

# 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.