* *. In the same way, making a physical model of fractions provides reinforcement for understanding the relative values of fractions.* ◄

How

To Make Kit I

- ☐ Take 5 strips of different colors. With your children, compare the strips to be sure they are all the same length. Talk about the fact that the strips each represent "1 WHOLE" and that you will be cutting some into fractional parts.
- ☐ Label one strip "1 WHOLE." (Note: It is often convenient to use a black strip for your whole.)



- ☐ Take another strip and fold it carefully in half.
  - ☐ Fold by first lining up the edges of the strip and then creasing the fold.

How many sections will you have when you open your folded strip?

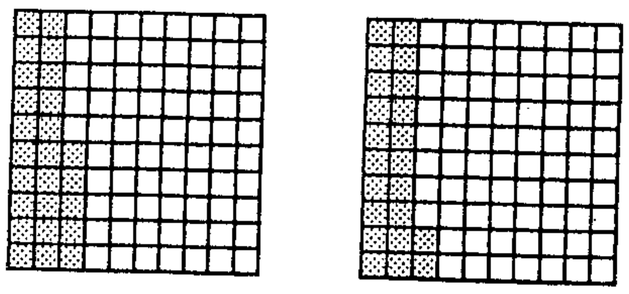
Open it and count.

- ☐ Label each part 1/2 and cut on the fold line.

- ☐ Take another strip and fold carefully in half two times.

Name _____ 5.2b

Comparing and Ordering Decimals

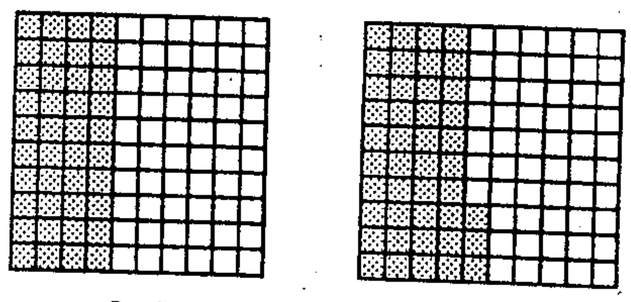


0.25 0.22

0.25 is greater than 0.22

5 > 2

We write: 0.25 > 0.22



0.4 0.43

0.4 0 is less than 0.43

0 < 3

We write: 0.4 < 0.43

Write the correct symbol, > or <, for each ◯.

1. 0.38 (>) 0.35

2. 7.3 ◯ 7.1

3. 0.5 ◯ 0.8

4. 6.48 ◯ 6.57

5. 12.9 ◯ 13.4

6. 0.036 ◯ 0.033

7. 0.07 ◯ 0.70

8. 0.235 ◯ 0.215

9. 3.80 ◯ 3.75

10. Since 6.3 > 6.2 and 6.2 > 6.1
what do you know about 6.3 and 6.1?

_____

11. Since 25.06 < 25.08 and 25.08 < 25.09
what do you know about 25.06 and 25.09?

_____

12. Write in order from greatest to least.
5.459 5.549 5.140 5.559

_____

13. Write in order from least to greatest.
9.042 8.949 8.98 9

_____

Name _____ Fractions and decimals: comparing and ordering

Finding the Right Combination

5.2b

Can you find the right combination to open the locks? Just follow the directions below. But first, review how to compare fractions and decimals.

To compare unlike fractions:

1. Rewrite as equivalent fractions with like denominators.
2. Compare numerators.

Example: Compare $\frac{2}{3}$ and $\frac{3}{4}$.

$\frac{2}{3} = \frac{8}{12}$ $\quad\quad$ $\frac{3}{4} = \frac{9}{12}$

$\frac{2}{3}$ is less than $\frac{3}{4}$ because $\frac{8}{12}$ is less than $\frac{9}{12}$.

To compare decimals:

1. Write the decimals so that their decimal points are lined up.
2. Compare one place value at a time, left to right.

Example: Compare 40.13 and 40.039.

40.13
40.039

The first place that is different is the tenths place. 40.13 is greater than 40.039.

To compare fractions and decimals to each other:

Write all of the numbers in one form—either as fractions or as decimals—and then compare.

Part 1: List the three numbers in each set from least to greatest. Circle the middle number.

1. $\frac{4}{5}, \frac{1}{2}, \frac{3}{4}$ _____
2. 0.17, 0.713, 0.71 _____
3. $\frac{2}{5}$, 0.55, $\frac{3}{8}$ _____
4. List the three circled numbers in order from least to greatest. Circle the middle number. _____

Part 2: List the three numbers in each set from least to greatest. Circle the middle number.

1. 1.07, 7.17, 1.77 _____
2. $1\frac{3}{5}, 1\frac{7}{8}, 2\frac{1}{4}$ _____
3. $1\frac{5}{8}$, 1.7, 1.65 _____
4. List the three circled numbers in order from least to greatest. Circle the middle number. _____

Part 3: List the three numbers in each set from least to greatest. Circle the middle number.

1. 1.3, $1\frac{1}{5}, 1\frac{3}{8}$ _____
2. 1.89, 1.803, $1\frac{7}{8}$ _____
3. $1\frac{1}{2}$, 1.503, 1.055 _____
4. List the three circled numbers in order from least to greatest. Circle the middle number. _____

List the three circled numbers from the fourth item in Parts 1–3 in order from least to greatest. _____ That's the winning combination!

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5.2b

Name _____ Date _____
Math

Compare using <, >, or =.

1.) 0.04 ___ 0.4

2.) 4.1 ___ 4.19

3.) 25.0 ___ 2.50

4.) 51.6 ___ 51.60

5.) 5.936 ___ 5.933

6.) 1.90 ___ 1.09

7.) 0.234 ___ 1.234

8.) 48.13 ___ 48.31

9.) 9.99 ___ 9.990

10.) 6.30 ___ 6.302

True or False.

11.) 8.29 < 8.3 T F

12.) 0.24 > 0.42 T F

13.) 4.0 = 4 T F

14.) 2.043 > 2.430 T F

15.) 10.47 < 1.47 T F

Put the following numbers in order from least to greatest:

0.32, 0.13, 0.249, 0.302

16) _____

6.3, 6.03, 60.30, 6.003

17) _____