

# Algebra: Integers and Equations

## Dear Family,

These activities provide an opportunity for you and your child to share knowledge of mathematics. I invite you to choose one or two activities and complete them together. Please have your child return the family project(s) to me by \_\_\_\_\_.

**Materials:** newspaper • tape measure • almanac • paper • pencil

## The Rain in Spain

Locate the weather section in the newspaper. Study the weather data from cities around the world. As a family, decide on an ideal place to visit using weather as a guide to a "perfect" vacation. What countries were suggested? List the cities and their individual high temperature and low temperature. Then list each location's average temperature. (Find the average temperature by dividing the sum of the high and low temperatures by 2.) How did your family make choices?

## Jump to It

Have each family member estimate the distance he or she can jump to the nearest inch. Then have each person jump from a designated point. Use the tape measure to find the distance from the point to the person's toes. Make a chart to record each family member's estimated jump and actual jump.

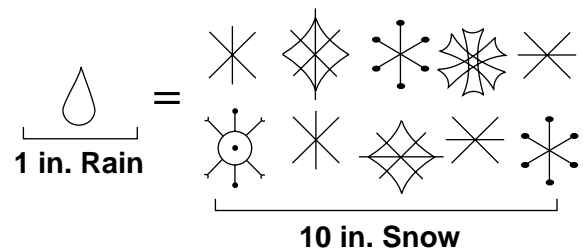
Have family members imagine that they are on the moon (where gravity is one-seventh what it is on Earth). Write an

equation that shows how to determine how far each person would have jumped if he or she were on the moon. Then use the equation to find the distance each person would jump. Include this data in your chart.

## Precipitation Predictions

Have family members guess the annual amount of precipitation in your area. Write down their guesses on a sheet of paper. Then use an almanac or other reference source to find the normal precipitation for each month of the year in your area (or the closest area for which data are available). Graph your data for each month. What is the annual amount of precipitation in your area?

Tell family members that some weather forecasters consider 1 in. of rain equivalent to 10 in. of snow. Imagine that your area received only snow for 1 year. Write an equation to determine how many inches of snow your area received each month. Include this data in your graph.



## What Do You Think?

Please take a few moments to let me know how you enjoyed these activities. Write your comments on the back of this sheet and have your child return it to me by \_\_\_\_\_.