Ghost Crab Craft

Created by the NC Aquarium at Fort Fisher Education Section

Essential Question:
What does a ghost crab look like?

Lesson Overview:
Students will learn about ghost crabs. They will understand they are a predator of the loggerhead sea turtle. They will then create a handprint ghost crab.

Learning Objectives:
By the end of this lesson the class will be able to describe the Atlantic ghost crab. Students will be able to:
  • List characteristics of the ghost crab.
  • Explain how ghost crabs prey on sea turtles.
  • Create a ghost crab out of handprints.

North Carolina Standards:

Kindergarten:

Art:
  • K.V.2 Apply creative and critical thinking skills to artistic expression.
    o K.V.2.3 Create original art that does not rely on copying or tracing.
  • K.V.3 Create art using a variety of tools, media, and processes, safely and appropriately.
    o K.V.3.3 Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.
  • K.CX.2 Understand the interdisciplinary connections and life applications of the visual arts.
    o K.CX.2.2 Identify relationships between art and concepts from other disciplines, such as math, science, language arts, social studies, and other arts.
    o K.CX.2.3 Understand that artists sometimes share materials and ideas (collaboration).

First Grade:

Art:
  • 1.V.2 Apply creative and critical thinking skills to artistic expression.
    o 1.V.2.1 Recognize that artistic problems have multiple solutions.
    o 1.V.2.3 Create art from imaginary sources of inspiration.
  • 1.V.3 Create art using a variety of tools, media, and processes, safely and appropriately.
1.V.3.3 Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.

- **1.CX.2** Understand the interdisciplinary connections and life applications of the visual arts.
  - **1.CX.2.2** Identify connections between art and concepts from other disciplines, such as math, science, language arts, social studies, and other arts.
  - **1.CX.2.3** Differentiate between sharing ideas and copying.

**Science:**
- **1.L.1** Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.
- **1.L.1.2** Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
- **L.3.2** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- **SL.3.2** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
  - **3.C.1.2** Exemplify how various groups show artistic expression within the local and regional communities.

**Second Grade:**

**Art:**
- **2.V.2** Apply creative and critical thinking skills to artistic expression.
  - **2.V.2.1** Understand that artistic problems have multiple solutions.
  - **2.V.2.3** Create art from real and imaginary sources of inspiration.
- **2.V.3** Create art using a variety of tools, media, and processes, safely and appropriately.
  - **2.V.3.3** Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.
- **2.CX.2** Understand the interdisciplinary connections and life applications of the visual arts.
  - **2.CX.2.2** Understand relationships between art and concepts from other disciplines, such as math, science, language arts, social studies, and other arts.

**Third Grade:**

**Art:**
- **3.V.2** Apply creative and critical thinking skills to artistic expression.
  - **3.V.2.3** Create art from realistic sources of inspiration.
- **3.V.3** Create art using a variety of tools, media, and processes, safely and appropriately.
  - **3.V.3.3** Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.
- **3.CX.2** Understand the interdisciplinary connections and life applications of the visual arts.
  - **3.CX.2.2** Understand how to use information learned in other disciplines, such as math, science, language arts, social studies, and other arts in visual arts.
Fourth Grade:

**Art:**

- 4.V.2 Apply creative and critical thinking skills to artistic expression.
  - 4.V.2.1 Identify different successful solutions to artistic problems.
  - 4.V.2.2 Use ideas and imagery from North Carolina as sources for creating art.
- 4.V.3 Create art using a variety of tools, media, and processes, safely and appropriately.
  - 4.V.3.3 Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.
- 4.CX.2 Understand the interdisciplinary connections and life applications of the visual arts.
  - 4.CX.2.2 Apply skills and concepts learned in other disciplines, such as math, science, language arts, social studies, and other arts, in the visual arts.

