

INTRODUCTION TO CELLS / LESSON OVERVIEW

Objectives

The students will:

- be able to define key vocabulary terms and concepts on the topic of cells along with the order of life;
- learn about the different types of cells (eukaryotic and prokaryotic) and the differences between them;
- understand the differences between a bacteria, animal and plant cells;
- and learn the proper Order of Life starting with the cell all the way to an ecosystem.

Lesson Summary

Part 1. What are Cells?

Students will define "cells", learn their characteristics, classify them, and understand that cells are the building blocks of life.

Part 2. The Order of Life

Students will learn the "Order of Life" and understand its importance in the scientific world.

Part 3. Activity

We recommend doing this activity at the end of the lesson and can be done in class or assigned as homework. In this activity, students are expected to use technology to research information to help them explain what they have learned about cells and the Order of Life.

First, students will use the OCEARCH Global Shark Tracker to select three different sharks that are currently in the same general location. Students will record information about the sharks such as their names, their species, their lengths, when and where they were tagged, and the total distance that they have traveled so far.

Students will then use this information to draw conclusions and answer questions (handout provided) about the life history of the sharks they have selected. Finally, they students will create a poster that illustrates their findings. The poster should include pictures, an explanation of the Order of Life, and how it relates to their sharks.