

Grade 9, 10

Distance Learning Module X: Week of: April 6 - April 10

Content Area: Biology - Modified from [Unit # 3 - Cell Transport](#)

Targeted Goals from Stage 1: Make observations and ask questions to define a problem based on prior knowledge and curiosity that stimulates further exploration, analysis, and discovery.

Content Knowledge:

Every living cell exists in a liquid environment that it needs to survive

Because diffusion depends upon random particle movements, dissolved molecules move along a concentration gradient across the cell membrane without requiring energy.

Vocabulary: polar, non-polar, solute, solvent, kinetic energy, atom, molecule, proton, neutron, electron, cohesion, adhesion, mixture, solution, solute, solvent, concentration, diffusion, equilibrium, osmosis, hydrogen bonds

Skills: Use a model to illustrate the organization of interacting systems that provide a specific function within a multicellular organism

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Students will be able to describe the effects of placing either sugar and salt into a tub of water.	Section 2-2 Property of Water Notes Phet Interactive of Sugar and Salt Solutions	Phet Lab Activity Questions
Tuesday: Students will be able to describe how hydrogen bonds explain the cohesive and adhesive properties of water.	Polar and Nonpolar Bonds and Molecules Video (3 min) TED ed Video on Cohesion and Adhesion	Edulastic Properties of Water Check-In Edulastic PDF Copy of Properties of Water Check-in

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
		Google Form
<p>Wednesday::</p> <p>Students will be able to explain how the kinetic energy of molecular motion explains the diffusion of molecules in a solution</p>	<p><u>Kinetic Molecular Theory of Energy</u></p> <p>Video of Food coloring dropped into glass of water, effects of temperature on kinetic energy</p>	<p><u>Edpuzzle Diffusion</u></p>
<p>Thursday: Students will be able to explain how the proportions of a solute and a solvent results in the concentration of a solution</p>	<p><u>Edpuzzle Calculating Concentrations of Solutions</u></p>	<p><u>Calculating and Comparing Concentrations of Solutions</u></p>
<p>School is closed for Good Friday. We have provided some optional activities for interested students. There is no obligation to complete any of these activities and students will not be behind their classmates if they do not complete them.</p> <p>Friday:</p> <p>Students will participate in a check- in quiz/assessment for Section 2-1 and 2-2</p>	<p><u>Matter and Properties of Water Quiz</u></p>	<p>Submitted Quiz Options</p> <p>Edulastic</p> <p>Google Form</p> <p>Scanned completed quiz</p>

Week criteria for success

Students will be assessed on their completion of the activities for the week and performance on the Friday assessment of vocabulary/concepts

Supportive resources and tutorials for the week (plans for re-teaching):

Biology Textbook Chapter 2

Section 2-2 Property of Water Notes