

Vaquita Wind Sock



ACTIVITY: Make a vaquita porpoise windsock.

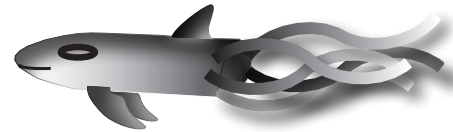
GRADE LEVEL(S): K to 3rd



30 minutes

OVERVIEW: Does body shape matter in the water?

DISCIPLINES: Life Science, Engineering, Visual Arts, role-play



OBJECTIVES: Students will be able to:

- define an **adaptation** as a behavior or body part that helps an animal survive
- recognize that animals have different adaptations
- name three adaptations vaquita have to survive
- compare and contrast human and vaquita locomotion adaptations
- describe or role-play how vaquita uses three adaptations to swim

OLDERS STUDENTS MIGHT ALSO:

- define hydronamic and aerodynamic
- name 2 examples of hyrdonmic animals and an example of an aerodynamic animal or human-made object
- distinguish the differences between hydronamic and aerodynamic animals and objects
- discuss how the study of an ocean animal's body shape can be used by people to design hyrdonamic vehicles.

MATERIALS:

- pre-cut craft pieces (head, fin, flippers)
- tissue paper cut into strips OR crepe paper streamers (black, grays, blues)
- string or yarn
- glue sticks or transparent tape
- stapler/staples
- hole punch

- measuring stick/ruler, 12-inch or longer (one per student)

OPTIONAL:

- black glitter
- watercolor paper or other paper
- child-safe paint, crayons, chalk, or other medium
- paint brushes

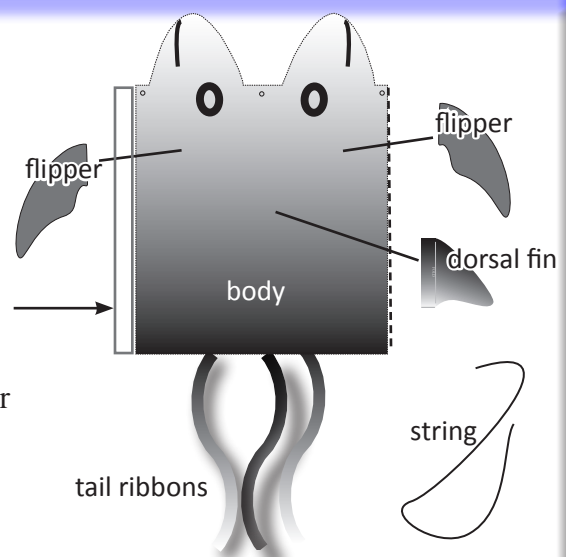
WHAT TO DO: Preparation

STEP 1: Cut 1/2-inch x 11-inch long tail ribbons using tissue paper, paper, or crepe paper streamers.

Step 2: Photocopy and cut out windsock body and body parts. Each student will need: 1 body; 1 dorsal fin; and 2 pectoral flippers.

(NOTE: We recommend you only cut one of the long sides. This provides an extra lip to make gluing the sides together a bit easier.)

OPTION: STEP 2a: If you prefer to have students paint or color their windsocks, trace pattern #2 and the body part patterns onto watercolor or other white paper. Provide paint, chalk, crayons, or other medium to decorate.)



What to Do (prep continued)

STEP 3: Pre-cut the string/yarn. (one per student, approximately 2.5 feet long).

Step 4: For younger students, add a small fold at the base of each flipper. Fold the dorsal fin and flippers, fold at the top to create. Add one fold (folding both sides) at the base of the flipper. For the dorsal fin, add small fold on either side of fin. These folds help the dorsal fin stand up and the flippers stick out.

NOTES/Discussion:

Review background information about vaquita body shapes and adaptations to lead, direct, or encourage discussion for this activity.

Terms you may want to introduce with this activity:

Adaptation: A body part or behavior that helps an animal survive.

