

## Day 2: March 7<sup>th</sup>

### Standard and Indicator

**Data Analysis and Statistics 5.DS.1** - Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data.

### Materials

1. Teacher
  - a. SMART Board
  - b. Survey about School (x24)
2. Student
  - a. Pencils
  - b. Paper
3. Resources

How to Do a Survey. (2014). Retrieved February 23, 2017, from <https://www.mathsisfun.com/data/survey-conducting.html>

T. (2011, March 16). Mark Bezos: A life lesson from a volunteer firefighter. Retrieved March 06, 2017, from <https://www.youtube.com/watch?v=sAQfzHBpRsc>

### Objective

1. The students will create a survey to determine how to improve the community through volunteer work.

### Motivation

1. I will tell the students that they will be taking a quick, five-question survey about school.
2. I will tell the students to pay close attention to the different types of questions.

### Goal for Learner

1. “Today, in groups you will be creating one survey question to help us determine what we will be doing when volunteering at Motivate Our Minds.”

### Content and Procedures

1. Teacher Content
  - a. Gathering information is an important way to help people make decisions.
  - b. Surveys can help decide what needs changing, where money should be spent, what products to buy, and various other things.
  - c. Surveys can be used to answer any question about any topic.
2. Procedure
  - a. I will begin by showing the students the video: Mark Bezos: A life lesson from a volunteer firefighter
    - i. <https://www.youtube.com/watch?v=sAQfzHBpRsc>
  - b. I will ask the students what is the lesson behind this video.
  - c. On the whiteboard, I will write, “Our Call is Civic Duty.”

- d. I will ask and call on students to explain what “Our Call is Civic Duty” means
  - e. I will begin by discussing that part of our civic duty is going to be taking a field trip to Motivate Our Minds on March 16<sup>th</sup>. During the field trip, we will be volunteering our time to help them out. I have been in contact with Mrs. Baker and she has provided me a list of various things that they need help with. I will write the list on the SMART board.
    - i. Vacuum
    - ii. Wipe computer tables
    - iii. Clean windows
    - iv. Pick up litter and yard debris
    - v. Take out trash
  - f. Then, I will tell the students that I will not be deciding what two or three volunteer services we will be doing. Instead, I will tell the students that whoever takes the survey will decide. This will be decided based on the results.
  - g. I will begin by explaining the steps to making a survey while writing them on the whiteboard.
    - i. Determine who they will be taking the survey or the target audience.
      - 1. I will ask the students who they think should take our survey and why.
    - ii. Create the questions
      - 1. I will ask the students what type of questions do they think we should ask. For example, should we ask multiple choice, fill in the blanks, ranking, or short answer questions.
    - iii. Take your own survey
      - 1. I will tell the students why do we need to take our own survey.
  - h. After stating the steps, I will tell the class that it is up to them to make good survey questions that will really answer what volunteer service our class will do at Motivate Our Minds.
  - i. I will explain that they will be in groups and I will decide who is in what group.
  - j. I will explain that each group is responsible for making one survey question.
  - k. I will get the students in their groups and tell them to get working.
  - l. After most of the students are done with their question, I will tell them to trade with another group and take their survey question. I would also explain that this would be a good time to give them feedback. The students will also be given the chance to fix their question if needed.
  - m. I will write the steps of what to do next on the whiteboard.
  - n. Once all of the groups are finished, I will collect their questions.
  - o. I will explain to the class that I will be looking over their questions and finding any similarities and differences. Then, I will use your questions to create the survey and present it to the class tomorrow.
  - p. I will ask the class how many questions do they think need to be on the survey if we want to keep it short.
  - q. I will ask the students how does taking a survey relate to civic duty.
3. Checking for Understanding
- a. While explaining the steps to making a survey, I will ask three questions to decide if the students understand why these are the steps.

- b. While the students are creating their survey question, I will be walking around the room and reading their questions. I will also ask questions to guide students or to encourage students to write a more challenging question.
4. Lesson Summary
  - a. In groups, the students will create one survey question to determine what volunteer services we will be doing at Motivate Our Minds.

#### Practice/Application

1. The students will work in groups to create one survey question to determine what volunteer services we will be doing at Motivate Our Minds.

#### Evaluation of Student Learning

1. I will be walking around the room and reading the students questions.
2. I will examine the students' questions to determine which ones are similar and which ones are different to help create the survey.

#### Closure

1. "Great job today everyone! Today, we created survey questions to determine how to improve the community through volunteer work. Can someone remind us what the steps are to creating a survey? Great job! Also, I am really excited to read your questions and put the survey together. Your work today was important because it will be used to determine what we will be doing at Motivate Our Minds."

#### Accommodations

1. Students with Special Needs:
  - a. To accommodate students with special needs, I will give them enough time to fully understand the concepts and the directions. I will also explain the direction a second time once all of the students start working on their question. Students will also be placed in groups that will help them through the process of creating a question instead of just telling them this is what we are doing.
2. Students who are Gifted and Talented
  - a. To modify for students who are gifted and talented, the students will be placed in groups that will be asked to create a more challenging question. For example, I might ask the group to create a ranking question or a short answer question.