

**WEEK OF:** March 22, 2021

**Class:** Biochemistry – A/B/C/D Blocks

**Teacher:** Mrs. Burke

**Contact Info:** [Deborah.Burke@thedeltahighschool.com](mailto:Deborah.Burke@thedeltahighschool.com), Teams, and Remind

**Office Hours:** 1:00-1:30 MTRF, 1:00-2:00 W

**Zoom Links:** See Teams “Meeting Links” channel for class and office hour access

**Objectives:**

- Develop understanding of Fever: regulation, scientific determination of “typical”
- Explore heat and structural change in proteins
- Develop understanding of amino acid structure and protein synthesis and decomposition
- Utilize molecular models to explore and communicate

<b>Synchronous Agenda</b>	
Lesson 1	Fever regulation (IL-1 and hypothalamus), “typical” values determination, bias
Lesson 2	Amino acid structure, dehydration synthesis, hydrolysis to decompose, molecular models

<b>Asynchronous Responsibilities</b>	
Resource Interactions	<p><b>Select one Enzyme item AND one Protein item</b></p> <p><b>Enzymes:</b></p> <p><b>Reading</b> “The Effects of Temperature on Enzyme Activity and Biology” <a href="https://sciencing.com/effects-temperature-enzyme-activity-biology-6049.html">https://sciencing.com/effects-temperature-enzyme-activity-biology-6049.html</a></p> <p><b>Video:</b> “Explain factors affecting enzyme activity” <a href="https://www.youtube.com/watch?v=D2j2KGWJXJc&amp;t=134s">https://www.youtube.com/watch?v=D2j2KGWJXJc&amp;t=134s</a></p> <p><b>Proteins:</b></p> <p><b>Reading:</b> “Proteins”(read all three pages – click at bottom to navigate) <a href="https://www.bbc.co.uk/bitesize/guides/zswqq6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zswqq6f/revision/1</a></p> <p><b>Video:</b> “Protein – Structure Of Protein – What Is Protein Made Of – Structure Of Amino Acids Building Blocks” <a href="https://www.youtube.com/watch?v=Gi9A56nu01E">https://www.youtube.com/watch?v=Gi9A56nu01E</a></p>
Activities	<ol style="list-style-type: none"><li>1. Describe how you will organize your journal – Teams “Response Prompts” channel assignment</li><li>2. Cook a protein (meat, poultry, seafood, egg) and record the changes as heat is applied.</li></ol>
Worksheets	N/A
Journal Entries	<ul style="list-style-type: none"><li>○ Prep for entry task: Why are fevers dangerous? <i>Be ready to put SOME INFO into the chat when you arrive to Lesson 2</i></li><li>○ Lab response</li></ul>

	<ul style="list-style-type: none"> <li>○ Vocab: enzyme, denature, rate of reaction, substrate, dehydration synthesis, hydrolysis</li> <li>○ <u>Resource Interaction Responses:</u> Interaction key concept summary sentences and/or annotated drawing Examples Questions and/or ponderings you have</li> </ul>
Quiz	N/A

### Asynchronous Time

Complete resource interactions, activities, journal entries

Work with others to support and enhance learning

Attend office hours: seek assistance, share resources and information, work with others

### **DUE DATES:**

**A Cohort/Distance Classes - Due by Monday March 29<sup>th</sup> at 8:00 AM:**

**B Cohort - Due by Thursday April 1st at 8:00 AM:**

- Engage with required resources
- Respond to the prompt assignment
- Complete the lab activity
- Complete ALL journal entries