**Community-Based Chronic Disease Prevention**

**WVU Extension-Lauren Prinzo**

1. Post a picture of your community seal from “My Hometown is Cool” activity.
2. Post 5 Pictures of your favorite places in your community OR write 5 sentences describing your favorite places.
3. Post a picture or recipe of your vegetable or fruit-infused meal.
4. Post a picture or recipe of your fruit-infused water.

**Preschool Children’s Health and Families**

**Dr. Te’ Allar**

Describe your final product and why you chose it in 5 sentences here. Send your teacher a copy of your final product or post it here.

**Human Anatomy and Spread of Disease**

**Dr. Rosa Santos**

**Section 1: The Heart**

Match the anatomy to the function.

Heart Anatomy:

1. Pulmonary veins
2. Aorta
3. Right atria
4. Left atria
5. Right ventricle
6. Left ventricle
7. Pulmonary arteries
8. Pulmonary trunk

Heart Function:

1. Heart chamber that receives deoxygenated blood. \_\_\_\_

2. Vessels that bring oxygenated blood to the heart. \_\_\_\_

3. Heart chamber that pumps oxygenated blood out of the heart. \_\_\_\_

4. Vessels that bring deoxygenated blood to the lungs. \_\_\_\_

**Section 2: Respiratory System**

Consider the following common items and think of ways of how they relate (or are similar to) the respiratory system:

1. Broccoli:
2. Grapes:
3. Balloon:
4. Duct system in a house (heat/air conditioning system)

**Section 3: Circulatory System**

Answer the following questions on the Respiratory System:

1. Describe gas exchange at the lungs. What gases flow into and out of blood? What gases flow into and out of the alveolus?
2. Describe gas exchange at tissues in the body. What gases flow into and out of blood? What gases flow into and out of tissues?

**Section 4: Infectious Diseases**

**Activity A-FaceTime**

Hypothesis Time:

Make a prediction- how often do you think this person touches their face in 1 hour:

Observations (type your notes here):

Summary of Observations:

* + How long did you observe this person:
  + What were they doing when you observed them:
  + How many times did this person touch their face:
  + How many times did this person touch their eyes:
  + How many times did this person touch their nose:
  + How many times did this person touch their mouth:
  + If this person acted the same all day, how often would this person touch their face in 1 hour?

Conclusion (Was your hypothesis correct? What did you learn? Did anything surprise you?):

**Activity B- Watch your technique**

Answer the following questions about your observations.

1. After you washed your hands using your normal hand washing technique, was there any GloGerm on your hands?
2. If you saw GloGerm after washing your hands normally, where on your hands did you visualize GloGerm on your hands? (Be specific for example: under finger nail on right pinky)
3. What did you learn from this exercise?

1. Did this exercise influence you to change the way you wash your hands normally?

**Activity C- Watch the spread**

Hypothesis time:

Make some predictions about the spread of GloGerm at each time point.

Where do you think you will find GloGerm after:

* 30 min:
* 1 hr:
* 4 hrs:
* Time experiment started:
* Note the spread of GloGerm that you observed after each time point. (Use as much space as needed).
  + 30 min:
  + 1 hour:
  + 4 hours:

Conclusions:

Summarize what you observed. Was your hypothesis accurate, partially accurate, or incorrect? Did you observe any spread of GloGerm that you were not directly responsible for? What did you learn about the spread of germs with this experiment? Did this experiment influence your or your family’s hygiene? If so, how? Write 5 sentences about your experience.

**Exercise Physiology**

**Dr. Emily Murphy and Danny Bonner**

Write 3-4 sentences about your plan to improve your aerobic capacity.

**Lab Sciences**

**Dr. Mike Gunther**

Post the picture of your lab results here or send a picture to your teacher.

Write 5 sentences about what you learned about PCR and antibody testing and the lab work it uses.

**Medical Sociology**

**Misty Harris**

In Part 3, you have looked at various population health data for the U.S. and West Virginia and took notes. List 5 things that you learned from the data below.

While completing the “What are Data?” Action Learning Guide in Part 4, answer the following questions with at least one sentence.

1. What questions do you have about the health of your community?
2. How could you use data to answer those questions?
3. Which data collection methods could be useful for your work?
4. Which existing data sources could be useful for your own work?
5. What about your County Health Rankings snapshot surprised you?
6. What questions does your snapshot raise for you?

While completing the “Introduction to Equity” Action Learning Guide, answering the following questions with at least one sentence:

1. When thinking about equity vs. equality, what parts remind you of your experience as an individual?
2. What parts remind you of your community?
3. As you think about your community, how do opportunities differ between neighborhoods or groups of people?
4. What do you think has contributed to those differences?
5. What could be done to change them?
6. What might motivate you and others in your community to focus on equity to improve health?

**Instance and Prevalence of COVID-19 and Movement**

**Dr. Amanda Stewart**

**Choose your Communities**

1. Briefly describe the two communities you have selected. How are they different? Alike?
2. Why did you choose the second community? (What was interesting to you that led you to this choice?)
3. Considering disease OTHER THAN Covid-19 in your two selected communities, briefly answer the following questions, using the internet to help you:
4. What are a few of the actual and potential health problems in each community?
5. Which populations are at increased risk? (for example, young, elderly, sedentary)
6. How do these patterns relate to the availability of public health services? (ie is there a hospital? How many people does it serve? Is there a health department? What basic health services are available or missing?)

**Get Familiar with the Data**

Write at least 5 sentences about what you learned from the data sources you explored. Be sure to included comparisons between the two communities you chose above.

**Zebrafish**

**Becca Coltigerone and Dr. Sadie Bergeron**

Topic 1

In the space below, write a brief discussion (at least 5 sentences) explaining what you learned. How are zebrafish used in research? Why are they used? How might they be used in a topic of your interest? Did you find anything else interesting?

Topic 2

In the space below, write a brief reflection (at least 5 sentences) explaining how you would feel about doing this in your own classroom. Would you enjoy working with zebrafish? Do you think your science classroom(s) have the capability to implement a tank? What topics would you like to use zebrafish to understand better? Do you have any other ideas or comments?

Idea Walk

What is your question/problem?

Why did you select this question/problem?

What is your hypothesis?

What will your control group be?

What will your experimental group be?

How many times would you repeat your experiment?

What results do you predict?

Why would your results be relevant to the greater scientific community?