

## ARC Week at Glance: IB Biology Year 2 (Ms. West)

**Topic:** Unity and Diversity – Molecules

**Course:** IB Biology Year 2

**Grade:** 12

**Dates:** Aug 11-15

Note: For lesson resources, handouts, etc., please see our Canvas Course.

**This week's Homework Focus:** Kognity Topic A.2.1 & Guided Notes Sheet

	Learning Target (I am learning about...)	Criteria for Success (I can...)	Activation/ Instruction	Collaboration/ Guided Practice	Independent Learning/ Assessment
			<i>(Include at least one/two formatives*in any part of the lesson as needed)</i>		
Monday	I am learning about physical properties of water and the consequences for animals in aquatic habitats	I can ... <ul style="list-style-type: none"> <li>Describe the following properties of water: buoyancy, viscosity, thermal conductivity, and specific heat capacity</li> <li>Contrast physical properties of air and water and illustrate the consequences of both for the black-throated loon and the ringed seal</li> </ul>	Math Monday Do Now – Calculations Practice  Mini lecture water properties	Jig Saw Activity – aquatic animal and reliance on water properties (black-throated loon and ringed seal) using InThinking Guided Sheets to direct student group thinking and research	Heart Rate CER Lab Assessment Check

Tuesday	I am learning about the origin of water and the necessity of water for extraterrestrial life	I can ... <ul style="list-style-type: none"> <li>• Explain the evidence for the origin of water (asteroids, retention to gravity, and low temps to condense water)</li> <li>• Describe the relationship between the search for extraterrestrial life and the presence of water</li> <li>• Explain the idea of the Goldilocks zone</li> </ul>	Test Prep Tuesday Do Now – CER  Kognity Video Clips – Origins of life on Earth and Goldilocks Zone	Brainstorming Boards – time in between each video clip to brainstorm thoughts, questions, reactions to information presented  Quick Research Task: Hypothetical types of biochemistry – non-water solvents	TOTD: Define “life” TOK writing prompt
Wednesday	I am learning about nucleic acids.	I can ... <ul style="list-style-type: none"> <li>• Describe the structure of nucleic acids</li> <li>• Describe the structure and role of the nucleosome</li> <li>• Distinguish between DNA and RNA</li> <li>• Describe the universality of the genetic code as evidence of common ancestry</li> </ul>	WIS WIM Do Now – Summarizing Sentences and Question Writing	Nucleic Acids Quick Revision Graphic Organizers  DNA Isolation Lab – Fruit Inquiry	Mid-Week Assessment Check – Data Analysis Focus

Thursday	I am learning about DNA experiments	I can ... <ul style="list-style-type: none"> <li>Describe the Hershey-Chase Experiment and results</li> <li>Explain Chargaff's data</li> </ul>	Throwback Thursday Do Now – MCQ & Justification Writing  International Mindedness Focus: Mexico	DNA Experiments Mini Posters & Presentations	DNA Experiments Summaries TOTD  IA Topic Proposal Assessment Check
Friday	I am learning about LUCA	I can ... <ul style="list-style-type: none"> <li>Describe how it is likely that other life forms evolved, but were outcompeted by a last universal common ancestor (LUCA)</li> <li>Outline approaches to estimate the time over which life has been evolving on earth.</li> <li>Outline the evidence that supports the existence of a LUCA</li> </ul>	FRQ Friday Do Now – Free Response Answer Construction & Self-Assessment	LUCA – Kognity TimeLine Activity	LUCA TOK TOTD

Literacy Tasks

Minor Assessment

Major Assessment