

Grade 9, 10

Distance Learning Module 5: Week of: 4/27 - 5/1

Biology – Level 2 *Modified from [Unit 3 - Cell Transport](#)*

Targeted Goals from Stage 1: Desired Results

Content Knowledge:

1. Because diffusion depends upon random particle movements, dissolved molecules move along a concentration gradient across the cell membrane without requiring energy.
2. Osmosis is the diffusion of water through a selectively permeable membrane
3. Cells also move dissolved molecules against a concentration gradient across the cell membrane in a process called active transport

Vocabulary:

Mixture, solution, solute, solvent, cell membrane, concentration, concentration gradient, diffusion, semipermeable, equilibrium, osmosis, isotonic, hypertonic, hypotonic, facilitated diffusion, active transport,

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 use Chapter 7 from the textbook to complete the 7-3 Cell Boundaries worksheet.	Chapter 7 (Textbook PDF) 7-3 Cell Boundaries Worksheet	Options: <ul style="list-style-type: none">- Edulastic version of the worksheet.- Snapshot of the printed hardcopy version of the worksheet.- Snapshot of answers to the Edulastic

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
		hardcopy written on a piece of notebook paper.
Tuesday: Students will watch a video about cell transport and answer a set of questions while watching the video.	Amoeba Sisters: Cell Transport Amoeba Sisters: Cell Transport Video Questions	Snapshot of answers to video questions drawn and written on a piece of notebook paper. (many of the questions require the student to draw a picture, so this type of product best suits the assignment)
Wednesday: Students will complete the Membrane Structure and Function POGIL activity.	Membrane Structure and Function POGIL	Options: <ul style="list-style-type: none"> - Edulastic version of the POGIL activity questions. - Snapshot of the printed hard copy version of the activity.
Thursday: Students will incorporate the concept of facilitated diffusion and active transport into their models. This will be in an effort to compare and contrast what is happening with the egg vs. these two newly learned processes that occur in a cell. Incorporation of the concepts of hypertonic, hypotonic, and isotonic solutions should also be added to the models.	Osmosis Lab - Distance Learning Activity (aka: the model)	Snapshots of the changes made to the student models. Changes should include depictions of facilitated diffusion and active transport.
Friday: Students will complete a formative assessment that covers the week's content.	Weekly Check-In (Edulastic)	Edulastic Formative Assessment Snapshot of the completed hardcopy version of the Edulastic Formative Assessment

Week criteria for success (attach student checklists or rubrics):

Successful completion of the daily assignments, accurate additions made to student models, and completion of the weekly check-in assignment.

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

- ☐ Video chats with the teacher to answer questions.
- ☐ Amoeba Sisters instructional and assessment videos
- ☐ Pre-recorded instructional videos from the teacher