Do You Have the “Write Relationships”?

* At each station, there is a set of terms or concepts that we have discussed throughout the year and that will be on the semester exam.
* Your task is to describe the relationships between or among the terms as we have addressed them in class so far this year.
* You will be working with your table team and rotating from one table to the other until you’ve completed the task at each table.
* However each of you will have roles:
  + Person #1: Reads the statement or question for that station
  + Person #2: Researches and reads the answer in the resources available at the table
  + Person #3: Makes sure everyone has written down the right relationship statement
  + Person #4: Asks the table team if there are any questions, examples, or thoughts that need to be clarified before moving stations. Write down any responses the team mates give.
* Rotate the roles at the next table
* Each person needs to write the relationship on his/her own sheet of paper. Label each station and number the answer for each relationship.

Station #1: Thinking Like a Scientist

* You are a scientist in a lab are have discovered the cure for the common cold. You’ve gone through all of the proper steps of the experimental process and procedures. However a class of middle school students are taking a tour of your lab and need a few topics clarified for a quiz they are having about labs and experiments. Write the correct relationships in complete sentences for each of these terms that the students need to learn. Give an example of a relationship for each as well.

1. Independent variable: dependent variable
2. Scientific theories: new evidence
3. Repetition of experiments: replication of experiments
4. Requirements of a good experiment: models, hypothesis, data, test, calculations, graphs, variables, pictures, conclusion, test tubes

Station #2: “We Are Family”

On a jungle safari with your classmates, you come across some really exotic animals and plants. Some physical traits of these organisms look familiar, but you’re still not sure how to classify them or which organisms they are related to. Review what you know about these aspects of classification by writing down how these terms are connected to help you figure out the correct family of these strange, but cool looking animals and plants you’ve found.

1. Genus: species
2. Common ancestor: physical traits of organisms
3. Kingdom: species (and everything in between)
4. Scientific name: classification

Station #3: Going Cellular… “Can You Hear Me Now?“

As you trek across Mars in the amazing astronaut suit NASA just designed. You’re so excited to be a part of the first journey of humans on the moon, that you barely noticed this small clump of dirt on the top of your space boots. Curious, you collect some of it and put it under a microscope to observe. You are amazed to see movement as you study these super small structures. Could they really be living things, you wonder. You take out your notes and read about all of the traits of living things. You mainly focus on your cell notes to help you confirm your discovery… Tell us what you’re notes say about the following pieces of cell characteristics.

1. Eukaryotes: prokaryotes
2. Unicellular: multicellular
3. Plant cells: animal cells
4. Smallest to largest: atoms, organs, tissues,

molecules, organ systems, cells

Station #4: Cell City

You’ve just got back from your trip to Cell City and are showing all of your friends and family your passport with all the great stamps you received from each organelle and structure. But there are about 3 aspects of cells, your family and friends still don’t understand. Clear up some of their questions on these using complete sentences and specific information.

1. Nucleus: mitochondria
2. Photosynthesis: cellular respiration
3. Cell theory: cells: organisms

Station #5: “Head, shoulders, Knees, and Toes”

The human body is a fascinating structure. You have really enjoyed learning about all of the organ systems, structures, and tissues while in medical school. Now’s the final exam to prove you’re knowledgeable enough to be a medical doctor. You’re challenge is to explain how these terms are related to each other in order to prove to your professor, you’ll be a great doctor. Use complete sentences to describe what they look like and what they do.

1. Small intestine: large intestine
2. Functions of the Skeletal system: functions of the

excretory system

1. Parts of the skeletal system: parts of the nervous

system

1. Excretory system: waste: kidneys
2. Breathing: bronchi and alveoli
3. Mechanical digestion: chemical digestion

Station #6: “Do It Yourself”

Work together to find out what the answers are to #1-5. Each of you needs to put your first and last name on a notecard and the answers to all five questions. This will be a quiz grade.

Look through the micro-slide viewer and answer questions #1 and #2.

1. What type of cell is on the slide—a plant or an animal?
2. What part of the cell is the function of the structure being shown?

Using the materials in the box, build a model of the digestive system. Then answer the questions.

1. What did you use to represent the stomach? Why?
2. What did you use to represent the small intestine? Why?
3. What types of digestion occur in the mouth? What structures in the mouth help with each type of digestion?