# PROPORTIONAL REASONING

# WONDER:

What can this cake designer do, all because she understands MATH?!



#### PLAY:

What do you know about ratios and proportions from playing the game?



### REVIEW:

Watch this video to learn/review 3 ways to solve for a missing value in a proportion.



## PRACTICE:

STEP 1: Form a small group of 3.

#### Choose a WORD PROBLEM to solve.

As Pamela drove her car 99 kilometers and used 9 liters of fuel. She wants to know how many kilometers she can drive with 12 liters of fuel. She assumes the relationship between kilometers and fuel is proportional. How many kilometers can Pamela drive with 12 liters of fuel?

B: Charlie builds decks for a living. He builds 14 standard decks in 3 weeks. How many decks can be build in 3 months (12-weeks)?



#### **STEP 2:**

**C:** A factory can assemble 3,400 iPods in an 8-hour shift. If the factory were to work around the clock, how long would it take them to assemble 100,000 iPods?



There are 1,200 students in the Hillcrest Elementary School. If the ratio of boys to girls is 5 to 7, how many boys attend Hillcrest Elementary?



Choose a tool. Solve the problem using one of the 3 options.

STEP 3:







**STEP** 4: Turn in the group's response to the problem <u>HERE</u>.

STEP 5: Review responses from other groups. Give feedback. HERE