

Where We Come From Unit Plan Overview

Day 1

Diagnostic Assessment

A KWL Chart will be completed and used as the Diagnostic Assessment. Note if there are any students who are very familiar with the material from the unit. If so, these students may need additional instruction beyond most of the class.

Lesson Plan: Wild Babies

During this first day of the unit, students consider the sources of our traits and characteristics. This activity is designed to get the students thinking, intrigue their interests, and involve them in class discussion. A KWL Chart will be initiated and used as the Diagnostic Assessment.

Days 2-3

Lesson Plan: How Unique Are You?

In this second lesson of the unit, *Where We Come From*, the students use traits that they each possess to gain further understanding of the dominant and recessive traits. In groups they survey the class for various dominant and recessive physical trait characteristics. Groups create bar/circle graphs, compile class data into a table, calculate percentages, and recognize characteristics of dominant and recessive traits.

Days 4-5

Lesson Plan: Marshmallow Babies

In this third lesson of the unit, *Where We Come From*, students will pair up “chromosomes” and interpret the genotypes and phenotypes; then use those genetic traits to create their own Marshmallow Babies. This is my modified version of an activity published by Patti Sorderberg in *The Science Teacher*, November 1992, pp 28-31.

Days 6-7

Lesson Plan: Pair ‘Em Up!

In the fourth lesson plan of the unit, *Where We Come From*, students learn how to use and verify the validity of Punnett squares by using a Weblink for instruction. They will also simulate a real-world situation by drawing “chromosomes” from a paper bag. Data will be tracked, students will calculate percentages, and cross check their predictions and results by using a Punnett square.

Day 8

Lesson Plan: 50:50 Chances

This is the fifth lesson in the unit, Where We Come From. Students reinforce the probability of gender by using a coin toss, as they continue to search for the answers to genetics questions by using mathematical expectations of probability.

Day 9

Lesson Plan: Decoding DNA

This is the sixth and final lesson plan in the unit, Where We come From, and is an extension activity that reflects the standards for Marion County Schools in Florida for eighth grade. Students complete their KWL Charts from the first lesson of the unit as a review for the summative. Then they decode a secret message using the four basic components of DNA, adenine, cytosine, guanine, and thymine.

Day 10

Summative Assessment

The summative is in the form of a test.

Students are assessed on the standards for the entire unit.

