

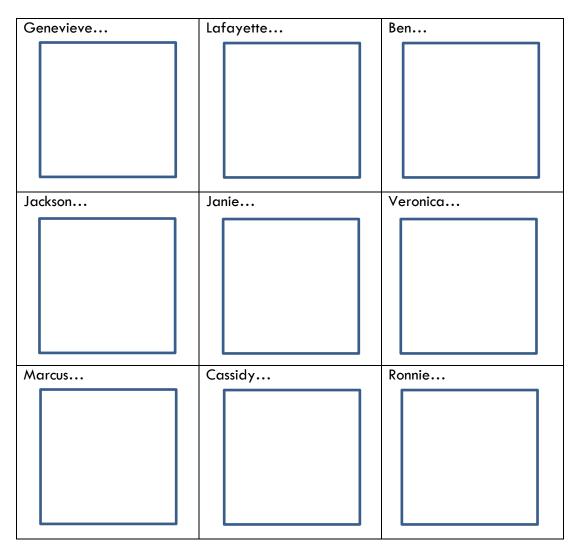
## Multiplying and Dividing Fractions Explore

## Use patty paper and complete three tasks below to obtain three in a row. You may work diagonally, horizontally, or vertically. Sketch the results of the patty paper model in the corresponding boxes on the next page.

Genevieve worked on her math homework for $\frac{1}{2}$ hour last night. If she completed each problem in $\frac{1}{6}$ hour, how many math problems did she finish last night?	Lafayette ran $\frac{3}{4}$ of a race yesterday and walked the rest. If the length of the race was $\frac{1}{2}$ mile, how far did Lafayette run?	Ben ate $\frac{1}{3}$ of his share of pizza for dinner. If Ben was given $\frac{3}{4}$ of a pizza, how much did he eat?
Jackson rode his bicycle $\frac{2}{3}$ of a mile home. There is a stop sign every $\frac{1}{9}$ of a mile. How many stop signs are there on Jackson's ride home?	Janie is making cookies using a recipe that calls for $\frac{1}{3}$ cup of sugar. If she only makes $\frac{1}{2}$ of a batch, how much sugar should Janie use?	Veronica has $\frac{7}{8}$ yard of fabric to use to make flags. If each flag requires $\frac{1}{4}$ yard of fabric, how many can Veronica make?
Marcus had $\frac{5}{8}$ of the released super heroes. If he sold $\frac{1}{2}$ of his collection, what fraction of the released super heroes does Marcus have now?	$\frac{3}{8}$ of the students in Cassidy's class are boys. Of those students, $\frac{1}{2}$ are wearing jeans. What fraction of Cassidy's class are boys in jeans?	Ronnie lives $\frac{8}{9}$ mile from school. If he walked $\frac{1}{3}$ of the way home, how far did Ronnie walk?



## Sketch your patty paper models here:



## **Debriefing Questions**

- 1. Look at one of the multiplication models and one of the division models. What is the difference between multiplying and dividing with patty paper?
- 2. Explain the steps you would take to model  $\frac{1}{4} \div \frac{1}{8}$  using patty paper.

3. How does the model for 
$$\frac{1}{2} \cdot \frac{3}{4}$$
 relate to the solution?

