

Anatomy and Physiology Quick Planning Guide

Activity Ideas (Complete in School)	Prep and Follow Up Ideas (Complete in School or at Home)
<p style="text-align: center;">Topic 1: Introduction to Science Course and Nature of Science Standards: SC.912.N.1.1</p>	
<ul style="list-style-type: none"> • Introduction to class • Safety discussion • Graphing Practice: this activity could be started in class and finished at home. • Science Practices Discussion • Early Discoveries in Science - CER - this activity can be used to teach how to write a CER (Claim, Evidence, Reasoning) • Independent and Dependent Variable Scenarios - Students can work in groups to determine IV and DV 	<ul style="list-style-type: none"> • Lab Safety Challenge from Flinn: Students can watch the video at home and take notes on safety violations. Students then bring back the notes and discuss them as a whole group. • Investigation: How Does Exercise Affect Heart Rate: This is an activity that can be designed around scientific practices and done at home. The teacher can have on line data collection for the students or multiple trials for the students to do themselves.. • Graphing Practice: This could be an at home lab as long as the students can communicate with their classmates. • Additional support at home: CPALMS interactive tutorial on Testing Scientific Claims. • What's The Difference Between A Scientific Law and Theory? - Students can watch video to reinforce the differences of a law and theory
<p style="text-align: center;">Topic 2: Introduction to Anatomy This unit encompasses a variety of standards and provides background to the students on the interconnectedness of the human body.</p>	
<ul style="list-style-type: none"> • This graphic organizer of the human body systems could be introduced in class and completed at home. • This graphic organizer from Biology Corner can be used as a formative assessment after students have completed their own graphic organizer as listed above. • Discovery Channel: Thermoregulation in Animals is a four minute video that discusses temperature regulation in elephants and penguins. 	<ul style="list-style-type: none"> • Teachers can show the Bozeman Biology video that introduces the topic of anatomy and physiology and further expand on the idea in class. • Students can read the following Khan academy article on homeostasis. • PBS: Understanding Dynamic Systems is a self-paced interactive lesson that teaches students how to identify and analyze a system. Practice questions are included and the assignment can be easily added to google classroom.
<p style="text-align: center;">Topic 3: Immune System Standards:</p>	

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| <ul style="list-style-type: none">• Discussion of the immune system components and basic responses are suggested in class if possible.• Disease Transmission Lab and graphing simulations: This website has many different activities for disease transmission. There's a hands-on lab, interactive graphing, info on Typhoid Mary and COVID-19 readings.• This Case study does a thorough job discussing vaccines and their relationship with the immune system. It would require in class discussion and then can be worked on at home. Students should be comfortable with the immune system function before they work on this assignment. | <ul style="list-style-type: none">• The following Crash Course videos can be viewed at home to reinforce ideas discussed in class about the immune system. There is a Part 1 and Part 2.• CPALMS informational text activity: The Immune System; This reading assignment could be given as independent work. However, the vocabulary could be discussed in class, and then allow the students to finish it at home.• The Blackout Syndrome: this is a fun online mystery game teaching students how diseases are spread. Takes about 20-30 minutes. |
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