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Writing Seminar
Mr.Hanson

Unit 1

1.

- a) Scientists were able to use the orbit of the stars to calculate the mass at the center of the galaxy to be so large that the mass has to be a black hole
- (b) Epidemiologists use a reproduction parameter " R_0 " which is the number of infected from others.
- (c) Newton's law of motion states that when things are dropped with different masses and shapes they all accelerate at the same downward rate.

2. Ten tomato seedlings are obtained 1- first we will need 10 seeds

^ A patch in the garden is reserved with space for all ten ^ 2. Have to have some land saved
A photo-sensor can be used to determine the light level at each spot in the patch ^ 4. Use a sensor to make sure they have enough light

Each tomato plant is given a different amount of water per day ^ 5. Each day they will receive different amounts of water

This whole process is done during the summer when the amount of sunshine is maximized 3.
Sun is the most important

To properly grow a tomato you will need seeds, land, sunshine, light level sensor and plenty of water. You will first need to gather the 10 seeds and plant them in the reserved space in the garden. After done planting make sure the light sensor is approving of the light level if not then replant. It is important to water each one differently for they all need water. Most importantly they all need sunshine and the summer is the best time to grow them for that is when it is the sunniest.

Unit 3

1.

When born, the baby weighed a good amount and was tall in height. ^

The baby grew really fast, by the time she was 1 year old, she was a lot taller.

Radio transmissions took time to transfer to the Earth and the Moon. ^

A hiker walked the full 60 km trail in 4 days, making her average speed a steady pace.

2.

We will be making a peanut butter and jelly sandwich. When you enter the kitchen you will first go all the way to the right so take three steps forwards and then 4 steps to the right. This will then leave you facing the counter top where you will always find bread. Above the bread is a cabinet and above the bread you will open that cabinet to get the peanut butter and jelly which is on the second shelf. Once you have both placed on the countertop next to the bread. If you

look down and to the right you will see a drawer with a distinct lock on it and this drawer has the knives that you will need for spreading the jelly and peanut butter. Look for a smooth knife such as a butter knife and once found place next to prior ingredients. Now open all containers and take two pieces of bread out. Get the knife and add 2 tbs of each sauce onto one side of each bread. After this close everything up and put everything away where you found it. Make sure to leave the knife out because most likely you'll want another but for now leave on counter top on bread packaging. Now put the sauce side up on each bread so they touch and smash together and enjoy.

Unit 4

1. The acceleration due to Earth's gravity, g , was measured with a pendulum. First, the length of the pendulum was measured to be 20 cm. Second, the bob was displaced 5 cm to the right. Thirdly the pendulum was released and the number of times it returned to the same position as it swung back and forth for one minute was recorded. Then the records were recorded and it was calculated that it returned to its original position every 0.90 seconds. Newton's Laws predicted the formula for g . The result was 9.81 m/s^2 .
2. The trials took place in a room, with no air conditioning and no airflow. Then the average horizontal distance of bacteria traveled after a person sneezed, was measured. Next 20 people are gathered by height, all following a pattern of being 5ft 6 inches tall. Next, it was divided into categories, such as the largest colony having 8 m. If one felt the urge to sneeze, they would have to sneeze straight down the line without covering their mouth. More dishes were set up and bacterial colonies were allowed to go on these dishes. As the results show if a person sneezes, it is possible that someone who is 8 m away, can be infected.
3. A meter stick was placed with an eraser and the angle was increased by tilting the meter stick until the eraser slid off. The tangent of the angle is the friction coefficient, as shown by the diagram of forces. The tangent of the angle is the friction coefficient. The coefficient of friction is measured to be 0.095. It is measured many times. The average coefficient of friction is 0.095. The standard deviation of the coefficient was 0.05. A future idea for an experiment is to determine if the friction coefficient depends on temperature if the temperature of the eraser is changed.