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INTD-100-19 College Writing

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Midterm

Unit 1 Concise Writing

1: Using the delete button. For the sentences below, re-write them more concisely

- a. Scientists use known orbits of stars in the center of the galaxy in order to calculate the mass of the object at the center of the galaxy. The object's mass is so large that it has to be a black hole.
- b. Epidemiologists use the reproduction parameter, R_0 , to determine the number of resulting infections from a newly infected person.
- c. According to Newton's Laws of motion, objects with different masses and shapes will still accelerate downward at the same rate when they're dropped.

2: Creating an outline. Create an outline of the following set of ideas, such that it describes how to determine optimal tomato growing conditions. Use the outline to write a well-organized paragraph describing the experiment. Submit both the paragraph and the outline.

Outline: Revise Outline

- Obtain 10 healthy tomato seedlings.
- Reserve a space in the garden for each tomato seedling
- Use a photo-sensor to determine the different light levels in each spot for each seed.
- Give each of the tomato plants a different amount of water each day.
- This process is done during the summer to obtain the maximum amount of sunshine.

Paragraph

In order to determine the optimal conditions for growing tomatoes, you should obtain 10 healthy tomato seedlings. Reserve a space in the garden for each tomato seedling. Once you find a spot for each seedling, use a photo-sensor to measure the different light levels in each spot. Then you want to give each tomato plant a different amount of water each day. This process should be done during the summer in order to obtain the maximum amount of sunshine during the day.

Unit 2: Concise Writing 2

Hierarchy of detail and outlines. Choose from any of the 4 topics from slide 4 of the Week 2 Lecture Notes. Select 3-4 sources online and use them to create an outline with the appropriate hierarchy of details covering the subject. Submit the outline and a 200 word summary of the subject, written concisely and without ambiguous words or phrasing. Properly cite your sources.

Unit 2: Week 2 is not available on moodle. I instead based my prompt off of the first Long Essay Writing assignment with the 4 scientific attitude stories.

Outline:

- Dr. Ignaz Semmelweis demonstrated how the use of the scientific attitude was used to eliminate childbed fever.
 1. The Scientific attitude
 - a. Empirical Evidence matters
 - b. Willing to change theories in light of new evidence
 2. Historical Context
 - a. Who was Semmelweis
 - b. Childbed fever
 - c. Different experiments
 - d. Discovery of childbed fever cause
 3. Connecting historical context with Scientific Attitude
 4. Conclusion

Paragraph:

Dr. Ignaz Semmelweis used the scientific attitude in order to discover the cause and eliminate childbed fever. The most important aspect of the scientific attitude is that empirical evidence must be treated as if it matters. This leads into the second aspect of the scientific attitude which is that one must be willing to change their theories in light of new evidence. Semmelweis was “Educated at the universities of Pest and Vienna, Semmelweis received his doctor’s degree from Vienna in 1844 and was appointed assistant at the obstetric clinic in Vienna” (Zoltan). During this time childbed fever was plaguing maternity wards causing birthing mothers to have a high fatality rate. During this time germ theory didn’t exist as the current medical theory at the time was that health was determined by the balance of the four humours. The four humours was the idea that the human body had to balance blood, phlegm, black bile, and choler and that “The ideal person had the ideally proportioned mixture of the four”(Britannica 2017). Semmelweis ran different experiments to determine the cause of childbed fever ranging from changing a priest's pathway through the hospital to measuring if crowding was an issue. His breakthrough would come when he “got back to the hospital,” to find out that “One of his colleagues, a pathologist, had fallen ill and died” (Davis). The pathologist had cut himself in a surgery and died of similar symptoms present in childbed fever. He determined that cadaveric matter was the cause of childbed fever. Semmelweis demonstrated the scientific attitude as he clearly cared about his empirical data. He used his data to expand his knowledge and change his theories on causes of childbed fever. Semmelweis demonstrates how using the proper scientific attitude was able to help discover the causes of childbed fever.

Sources (78 words)

- Zoltán, Imre. "Ignaz Semmelweis". *Encyclopedia Britannica*, 9 Aug. 2022, <https://www.britannica.com/biography/Ignaz-Semmelweis>. Accessed 30 October 2022.
- Britannica, The Editors of Encyclopaedia. "humour". *Encyclopedia Britannica*, 16 Jun. 2017, <https://www.britannica.com/science/humor-ancient-physiology>. Accessed 30 October 2022.
- Davis, R. (2015, January 12). *The doctor who championed hand-washing and briefly saved lives*. NPR. Retrieved September 17, 2022, from

<https://www.npr.org/sections/health-shots/2015/01/12/375663920/the-doctor-who-championed-hand-washing-and-saved-women-s-lives>

