Cells Stations Instructions

TOC 14: Cell Biology (ck12.org)

E.Q. Are all cells the same? Why or why not?

Read, annotate, and complete the Explore More activity and Review Questions.

Brain Pop: Cell Specialization (for all Brain Pop videos: please watch the video, take the quiz and write down the questions with the correct answer)

TOC 15: Prokaryotic and Eukaryotic Cells (ck12.org)

E.Q. How are bacteria unique?

Read, annotate, watch the animation of the two types of cells, and complete the Explore More I, II, and III. The link in Explore More I no longer works, but there is a good video embedded in the article at ck12.org.

Brain Pop: Bacteria

TOC 16: Plant and Animal Cells

E.Q. What are the structures of a cell for?

Use the icell app (or you may use the textbook p.524-525) to define the cell structures and add color.

TOC 17: Comparing Plant and Animal Cells

E.Q. What are the differences between plant, animal, and bacterial cells?

Read, annotate, write something that surprised you, and complete the Venn diagram along with the comparison chart.

TOC 18: Diffusion, Osmosis, and Active Transport

E.Q. How does the cell membrane control these three processes? Why are they important?

Read, annotate, and complete the Beaker page.

Brain Pops: Passive Transport, Active Transport, and Diffusion

TOC 19: Cell Theory: Historical Timeline

E.Q. What are the parts of the cell theory?

Go to you tube and watch “The wacky history of cell theory” by Lauren Royal-Woods (TED Ed video). Complete the activity page using both the video and the textbook p. 512-514.

TOC 20: Photosynthesis and Respiration Model

E.Q. Why are photosynthesis and cell respiration looped together on this model?

Follow the instructions to Examine the Details. For the Apply What You Know section, you may NOT answer the questions with a simple “they gonna die”. Explain what happens to the cell process using the chemistry from the model. Also complete the Big Ideas.

TOC 21: Cells at Work: Photosynthesis/Respiration

E.Q. From TOC 20 Big Ideas – What is an inverse reaction?

Read, annotate, and highlight the Reactants and Products of the chemical equation.

Brain Pop: Cellular Respiration

TOC 22: Asexual vs. Sexual Reproduction

E.Q. What are the main differences between asexual and sexual reproduction?

Watch the Brain Pop: Asexual Reproduction. Write up the Quiz as usual, then complete the Activity vocabulary and create a Venn diagram to compare the methods of reproduction including examples of protists, bacteria, plants, and animals.

Brain Pop: Mitosis

TOC 23: Cell Analogy

E.Q. How are cells like little factories?

Everyone in the group must complete a planning sheet; only one construction paper illustration is to be created.

Brain Pop: Cell Structures