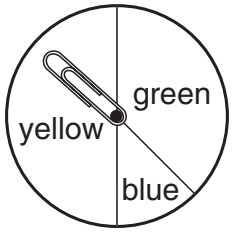
Name Date Time

HOME LINK 10•11

Unit 11: Family Letter

Probability; Year-Long Projects, Revisited

In this year's final unit, children will have the opportunity to bring closure to the yearlong data-collection projects about lengths of days and temperature changes. They will look at patterns in data and draw conclusions.



Unit 11 also contains informal spinner activities relating to chance and probability.

Some of these activities call for children to compare the likelihood of several possible outcomes of an event: why one thing is more likely to happen than another. For example, children will make predictions about where a paper clip on a spinner is more likely to land when the spinner is divided into unequal parts.

Other activities ask children to estimate the chance that something will happen. For example, children design a spinner so that a paper clip is twice as likely to land on one color as another.

Please keep this Family Letter for reference as your child works through Unit 11.

Vocabulary

Important terms in Unit 11:

equally likely outcomes Outcomes of a chance experiment or situation that have the same probability of happening. For example, any number 1–6 landing up are the equally likely outcomes of rolling a die.

winter solstice The shortest day of the year, when the sun is farthest south of the Earth's equator. The number of hours of daylight depends on your latitude. In the Northern Hemisphere, the winter solstice occurs on or about December 21.

summer solstice The longest day of the year, when the sun is farthest north of the Earth's equator. The number of hours of daylight depends on your latitude. In the Northern Hemisphere, the summer solstice occurs on or about June 21.

Do-Anytime Activities

To work on the concepts taught in this unit and in previous units, try these interesting and rewarding activities:

1. When you are in the car or walking with your child, search for geometric figures. Identify them by name if possible and talk about their characteristics. For example, a stop sign is an octagon, which has 8 sides and 8 angles. Many skyscrapers are rectangular prisms; their faces are rectangles.

2. Draw name-collection boxes for various numbers and together with your child write five to ten equivalent names in each box. Include name-collection boxes for fractions and decimals. For example, a $\frac{1}{2}$ name-collection box might include $\frac{2}{4}$, $\frac{10}{20}$, 0.5, 0.50, and $\frac{500}{1,000}$ because these are also names for $\frac{1}{2}$. Then create name-collection boxes that include equivalent measures. For example, a 1 ft name-collection box might contain 12 in., $\frac{1}{3}$ yd, $\frac{1}{5,280}$ mile, $\frac{12}{36}$ yd, and so on.

3. Make predictions about the likelihood of pulling an item of one color out of a bag filled with the same items of different colors. Then check your predictions. For example, place 2 red blocks and 4 blue blocks in a bag. There are 4 out of 6 chances to pull a blue block.

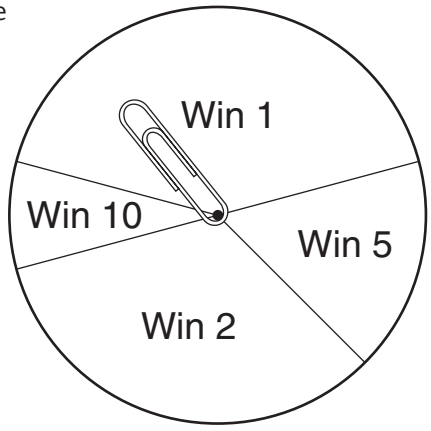
1 ft	
12 in.	$\frac{1}{5,280}$ mile
$\frac{1}{3}$ yd	$\frac{12}{36}$ yd

Building Skills through Games

In Unit 11, your child will practice skills related to chance and probability by playing the following games. For detailed instructions, see the *Student Reference Book.*

Block Drawing Game

Without letting the other players see the blocks, a Director puts five blocks in a paper bag and tells the players how many blocks are in the bag. A player takes a block out of the bag. The Director records the color of the block for all players to see. The player replaces the block. At any time, a player may say *Stop!* and guess how many blocks of each color are in the bag. If a player guesses incorrectly, that player is out of the game. The first player to guess correctly wins the game.



Spinning to Win

Each player claims one section of the spinner. Players take turns spinning the spinner. If the spinner lands on a player's number, the player takes that number of pennies. The player with the most pennies after 12 spins wins the game.

As You Help Your Child with Homework

As your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through this unit's Home Links.

Home Link 11•2

Numbers	Add	Subtract	Multiply	Divide
30 and 7	37	23	210	4R2
50 and 5	55	45	250	10
40 and 6	46	34	240	6 R4
150 and 3	153	147	450	50
3,000 and 50	3,050	2,950	150,000	60
12,000 and 60	12,060	11,940	720,000	200

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