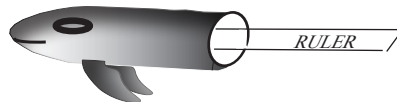
Aerodynamic: Streamlined shape designed to cut or move quickly through air.

Hydrodynamic: Streamlined shape designed to cut or move quickly through water.

Create the Craft

Discuss and role-play (with younger students) how the vaquita uses each body part as students build their vaquita.

PRE-STEP 1: Show students an example of an undecorated vaquita windsock so they have an idea of what they're creating. Then tell them you're going to show them a trick on how to glue the body parts. Demonstrate how they'll use the ruler for leverage. Put the measuring stick through the windsock. Place one end of the ruler on the desk or table. Then show them how they can use the ruler as a small hard surface to gently press the pieces as they're glued onto the body. (GIVE EACH STUDENT A RULER)

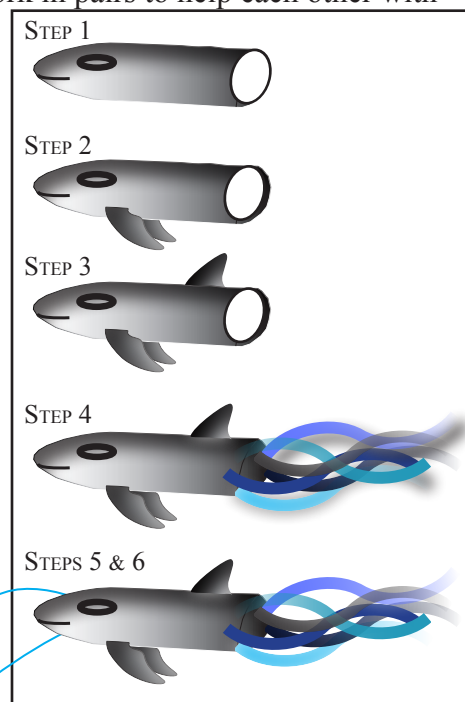


STEP 1: Give each student the vaquita **head/body**. Students can work in pairs to help each other with this step. Show students how to:

- run a bead of glue down the length of the body
- how to roll the body
- use piece of tape or staple to hold it together while glue dries

STEP 2: Give each student **two pectoral flippers**. Discuss the shape of the flipper and how, like our arms, they have a right and left flipper. Help them figure out the right and left flipper (Hint, the end of the flipper points to the tail-end of the whale.) Have them put a bead of glue on the small/folded part of the fin then glue the pectoral flippers on to their windsock.

STEP 3: Give each student a **dorsal fin**. Discuss where the dorsal fin is located. Discuss how far back the dorsal fin is located (on top of the dolphin, center of the body, closer to the tail than mouth). Make sure the top of the dorsal fin points toward the tail-end of the porpoise. Next, explain/show how the flaps help the dorsal fin stand up. Have students place glue on the bottom of each flap. Then paste the fin onto the windsock.



©2017 WHALETIMES, INC. All Rights Reserved

STEP 4: Glue **tail ribbons** at end of windsock. Discuss with students the vaquita's tail and how it's used. (NOTE: Though kids will probably realize this, remind or ask them if the ribbons are a real vaquita adaptation. Discuss how the ribbons are an artistic or decorative aspect representing the tail and moving water.)

STEP 5: Use a hole punch to create to holes for string to hang windsock. We recommend the holes be put on the dorsal (top) side and ventral (bottom) at the front of the vaquita. To avoid ripping, be sure hole is not too close to the edge of the paper.

STEP 6: Loop the yarn through the holes and tie in knot. The teacher may choose to do this for younger students after craft completed.