Fifth Grade:

**Art:**

- 5.V.2 Apply creative and critical thinking skills to artistic expression.
  - 5.V.2.2 Use ideas and imagery from the global environment as sources for creating art.
  - 5.V.2.3 Create realistic, imaginative, abstract, and non-objective art.
- 5.V.3 Create art using a variety of tools, media, and processes, safely and appropriately.
  - 5.V.3.3 Use the processes of drawing, painting, weaving, printing, collage, mixed media, sculpture, and ceramics to create art.

**Science:**

- 5.L.2 Understand the interdependence of plants and animals with their ecosystem.
  - 5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).

**Time Frame:**

Preparation: 5 minutes
Activity: 15 minutes

**Materials:**

- Black construction paper
- White or tan washable paint
- Paint brushes
- White and blue puffy paint
- Glue (optional)
- Sand (optional)
Supplemental Background Information for Teachers:

The Atlantic ghost crab is a sand colored crab with white claws. Like a ghost, they can change colors to better blend in with their surroundings. They are nocturnal, meaning they are most active at night, and can be found on coastal beaches from Rhode Island to Brazil. Like ghosts, they can quickly disappear due to their ability to run up to 10 mph. Ghost crabs have a carapace, or shell, which can grow up to 2 inches. They have eyes on the top of stalks that can see 360° around them. These small crabs build burrows up to 4 feet deep and often plug the entrance during the day. They are related to the fiddler crab.

Ghost crabs are omnivores, eating vegetation, insects, mole crabs and even sea turtles. Ghost crabs are one of many predators that prey on sea turtle nests. They will eat both the eggs and straggling loggerhead hatchlings. Ghost crabs will sometimes dig into a turtle nest and help themselves to the eggs. They will also chase after hatchlings as they race to the water. Thankfully for our turtles in North Carolina, almost every nest is monitored to protect the hatchlings as they head to sea. Predators play an important role in every ecosystem which means ghost crabs are just doing their job.

Preparation:
Collect one piece of construction paper per student. Also gather the paint and other supplies.

Activity:
1. As a class, read the blog on ghost crabs on seaturtleexploration.com: www.seaturtleexploration.com/ghostcrabs
2. Discuss the role of ghost crabs in the life of a sea turtle.
3. Pass out a piece of construction paper to each student. Explain the paper is black because ghost crabs are nocturnal.
4. One at a time, have the students work in pairs to paint the palms and fingers of each student. Make sure they get the entire hand including the edges of the thumbs.
5. Have the students place their paper in landscape position (longways).
6. Have the student with the painted hands, place their right hand with the edge of their palm in the center of the paper. Their fingers and thumb should point to the short end of the paper.
7. The partner with clean hands should gently press down on the fingers and hands of the painted student to make sure they all touch the paper.
8. Gently peel the hand off of the paper.
9. Next the partner with the painted hands should place their left hand with the palm slightly overlapping the right hand. The fingers and thumb should point towards the short end of the paper.
10. The partner with clean hands should gently press down on the fingers and hands of the painted student to make sure they all touch the paper.
11. Gently peel the hand off of the paper.
12. The student with the painted hands should then wash their hands with soap and warm water.
13. Repeat steps 4-12 with the other partner.
14. Using white puffy paint, the students should turn their thumb into a claw. They will use their thumb as the top part of the claw. They will use the puffy paint to draw the bottom of the claw. They may also want to fill in any gaps in the paint on the thumbs. (This could also be done using the same paint as the rest of the crab and small paint brushes instead of puffy paint).
15. Using blue or black puffy paint, the students should draw two lines from top of their crab. These will be their eye stalks.
16. Next, create a circle on the top of each line to be the eyes. Students can add another drop of white paint to be the eyes. (Steps 15 and 16 could also be done using blue or black paint and small paint brushes instead of puffy paint).

Extensions:

1. Next the class can discuss the habitat where ghost crabs live. (Along the dunes on the beach). They can decorate their paper to create the habitat. This could include gluing sand to the bottom of the page, drawing dunes behind the crab, or even adding a moon using chalk or paint markers.