Activity 1

ROCKET MATH

Reproducible

PART 1: It takes math to prepare the materials for a baking soda rocket. To get started, fill in the blanks below with the correct conversions. Use the chart to help you.

1. 3 tablespoons = ____ teaspoons
2. 3 cups = ____ fluid ounces
3. 1 liter = ____ cups
4. 9 teaspoons = ____ tablespoons
5. 24 fluid ounces = ____ cups
6. 3 cups = ____ tablespoons

Unit	Equivalent
1 cup	8 fluid ounces (fl oz)
1 pint	2 cups
1 quart	2 pints
1 tablespoon (tbsp)	3 teaspoons (tsp)
16 tablespoons (tbsp)	1 cup
1 liter	33.8 fluid ounces (fl oz)
1 foot	12 inches
1 yard	3 feet
1 mile	5,280 feet

PART 2: Now you're ready to launch your rocket. Work with your group to fill in the table below with your predictions for how fast your rocket will lift off, how long it will fly, and how high and how far it will go. Write the predictions of two other groups in the table, too. After your launch, fill in the results under "actual." *Were your predictions close?*

	Group 1 (My group)		Group 2		Group 3	
	Prediction	Actual	Prediction	Actual	Prediction	Actual
How long will it take the rocket to launch?						
How long will the rocket stay airborne?						
How far will the rocket travel?						
How high will the rocket go? (Use a landmark reference like a tree or building for this answer.)						

BONUS: For a "real" rocket to leave the Earth's atmosphere, it needs to travel 62 miles above sea level. How many yards does the rocket travel before it is in space? How many feet?

_____ yards

_____ feet