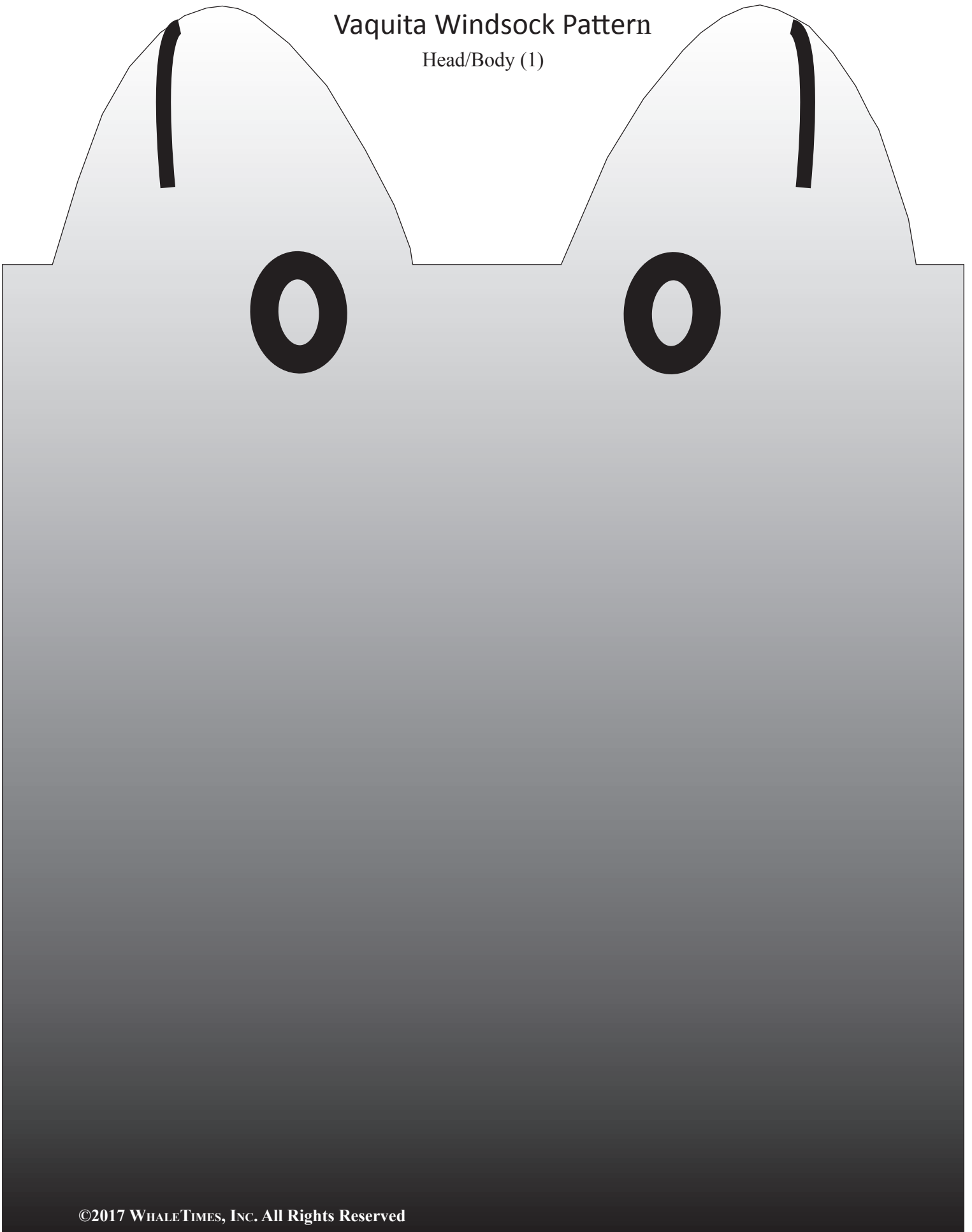
OPTIONAL STEP: Add glitter to the eye rings and lips.

After Vaquita Windsock is completed (and dry), have students gently move their vaquita fast enough to swim through the air. Discuss or review the differences between aerodynamic and hydrodynamic.

NOTE: Windsock craft is designed to enjoy indoors. This craft can be turned into an outdoor windsock by using sturdier weather resistant materials.

