Lesson Plan | Tear Sheet Title Unit Topic | Significant Idea Class Duration Age

What's with all the bugs? Diversity 1hr 15minutes 9-10



## **Process Documentation**



## **Finished Works**



## **Overview**

Students discussed ideas about diversity and evolution. Why have species developed so many ways to exist? How do their different features benefit them? They looked at a large variety of insects and discussed some of the identifying characteristics of them: three body parts, six legs. They then used decorative papers to create chine collé collages of invented insects. These were run through a printing press to emboss the insects with dimension.

## **Essential Question**

Why is diversity important?

# **Learning Objective**

Students will learn that they can create a wide range of insects through chine collé and embossment.

#### **Linked Assessment Outcomes**

Students will recognize the diversity of the insect species.

Students will identify the parts of an insect.

Students will observe the distinguishing parts of different kinds of insects.

Students will correlate different insect parts to different functions.

Students will assemble paper insects with the appropriate number of parts for insects.

Students will invent a diversity of new species of insects out of paper based on their new knowledge of insects.

#### **Content Standard Connections**

VA:Cr2.1.5 a. Experiment and develop skills in multiple artmaking techniques and approaches through practice.

VA:Cn10.1.4. a. Develop a work of art, based on observations of surroundings.

#### Science Standard

3-LS3 -1 Heredity: Inheritance and Variation of Traits. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

## Vocabulary

Diversity – a big collection of different kinds of things.

Bio-diversity – a wide range of living things

Insect – an invertebrate animal with three body parts (head, thorax, abdomen)

Head – the front section of an insect.

Thorax – the middle section of an insect, usually where wings are attached.

Abdomen – the third section of an insect, tail area.

Chine-collé – literally French for 'tissue-glue'

Embossment – raising one section of paper above the rest of the surface

Print press - A mechanical tool for using pressure to create an image

Deckle edge—the edge of torn paper, where it shows the fibers

Symmetry – the balance of parts on both sides

#### **Developmental References**

Davies, D. & Jindal-Snape, D. et all. (2013) Creative learning environments in education —A Systematic literature review. *Thinking Skills and Creativity*. Vol. 8 April 2013 pp 80-91

Petzoldt, M. (2008) Using art to get kids into and doing science. Science Scope. Feb. 2008. 31, 6. Pg 42.

### **Guided Discussion Questions**

How do we sort animals?

What are the defining characteristics of insects?

Why is there such a diversity insect types?

What function do the differences serve?

If we only had one shirt to wear, one meal to eat, etc., what would life be like?