

ALTERNATIVE LESSON PLANS FOR DISTANCE LEARNING

These alternative lesson plans condense what is taught and suggest ways to support students learning at home. We acknowledge that every situation is unique and strive to provide plans that can be used online or as printed packets. Focus on fewer scientific principles. Use print and audio readings. Share the videos that you can. Discuss if you can.

UNIT TITLE	LS2
DRIVING QUESTION	What is going on inside me?

Lesson 1 (2 days)	<i>How Do I Do the Things I Do?</i>
Activity 1.1	What Is Inside Me? Share PI 1)Field of View, 2)Cheek Cells and Skin Cells, 3)Heart Tissue and Heart Cell Lesson 1 - Video: 1.1: Heart Muscle Cell (Cardiomyocyte)
Reading 1	<i>How Did Scientists Find These Tiny Cells?</i>

Lesson 2 (2 days)	<i>Where Else Can We Find Cells?</i>
Activity 2.1	What Is in My Yogurt? Share PI Yogurt Bacteria; search for YouTube video on yogurt bacteria
Activity 2.2	Are There Cells in a Drop of Water? search for YouTube video of amoebae
Activity 2.3	How Do All These Compare? YouTube video, Share: PI 1)Cheek Cells and Amoeba, 2)Amoeba Engulfing Food, 3)Amoeba Dividing
Reading 1	<i>Cells: Here, There, Everywhere</i>

Lesson 3 (1 day)	<i>Am I a System?</i>
Reading 1	<i>Systems, Systems, and More Systems</i>

Lesson 4 (3 days)	<i>What Is Breaking Food Down Inside Me?</i>
Activity 4.1	Lab: Grind, Slush, and Down – complete if students are able to obtain crackers Share “Levels of Organization” Chart from TE 82 Share PI: 1)Cheek and Skin Tissue, 2)Mouth, Esophagus and Stomach, 3)Path for Food, 4)Structure of the Small Intestine – share the path through these organs
Activity 4.4	What Happens to the Food Molecules in the Small Intestine? (Students could use paper towel or napkin at home)
Reading 1	<i>Out with the Bad, In with the Good!</i>

Lesson 5 (3 days)	<i>How Does Food Move in My Body?</i>
Activity 5.1	Can Food Molecules Move through My Body? Share PI: 1)Map of Street System, 2)Human Circulatory System, 3)Villi and Capillaries, 3)Human Blood, 4)Glucose Levels, search for YouTube video of Circulatory System.
Activity 5.2	Can Water Move into the Cell? Share PI: 1)Molecular Workbench Diffusion Model, 2)Onion and Cheek Cell Comparison, search for YouTube video of Osmosis and Diffusion
Reading 1	<i>The Ins and Outs of Osmosis</i>

Lesson 6 (2 days)	<i>The Case of the Missing Oxygen</i>
Activity 6.1	“Breathe in, Breathe out . . .” Lab 1 only - Share: You Tube video of Bromothymol blue changing color with only a breath
Activity 6.2	Inspector Bio: What Happened to the Oxygen and Why? Share: YouTube video of respiratory system
Reading 1	<i>Aahhhh- Choo! Cough-Cough! Whh- eEEez!</i>

Lesson 7 (2 days)	<i>Growth and Repair</i>
Activity 7.1	What Is Inside a Bone? Share PI 1)Skeletal System, search for image of cross section of large animal long – leg bone (showing bone marrow)
Activity 7.2	How Do Cells Make More Cells? Share: search for YouTube Video of Mitosis Use discussion prompts in blue box TE 198 and discussion synthesizing Lesson 7 - Video 7.2: Mitosis (Fruit Fly)
Reading 1	What Is My Skeleton Made Of?

Lesson 8 (1 day)	<i>Can My Systems Keep Up the Pace?</i>
Activity 8.1	What Is the Rate? (caution for students who may have health conditions not tolerate exercise well - may also need to share how to find pulse and count)
Reading 1	<i>Organisms’ Balancing Acts</i>

Lesson 9 (1 day)	<i>How Does All This Energize and Repair Me?</i>
Activity 9.1	Where Is Food Used in My Body?
Reading 1	<i>SimCell</i>

Lesson 10 (1 day)	<i>How Does All This Work Together Inside Me?</i>
Reading 1	<i>What Happens When I Get the Chills?</i>

Lesson 11 (1 day)	<i>What Is Going on Inside Me?</i>
Activity 11.1	How Does Everything Work Together?

SUMMATIVE ASSESSMENT: Students will construct a scientific explanation to answer the Driving Question “What is Going on Inside Me?” and to address four areas: energy, systems, results, and control.