

7th Grade Teacher Information

Unit 3 Genetics and Heredity

SCI.7.14A Define heredity as the passage of genetic instructions from one generation to the next generation.

SCI.7.14B Compare the results of uniform or diverse offspring from sexual reproduction or asexual reproduction.

SCI.7.14C Recognize that inherited traits of individuals are governed in the genetic material found in the genes within the chromosomes in the nucleus.

Activity 1 Learning About Genetics

Materials: none needed

Focus: I can define heredity as the passage of genetic instructions from one generation to the next generation.

Language Objective: I can gather information by reading.

Activity 2 Observing Traits

Materials: none needed

Focus: I can describe how the genetic material found in genes governs inherited traits.

Language Objective: I can identify my inherited traits by comparing them to a picture.

Activity 3 Dragon Genetics

Materials: colored pencils, bags of chromosomes, scissors, glue

Copy MOM chromosomes on to pink paper and DAD chromosomes on to blue paper. Make enough so each student will have chromosome 1, 2 and 3 from MOM and 1, 2 and 3 from DAD.

Focus: I can describe the phenotype and genotype of various organisms

Language Objective: I can read a chart and use it to analyze data.

Activity 4 Asexual Reproduction

Materials: scissors, glue, ameba and paramecia pictures

Download Budding and Shmooing video, Binary Fission video, Asexual Reproduction in Plants and Bacteria Multiplying video from website.

Focus: I can compare the results of sexual reproduction or asexual reproduction as being uniform or diverse offspring.

Language Objective: I can gather information by listening and watching a video.

Activity 5 Diverse or Uniform?

No materials needed

Focus: I can compare the results of sexual reproduction or asexual reproduction as being uniform or diverse offspring.

Language Objective: I can use strategic learning techniques such comparing and contrasting to acquire basic and grade-level vocabulary.