Lesson Title:Using all your senses to observe natureGrade:3-4Week:1Topic: Observation

#### **Lesson Objectives:**

- Students will be able to demonstrate understanding of various art concepts through drawing activities.
- Students can use their senses to determine the characteristics about different objects.
- Students can accurately describe and depict what they are "observing" using their senses.

**Art/Science Inclusion** (brief description of how your lesson presents an integration of art and science concepts.)

 Using observational skills including the 5 senses, along with art concepts such as scale, texture, color, and shape, to examine objects in nature and accurately describe and portray them

**Art Open-Ended Question** (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))

- How will students explore objects in nature through scientific observation?

**Art Education Standard** (should include at least one, see https://www.arteducators.org/learn-tools/national-visual-arts-standards)

- Apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process.

**Science Education Standard** (should include at least one, see <a href="https://www.doe.in.gov/standards/science-computer-science">https://www.doe.in.gov/standards/science-computer-science</a>, NGSS also great)

- -Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

Timeline	Lesson Description
- 5 min	- Introductions
- 5 min	<ul> <li>Change blindness video and tie in to observation</li> <li><a href="https://youtu.be/14Nb45CS9og">https://youtu.be/14Nb45CS9og</a></li> </ul>
- 20 min	- Mystery Box activity

Students will work in small groups to determine the identity of unknown objects using observational and questioning skills
 Demonstration and explanation of blind contour drawing
 Blind Contour Drawing and Observational still life drawing activities
 We will be outside during this time allowing students to work on the two different drawing activities focusing on using different observational skills to describe and draw various objects in nature
 Wrap up questions

Materials List (please be detailed; include exact quantities)

Class set of all materials listed (9)

- Clipboards
- Colored pencils
- Pens and Pencils
- Drawing Paper (Unlined)

If we have any dissecting/biopsy scopes please let me know, I would only need 1-3

#### Week 2: Light and Shadow

Lesson Title: Not a Pink Floyd appreciation day

Grade: 3/4

Week: 2

Topic: Light and shadow

#### **Lesson Objectives:**

- Students will develop a better understanding of how the moon influences earth
- Students will be able to identify the different phases of the moon
- Students can explain the difference between a solar and lunar eclipse

**Art/Science Inclusion** (brief description of how your lesson presents an integration of art and science concepts.)

Creating oil pastel layered night sky drawing

**Art Open-Ended Question** (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))

- How does light and shadow affect how we see the world at night?

## Art Education Standard (should include at least one, see

https://www.arteducators.org/learn-tools/national-visual-arts-standards)

- 3rd grade VA:Cr2.1.3a Create personally satisfying artwork using a variety of artistic processes and materials.

# Science Education Standard (should include at least one, see

https://www.doe.in.gov/standards/science-computer-science, NGSS also great)

 4.ESS.1 Investigate how the moon appears to move through the sky and it changes day to day, emphasizing the importance of how the moon impacts the Earth, the rising and setting times, and solar and lunar eclipses

Timeline	Lesson Description
- 5 min - 6 min - 15-20 min	<ul> <li>Opening questions         <ul> <li>What do we know about the moon?</li> <li>How does the moon affect the earth?</li> </ul> </li> <li>Phases of the moon video         <ul> <li>Phases of the moon group activity</li> <li>Q: What causes seasons?</li> <li>Temperature and Daylight variation demonstration with globe or foam balls</li> <li>Q: Are seasons the same all over the planet? Why or why not</li> </ul> </li> </ul>
- 5 min - 40 min - 5 min - 10 min	<ul> <li>Art setup and activity description</li> <li>Oil pastel painting activity</li> <li>Art discussion</li> <li>Wrap up and clean up</li> </ul>

Materials List (please be detailed; include exact quantities)

- 15 black and 15 blue pieces of construction paper
- 11 Oil pastels
- Pencils, scissors, gluesticks
- 3 flashlights
- 3 foam balls (bigger is better)
- Globe (if possible)

**Lesson Title:** Crafting with color **Grade:** 3<sup>rd</sup>/4<sup>th</sup> grade **Week:** 3 **Topic:** Color in nature

# **Lesson Objectives:**

- Students can understand how our sense of vision functions.
- Students can explain why plants and animals have such diversity of color.
- Students will find examples of colors in nature and use those ingredients to dye homemade playdough.

**Art/Science Inclusion** (brief description of how your lesson presents an integration of art and science concepts.)

- Examining how color is perceived and seen in nature, using natural ingredients to create playdough, and dyeing it using dandelions.

**Art Open-Ended Question** (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))

- How do we create colors using natural ingredients?

**Art Education Standard** (should include at least one, see https://www.arteducators.org/learn-tools/national-visual-arts-standards)

- Individually or Collaboratively construct representations, diagrams, or maps of places that are part of everyday life.

Science Education Standard (should include at least one, see <a href="https://www.doe.in.gov/standards/science-computer-science">https://www.doe.in.gov/standards/science-computer-science</a>, NGSS also great)

3.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction

4.LS.3 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction in a different ecosystems.

Timeline	Lesson Description
- 15 Min - 30 Min - 45 Min	<ul> <li>How vision works and color in nature intro</li> <li>Color wheel scavenger hunt</li> <li>Homemade playdough and natural dye activity</li> </ul>

Materials List (please be detailed; include exact quantities)

- Rainbow pack of construction paper (at least just 1 of every color)
- 12 ziploc bags
- 1 Prism (if available)
- The following materials if available, please let me know
  - o 10 cups flour
  - o 2 cups salt
  - o 1 cup vegetable oil
  - o Cream of tartar

# Week 4: Building with Mother Nature

Lesson Title: Fortnite but in nature

**Grade:** 3<sup>rd</sup>/4<sup>th</sup> **Week:** 4 **Topic:** Building in nature

#### **Lesson Objectives:**

- Students can explain why animals build various structures and how they build these structures
- Students can create a natural bird nest using principals of building in nature
- Students can create land art structures and explain how these are considered sustainable art

**Art/Science Inclusion** (brief description of how your lesson presents an integration of art and science concepts.)

- Students will be integrating scientific concepts along with artistic skills to create nests that is biodegradable.

**Art Open-Ended Question** (what problem, task, or exploration will students be dealing with (should have multiple ways to complete it))

- How can we create habitats in nature?
- What are key features of land art?

Art Education Standard (should include at least one, see

https://www.arteducators.org/learn-tools/national-visual-arts-standards)

Collaboratively set goals and create artwork that is meaningful and has purpose to the makers.

Science Education Standard (should include at least one, see

https://www.doe.in.gov/standards/science-computer-science, NGSS also great)

- Construct an argument that some animals form groups that help members survive.
- Use evidence to support the explanation that a change in the environment may result in a plant or animal will survive and reproduce, move to a new location, or die.
- Construct and compare multiple plausible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

Timeline	Lesson Description
- 10 min	<ul> <li>YouTube video about natural architects</li> <li>https://youtu.be/7Sc2sOIXhOc</li> </ul>
- 10 min - 10 min - 30 min - 30 min	<ul> <li>PowerPoint about natural structures used in architecture.</li> <li>Honeycomb demo</li> <li>Building a bird's nest</li> <li>Land art build</li> </ul>

Materials List (please be detailed; include exact quantities)

- Popsicle sticks (30 count)
- Thick paper (any color) (15 Pieces)
- Elmer's white glue (10 ct)