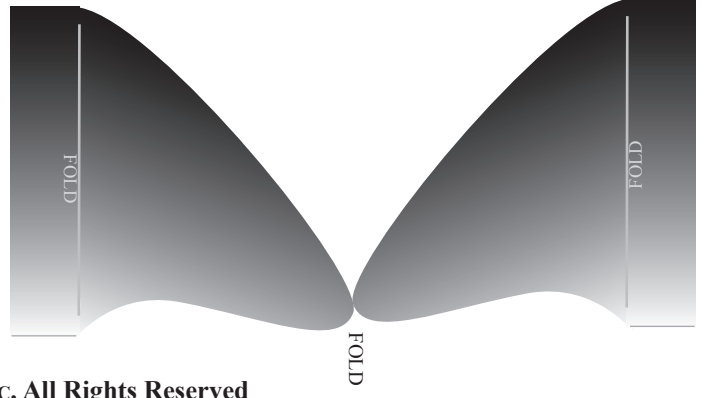
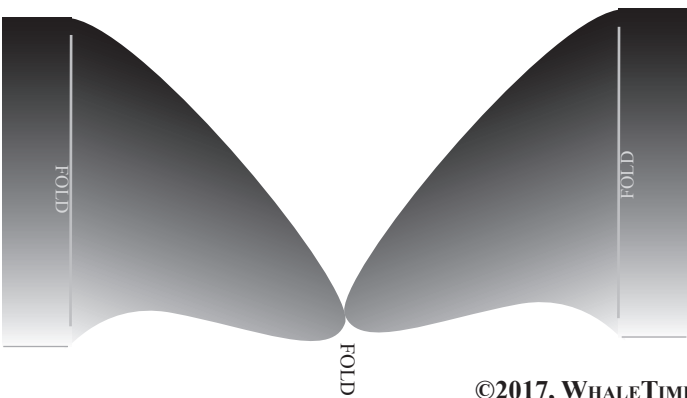
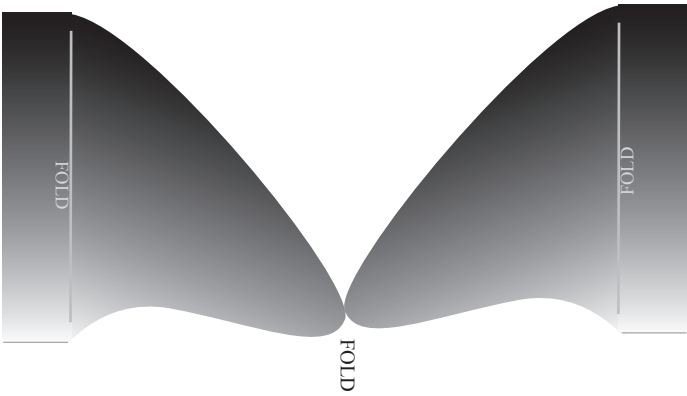
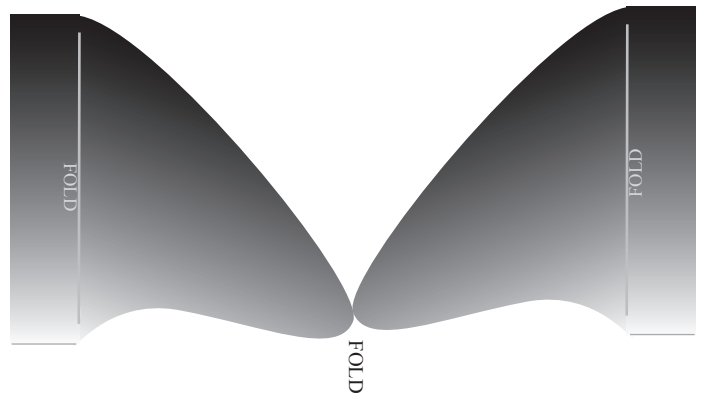
