POSTER PROBLEM: NAME CHAIN

Part 1: Your teacher will divide you into groups.

- Identify members of your group as A, B, C, or D.

- Each group will start at a numbered poster. Our group start poster is _____.

- Each group will have a different colored marker. Our group marker is _____.

Part 2: Do the problems on the posters by following your teacher's directions.

A. Write the name of a movie. Circle the LAST letter in the movie's name.

B. Write the name of a singer or musical group that begins with the circled letter from Part A. (If you cannot think of one, you will need to change the movie and then proceed.) Put a circle around the first letter and a square around the last letter in the name.

C. Write the name of a sport or game whose name begins with the letter squared in Part B. (If you cannot think of one, you will need to change the previous step(s) and then proceed.) Put a square around the first letter and a triangle around the last letter of the activity.

D. Write the name of a snack or food that begins with the triangled letter from Part C. (If you cannot think of one, you will need to change the previous step(s) and then proceed. Put a triangle around the first letter of the snack's name.

Part 3: Return to your seats. Work with your group. Use your "start problem."

Write a sentence or two that incorporates the movie, music, sport/game, person, and snack/food. Be prepared to share with the class.

POSTER PROBLEM: PLACE CHAIN

Part 1: Your teacher will divide you into groups.

- Identify members of your group as A, B, C, or D.

- Each group will start at a numbered poster. Our group start poster is _____.

- Each group will have a different colored marker. Our group marker is _____.

Part 2: Do the problems on the posters by following your teacher's directions.

A. Write the name of a city in the United States. Circle the LAST letter.

B. Write the name of a city outside the United States that begins with the circled letter from Part A. (If you cannot think of one, you will need to change the Part A answer and then continue.) Put a circle around the first letter and a square around the last letter.

C. Write the name of a state in the United States whose name begins with the letter squared in Part B. (If you cannot think of one, you will need to change the previous step(s) and then continue.) Put a square around the first letter and a triangle around the last letter.

D. Write the name of a country that begins with the triangled letter from Part C. (If you cannot think of one, you will need to change the previous step(s) and then continue. Put a triangle around the first letter.

Part 3: Return to your seats. Work with your group. Use your "start problem."

Write a few facts that relate to one or more of the places you listed. Facts can include where these locations are. Be prepared to share your facts with the class.

POSTER PROBLEM: FRACTIONS

Part 1: Your teacher will divide you into groups.

- Identify members of your group as A, B, C, or D.

- Each group will start at a numbered poster. Our group start poster is _____.

- Each group will have a different colored marker. Our group marker is _____.

Part 2: Do the problems on the posters by following your teacher's directions.

Poster 1 (or 5)	Poster 2 (or 6)	Poster 3 (or 7)	Poster 4 (or 8)
$\dfrac{3}{5}$	$\dfrac{3}{4}$	$\dfrac{3}{10}$	$\dfrac{3}{2}$

A. Copy the "start" fraction. Draw an "area model" diagram using a rectangle that represents the fraction.

B. Represent the fraction with a "number line" diagram.

C. Write a fraction that is equivalent to the start fraction. Justify with pictures, numbers, or words that they are equivalent.

D. Write a decimal that is equivalent to the start fraction. Justify with pictures, numbers, or words that they are equivalent.

Part 3: Return to your seats. Work with your group. Use your "start problem" fraction.

Critique the poster.

1. Which do you think more clearly shows the fraction visually, an area model or a number line? Why?

2. What do you think is easier to justify, the equivalent fraction or decimal? Why?

POSTER PROBLEM: RECTANGLES

Part 1: Your teacher will divide you into groups.

- Identify members of your group as A, B, C, or D.

- Each group will start at a numbered poster. Our group start poster is _____.

- Each group will have a different colored marker. Our group marker is _____.

Part 2: Do the problems on the posters by following your teacher's directions.

Poster 1 (or 5)	Poster 2 (or 6)	Poster 3 (or 7)	Poster 4 (or 8)
(0,0), (8,0) (8,2), (0,2)	(3,2), (9,2) (9,6), (3,6)	(1,1), (10,1) (10,2), (1,2)	(4,3), (11,3) (11,6), (4,6)

A. Make a coordinate graph. Plot the four coordinates and connect them to make a rectangle.

B. Label side lengths with numbers. What are some different names for the two dimensions?

C. Write a formula for the perimeter (P) of a rectangle. Then, find the perimeter.

D. Write a formula for the area (A) of a rectangle. Then find the area.

Part 3:

Walk around the room. Discuss and compare the different rectangles.

1. What is the same about all the rectangles?

2. What is different about all the rectangles?

Return to your seats.

3. Can you find a rectangle with perimeter equal to 20 units that has a larger area than any of those made? State its dimensions and find its area.

4. Can you find a rectangle with perimeter equal to 20 units that has a smaller area than any of those made? State its dimensions and find its area.