December 14, 2015

Standards:
SI #4: Analyze & interpret data.
SI #5: Develop descriptions, models, explanations, and predictions.

Handouts:
S.T. E - U1 L5 Knowledge Builders. - Day 5 (Quick Lab: Heart Rate and Exercise)

On Board:
1. Take paper out of tray.
2. Get laptop from 9th period class (1-2 Period Only).
3. Get out your Science Composition books.
4. Do Bell Work on the Smart board.
5. Pencil

Up For Grabs:

Materials:
Vocabulary Words for Around The Room, Graph paper, Stopwatches, and Lap tops.

Procedures:
1. Take attendance.
2. Do Bell Work.
3. Discuss Bell Work.
4. Go over procedure for the day.
5. Go over focus for the day.
6. Play one round of Around the Classroom to review vocabulary.
7. Go over instructions for lab with students.
8. Do lab and record results.
9. Go over answers to the lab.

Note: Be sure to emphasize that anyone with breathing problems or known heart problems are not permitted to be the runner for the lab.

Note: Child's resting heart rate per minute 60-100. Well trained athlete's resting heart rate will be closer to 40 beats per minute.

Note: GO OVER WITH THEM HOW TO TAKE PULSE, RUN 1 MINUTE, TAKE PULSE 1 MINUTE STILL, ETC.

Homework:

Notebook Checks will continue this week. Please be sure you have signed up.

If you scored 75 percent or below do Assignment A - pp. 56-66 in your Fusion books.

If you scored 75 percent or higher do Assignment B - Do Family Statistics assignment (see my lesson from class for assignment details).

Science, Technology, and Engineering Unit 1 - Lesson 5

Day: 5

Bell Work - Day 5

To Do...

1. Take paper out of tray.
2. Get laptop from 9th period class (1-2 Period Only).
3. Get out your Science Composition books.
4. Do Bell Work on the Smart board.
5. Pencil

Label This Bell Work: Science, Technology, and Engineering Unit 1 - Lesson 5 - Use two boxes.

How do you find the range for a set of data?

How do you find the mode for a set of data?

Bell Work - Day 5

Label This Bell Work: Science, Technology, and Engineering Unit 1 - Lesson 5 - Use two boxes.

How do you find the range for a set of data?

Take the largest number in a set of data and subtract it from the smallest number in a set of data.

How do you find the mode for a set of data?

Find the number that appears the most in a set of data.

Procedure

Today We will...

1. Take attendance.
2. Do Bell Work.
3. Discuss Bell Work.
4. Go over procedure for the day.
5. Go over focus for the day.
6. Play one round of Around the Classroom to review vocabulary.
7. Go over instructions for lab with students.
8. Do lab and record results.
9. Go over answers to the lab.

Focus

- ☐ You will learn that tables can be used to represent data, especially numbers.
- ☐ You will learn that graphs are a way of representing data.
- ☐ You will learn that statistics are used to analyze data.

State Standard

SI #4: Analyze & interpret data.
SI #5: Develop descriptions, models, explanations, and predictions.

Vocabulary Review - Around The Room

1. Play one round of around the room.

Quick Lab: Heart Rate and Exercise

1. Look at you handout, Quick Lab: Heart Rate and Exercise.

2. We will divide up into groups of three students.

3. Log into you computer and go the the following website for an online stopwatch to use for keeping track of heart rates: http://www.online-stopwatch.com/full-screen-stopwatch

3. Follow the instructions on your Quick Lab: Heart Rate and Exercise.

Note: If you have asthma or any kind of heart condition you are not permitted to be the runner.

5. When you have collected all the data fill in the answers to questions # 6-8 on your Quick Lab: Heart Rate and Exercise handout.

6. When you are finished with the questions please return all lab materials to their proper spots and you can work on another assignment until everyone is complete then we will discuss the lab questions as a class.

Quick Lab: Heart Rate and Exercise

1. Lets practice taking you heat rate.

2. Find you pulse by either placing your pointer finger and middle finger on the side of your throat or wrist.

3. While standing still and quiet count the number of beats for 15 seconds when I say, "start."

4. Take your number and multiple it by 4. The answer will be your beats per minute. What did you get?

Quick Lab: Heart Rate and Exercise

Answers Quick Lab: Heart Rate and Exercise

Time (min)	Heart rate (beats per minute)	Time (min)	Heart rate (beats per minute)
0 (at rest)		5 (running)	
1 (running)		6 (at rest)	
2 (running)		7 (at rest)	
3 (running)		8 (at rest)	
4 (running)		9 (at rest)	

Answers To Quick Lab: Heart Rate and Exercise

5. Answerswillvary.

6. Sample answer: The heart rate was lowest at 0 minutes. It increased steadily for the first 2 minutes and then leveled off until the subject stopped running. When the subject stopped running, the heart rate slowly returned to its initial level.

7. Sample answer: Other subjects had different actual heart rates, but the general shape of the curve was the same for all groups.

8. Sample answer: The physical fitness of the subjects,the accuracy of the data collector, and the speed at which the subjects ran may all have affected the results.

Homework

Notebook Checks will continue this week. Please be sure you have signed up.

If you scored 75 percent or higher do Assignment A - Do Family Statistics assignment (see my lesson from class for assignment details).

If you scored 75 percent or below do Assignment B - pp. 56-66 in your Fusion books.