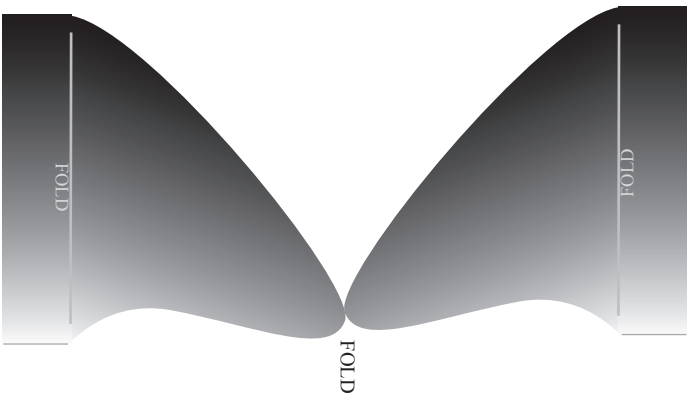
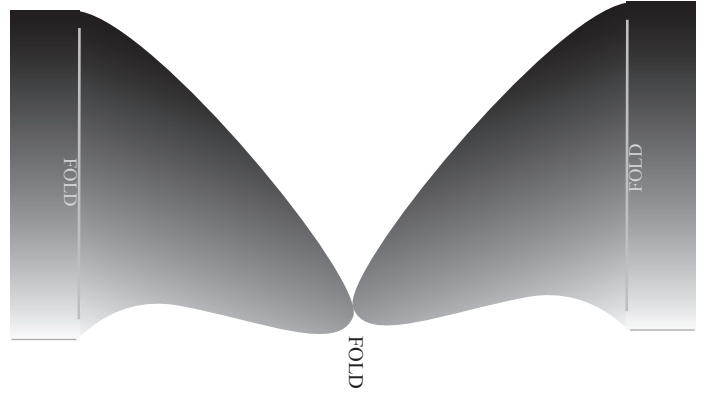
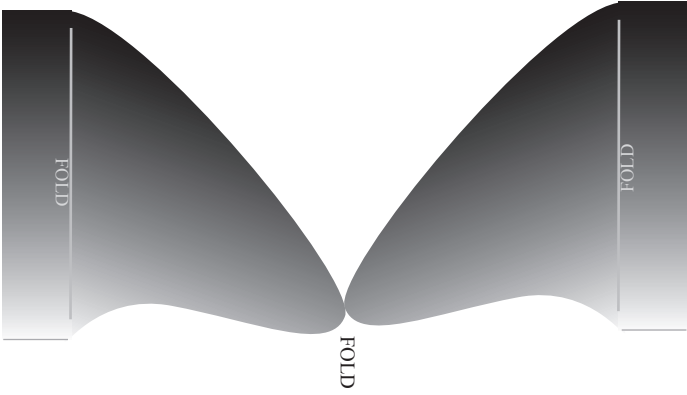
Vaquita Windssock Pattern

