

Lesson Plan: Candy Math

Subject: Math

Grades: K - 5

Time: Approximately one hour for both parts.

For this activity you may use any type of candy that has a variety of colors such as: gum drops, Life Savers, or M&Ms. I use M&Ms because **I** like them! Be aware of any food allergies students may have (avoid any candy with peanuts).

Skills: Following directions, counting, addition/subtraction/multiplication/division, graphing

Objective: Using candy, students will perform a variety of mathematical operations and graph the final results. Individual or class bar graphs can be created.

Materials:

- Different colored candies
- Small plastic bags
- Graph paper
- Pencils
- Coloring supplies (crayons, colored pencils, or markers)

Procedure:

Preparation:

Give each student a copy of graph paper.

Create a baggie of candy for each of your students. Each baggie should contain approximately 40 different colored candies. Or give each student a few packets of M&Ms (this eliminates the need to count out candies).

If you would rather the students not have candy, you can do this activity using cut up squares of construction paper, different colored tokens, marbles, or any object that comes in a variety of colors. Instead of the students “eating” the objects, have them place the objects in a plastic baggie to remove them. (Note: This activity is far more fun for the students when using candy!)

Activity Part I: Following directions and performing math operations

Explain the overall activity to the students, reminding students they may only eat the candy when it is mentioned in the directions.

Create a list of questions for the students using any (or all) of the questions below. Write the questions on the board, a piece of chart paper, overhead, or individual handouts. Change any colors depending on the type of candy (or objects) you are using.

Each student will have different answers depending on the colored candies they have. Older grades can work independently, for younger grades read and follow directions together as a class. Have students work through the problems mentally or record them on paper to be collected.

Student directions and questions:

Estimate the number of candies you have.

Separate the candy by color and count the candy in each group. Add the groups together. How much do you have all together?

Was your estimate close?

Eat one candy from any group.

Count your blue candy and your red candy. How much candy do you have all together?

Count your green candy and your yellow candy. Subtract the smaller number from the larger number. What number do you have?

Put your brown and your orange candy together. How much do you have all together?

Eat two brown candies and one orange candy. How much do you have left?

Count the green candy and the brown candy and multiply the numbers. Eat one green candy. Multiply the numbers again. Eat one brown candy and multiply the numbers again.

Add up all the candies that belong to a group that has even numbers.

Add up all the candies that belong to a group that has odd numbers.

Add the numbers from those two groups. Multiply the number from those two groups.

Put all the candy together and make three equal groups. How many candies are in each group? How many are left over? Eat the remainders.

Line up all your candy in any pattern. For example: yellow, red, red, green, blue, brown, yellow, red, red, green, blue, brown. Eat the fifth, seventh, and tenth candy in line and separate the candies into color groups again.

Add up the candy in the red, blue and green groups. Divide that number by the number in the yellow group. What number do you have? Is there a remainder? Eat the remainder.

Write your own mathematical equation for your candy and have a friend solve it.

Part II – Graphing

If you have already introduced graphing to your students, have them complete a bar graph, graphing the candy colors they have remaining. Students can create individual graphs or put the students in pairs or groups and complete larger graphs on chart paper by counting all the colors for all the students in the group. If you choose to pair up or group the students, be sure to tell the students to keep their candy separate. This way each student leaves the group with the same amount (and same candy) they've been using.

If your students have never created a bar graph, this is a great activity to use as graphing introduction. Complete one large graph together on chart paper or on the board, and then let the students compete one on their own.

Suggestions for completing the bar graphs:

- Number of candies should appear along the side – help students decide if numbers should go up by ones, fives, tens, etc. The side should also be labeled (ex. Number of M&Ms)
- Colors should go along the bottom and the bottom should also be labeled (ex. Colors of M&Ms)
- Students should color in the bar graph matching the colors of the candies.
- The graph should have a title.

Once the individual or group graphs are completed, complete one large class graph if time.

Students should be allowed to take the candy home (or eat it in class).

Create a math bulletin board hanging up the students graphs.

Part III – Writing Link

Writing a persuasive paragraph

Tell the students that the candy company has decided to do away with one color candy. Have each student choose their favorite color candy, and write a persuasive paragraph to the candy company about why their color should not be removed. Younger students can write a sentence or two about why their color is their favorite while older grades can write paragraphs. Students can be put into groups and have a class debate on why their

color should remain, or put a different swing on it and have the students write from the perspective of a color and have the entire paragraph from that color's point of view.

Evaluation:

Students can be evaluated on:

- Following oral and/or written directions
- Completing individual or group bar graphs