

8A.3 Learning Opportunity

Sample Spaces: Fundamental Counting Principle



Name: _____

OK to use

Polar Puzzle

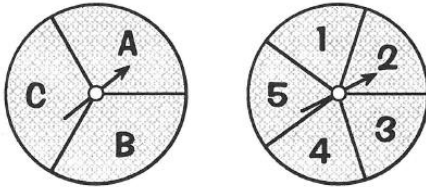
1 What do you call a baby polar bear?

140 18 9229 324 16 15 196 16 158,184 144

2 What do polar bears eat for lunch?

324 16 15 30 144 158,184 27 125 15 27 12

E. If you spin each of these spinners once, how many possible outcomes are there?



S. Zoo officials are trying to decide on a name for their new baby polar bear. For a first name, they like either Buddy, Cubby, Snowball, or Alabaster. For a middle name, they like either Frosty, Flake, or Freeze. How many different choices do they have?

N. Java needs a roll of film for her 35-mm camera. Based on the information in the table, how many different kinds of film can she buy?

Speed	100, 200, or 400
Exposures	12, 24, or 36
Type	print or slide

U. License plates in Toontown consist of three letters followed by a digit from 1 to 9, such as **AAB1**. How many different license plates are possible?

G. Dregg guessed the answers to three multiple-choice questions on a test. If each question had 5 different choices, how many different answer combinations were there?

A. Argyle has 10 T-shirts and 7 pairs of shorts that he wears with either sandals or sneakers. If all the colors and patterns coordinate, how many different outfits can he make?

I. Balloons or Bust sells balloons in 18 different colors. Each color comes in 3 sizes. They will inflate the balloon and tie on a gold, green, red, blue, pink, or purple ribbon. How many different choices are there?

R. Camp Cornflake has 3 activity periods with the choices shown. How many different schedules are possible?

Camp Cornflake		
PERIOD 1	PERIOD 2	PERIOD 3
leatherwork	archery	canoeing
pottery	riflery	water skiing
basketry	nature study	swimming

B. A 4-course dinner special consists of soup or salad, a main dish, dessert, and coffee or tea. If there are 9 different main dishes and 4 different desserts from which to choose, how many different dinner specials can be ordered?

C. A computer is sold with or without a monitor, with or without a keyboard, with or without a DVD player, and with or without a wireless card. How many different choices are there?