Head/Body (1)

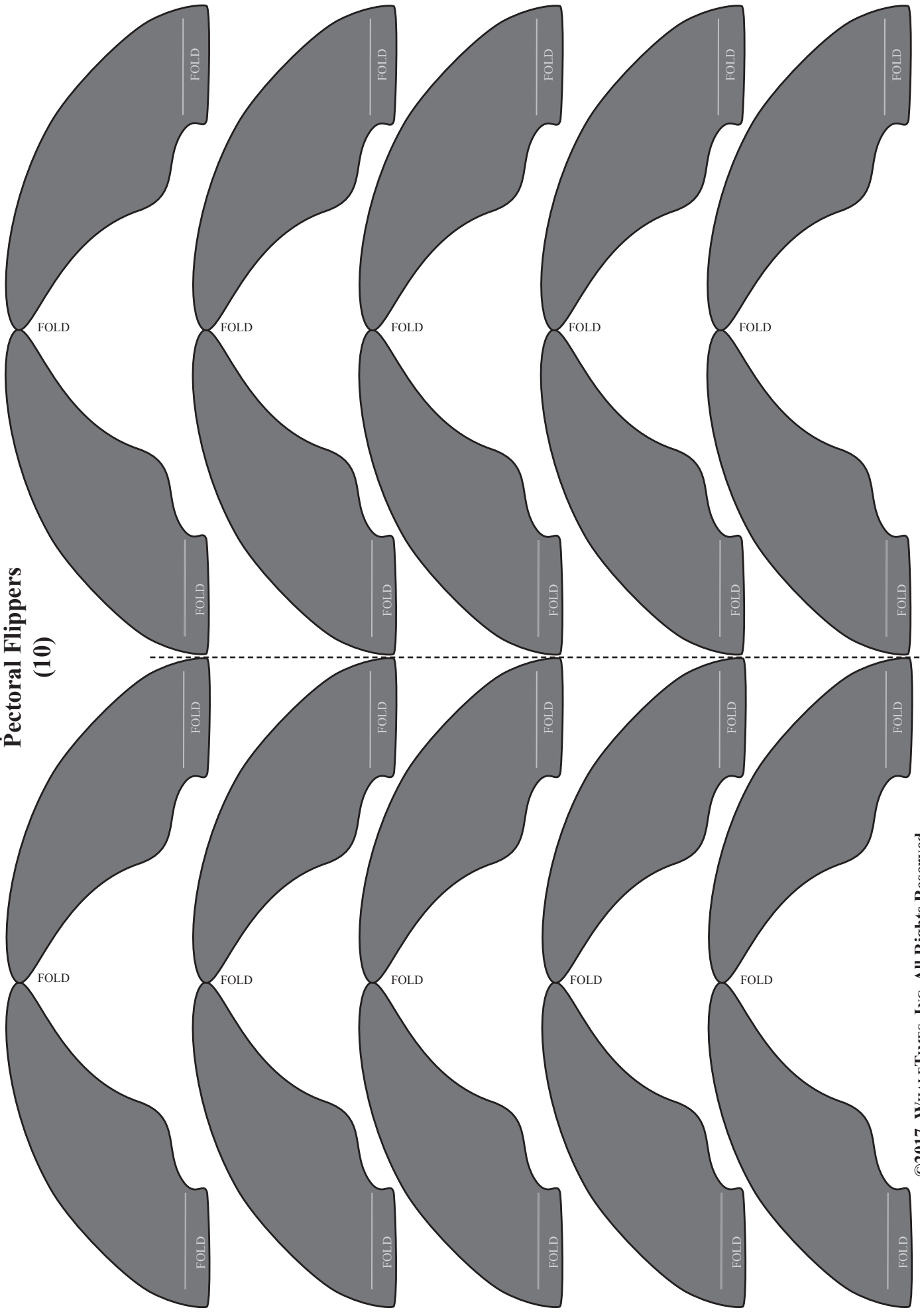


Vaquita Windsock Patterns

Dorsal Fins (8)



**Vaquita Windsock Patterns
Pectoral Flippers
(10)**

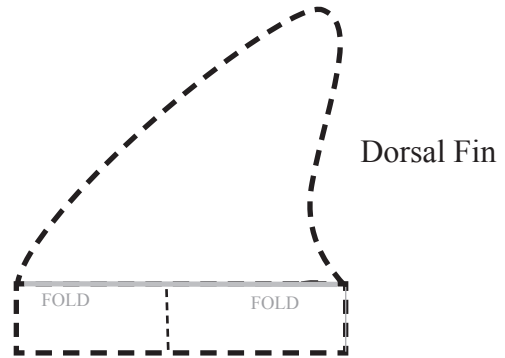
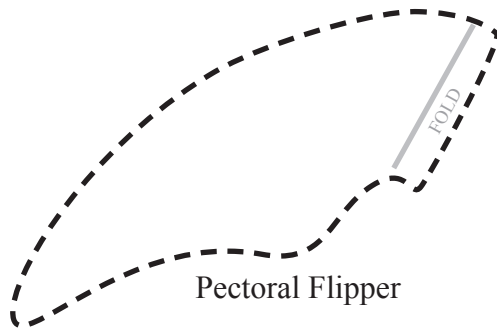