Unit 3: Technical Description 1

1. Removing ambiguous words. In the following sentences, remove or replace ambiguous words.
 - When born, the baby was seven pounds and 23 inches tall.
 - The baby grew quickly, by the time she was 1 years old, she was 33.5 inches tall.
 - Radio transmissions between the Earth and Moon took 3 seconds which is a considerably long time due to their distance apart.
 - A hiker walked a 60 km trail in 4 days moving at an average speed of .625 km/hour assuming she didn't stop.
2. Spatial and temporal detail, perspective. Recall the exercise we performed in class, in which we wrote our favorite recipe. In this exercise, explain to the reader from where you are gathering the ingredients, and the recipe. Thus, the result should be a tract of writing that would enable someone to prepare the dish using your kitchen and pantry. Notice how this requires you to pay attention to both time and space.

My favorite recipe to make is chia seed pudding as it is a quick and healthy breakfast which has helped me get ready for swim practices and swim meets. To begin, enter my room and head to the bed to the left of the door. Underneath the bed, open the bottom left drawer and grab the plastic jar and $\frac{1}{4}$ measuring cup, and the jar of chia seeds. Then open the drawer on the top right to grab a container of almond milk. Lastly open the middle drawer on the left to grab the collagen protein and a container of honey. Take all of the ingredients and place it on the desk in front of the bed near the window. First measure $\frac{1}{4}$ cups of chia seeds and pour it into the plastic jar. Then use the scoop to add 1-2 scoops of the collagen protein. Then open the container of almond milk and add one cup or 4 scoops of the $\frac{1}{4}$ cup to the plastic jar. Finally, add a drizzle of

honey or a 2 second pour into the jar. Seal the jar and take it to the fridge with the microwave on top of it that is to the right of the door. Leave the jar inside the fridge for up to two hours minimum or 5 days maximum. When you are ready to eat the pudding, take it out of the fridge and add berries or oats if you desire it. The berries are located in the fridge on the second most top shelf. The oats are located in the middle left drawer under the bed to the left of the door. Grab a plastic spoon from the top left drawer and enjoy your breakfast.

Unit 4: Technical Description 2

1. Passive Voice

The acceleration of Earth's gravity, g , was measured with a pendulum. First, the length of the pendulum had been measured by me to be 20 cm. Second, the pendulum was hung straight down by me and the bob was displaced by 5 cm to my right. The pendulum was released by me and the number of times it returned to the same position was recorded for one minute. The time it took to return to its original position was calculated by me to be 0.90 seconds. The results were inserted by me into the formula predicted by Newton's Laws. The result for g was 9.81m/s^2 .

2. Rearrange the sentences to have the proper hierarchy of detail

The trials were conducted in a room with no air conditioning, and therefore no air flow. First, a sample of 20 infected people was gathered. The height of each subject was required to be within 6 inches of 5 feet 6 inches tall. Second, petri dishes were arranged in 0.5 meter intervals out to 10.0 meters on the floor in front of the subject. Third, once each subject felt the urge to sneeze, the subject was required to aim the sneeze down the line without covering their mouth. The average horizontal distance bacteria travel after a person sneezes was measured. Fourth, bacterial colonies were allowed to grow in the dishes for one week under ideal conditions. The results show that when a person sneezes, it is possible to spread infection to someone who happens to be 8.0 meters away. The category of dishes with the largest colonies were the ones corresponding to 8.0 meters. These results inform the epidemiology of spreading bacteria.

3. Rearrange the sentences to have the proper hierarchy of detail, and convert to passive voice. Remove ambiguous words, and make the writing more concise.

Original in proper hierarchy

We placed an eraser on a meter stick. We increased the angle between the meter stick and the table. We measured the angle with a protractor. We increased the angle until the eraser slid off the meter stick. Using a diagram of the forces, we show that the tangent of the angle is the friction coefficient. I measured the coefficient of friction to be 0.095. The tangent of the angle is measured many times. The average friction coefficient is 0.095. The standard deviation of the coefficient was 0.05. A future idea for an experiment is to change the temperature of the eraser and determine if the friction coefficient depends on temperature.

Revision

An eraser was placed on a meter stick by us. The angle between the meter stick and table was increased. A protractor was used to measure the angle. The angle was increased until the eraser slid off of the meter stick. A diagram of forces was used to show us that the tangent of the angle is the coefficient of friction. The coefficient of friction was measured by me to be 0.095. The tangent of the angle was measured multiple times. The average friction coefficient was 0.095. The standard deviation of the coefficient of friction was 0.05. A future experiment idea would be to change the temperature of the eraser to see if the friction coefficient is affected by temperature.