Vaquita Windsock Patterns

OPTIONAL MEDIUM PATTERNS

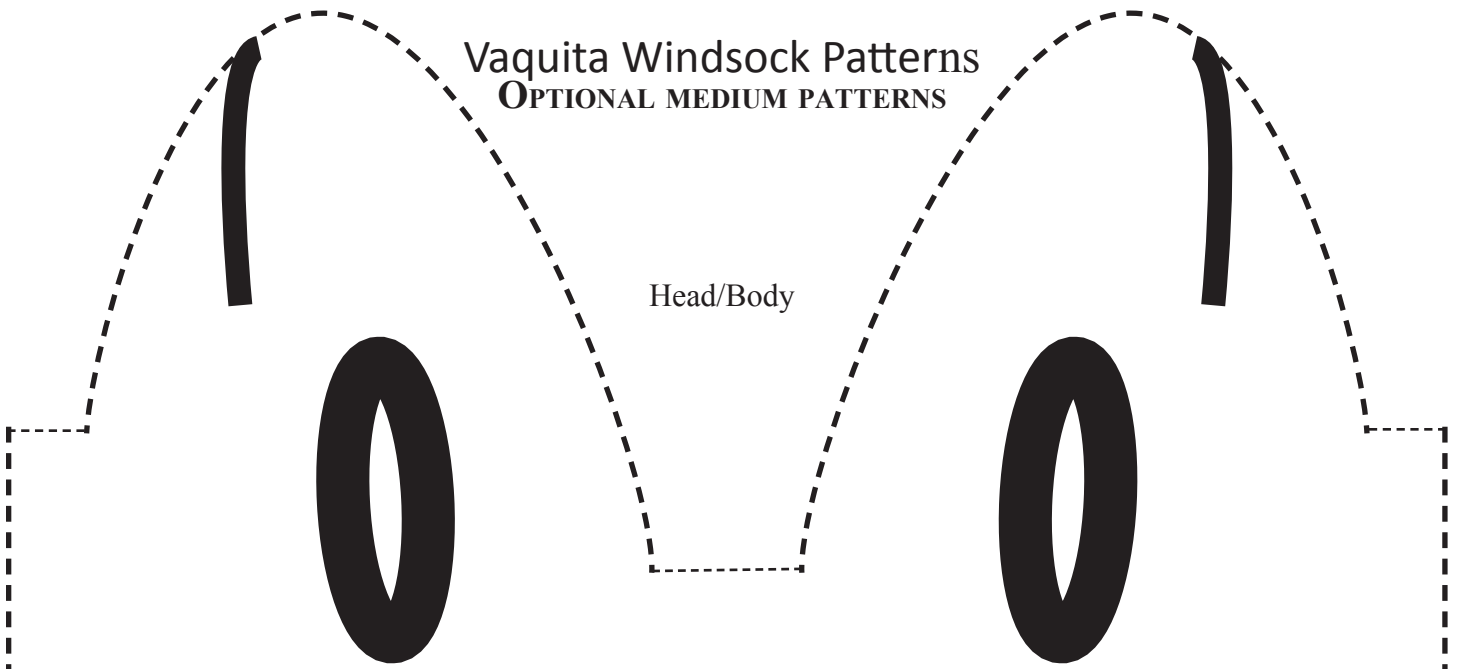
Option 2: Print this pattern on to card stock or copy it onto a file folder. Cut out. Trace the pattern on watercolor paper or other paper.

Allow students to paint or color their vaquita before follow the rest of the directions to create the windsock.



Vaquita Windsock Patterns

OPTIONAL MEDIUM PATTERNS



Option 2: Print this pattern on to card stock or copy it onto a file folder. Cut out. Trace the pattern on watercolor paper or other paper. Allow students to paint or color their vaquita before follow the rest of the directions to create the windsock.