

Tarpon Scale Mail

Objectives:

At the end of the activity students will demonstrate their understanding of the tarpon life cycle and habitat of a specific stage in that life cycle. Students will also demonstrate their understanding of visual appearance of both the life stage and the habitat through creation of a drawing or collage depicting colors, features or species living in chosen habitat.

Differentiation:

You can help students who are struggling to write their postcards by creating a writing prompt or using the provided one. The planning worksheet can be done in small groups or with the help of a teacher. For students who are unsure of their ability to draw a habitat or tarpon life stage you can ask them to collage their postcard or use the appropriate colors and do the best drawing that they can. Assure them that drawing is only a small part of the activity and not related to their grade or completion at all. If a student feels that his/her writing is too limited due to a postcard's size, then encourage him/her to write a letter using paper rather than the template and he/she should include a picture and strong descriptive words in the writing.

Lesson background:

Many fish spend parts of their life cycles in unique habitats. These habitats are often long distances from each other and this requires that the tarpon travel either via wind, waves or their own swimming capability. This concept is something that every child can understand and also is a concept addressed in the state science standards. This lesson gives the chance for the students to demonstrate their understanding of the life cycle stages as well as the unique habitat in which each stage is spent. It is imperative that the teacher NOT introduce this lesson until the students have shown a firm understanding of both of these topics in order for them to have the most successful experience with this activity. The planning page should be completed prior to the activity and after the students have had an opportunity to read about the life cycle stages.

Florida State Standards (NGSSS)

- SC.2.L.16.1: Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.
- SC.2.L.17.1: Compare and contrast the basic needs that all living things, including humans, have for survival.
- SC.2.L.17.2: Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.

National Standards (NGSS)

- 1-LS1-2: Growth & Development of Organisms
- 2-LS2-1: Interdependent Relationships in Ecosystems
- 2-LS2-2: Interdependent Relationships in Ecosystems
- 2-LS4-1: Biodiversity & Humans



Activity:

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Procedure:

- Introduce the life cycle of the tarpon as well as the various habitats that these life cycle stages occur in. If students have not read the life cycle student reading(s), they should at this time. They can be provided with copies of the student reading to use small group or individually or can just read it aloud as a class.

- Start by filling out the Activity Background sheet as a class. Start by clarifying any words from the readings that students may not understand. Identify 5-10 vocabulary words that they can use in their postcards, but encourage them to write down more on their own if they wish.

- On the board make a list of the distinct life cycle stages (larvae, juvenile, subadult, adult). Under each life stage, make notes about unique features or characteristics of these life stages. Name preferred food for each stage.

- Finally, write the habitats that each stage takes place in (deep ocean, inshore coral reefs, inlets or estuary, creeks or shallow areas) make notes about what these places each look like or what plants, animals that might live in each habitat and environmental factors in each habitat (wind, waves, algae blooms, mangrove deforestation, water quality issues from rain events or man-made discharges)

- Using these created lists the students will brainstorm which life stage they will imagine they are when writing their post card. Their postcards should be written in “first person perspective”, so they should understand that they need to imagine they “are the tarpon”. Students should consider what activities a tarpon in this life stage might take part in (this can be a mixture of activities a fish that age would do). They will use the postcard template to write a message from them (the tarpon) to a person of their choosing (a friend, a relative, another tarpon).

- On the front of the postcard the student will sketch a picture of the habitat that their tarpon currently lives in and a message of their choosing. The teacher could google examples of postcards if the students do not demonstrate previous knowledge or experience with postcards and how they are set up or look visually.

Name: _____

Date: _____



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Activity Background



You will be creating a postcard from a tarpon who is in a specific habitat and at a certain life stage. On the front of the postcard draw a picture of your tarpon at the age you would like it to be (larvae, juvenile, sub-adult or adult) and the habitat that a tarpon that age would live in (pelagic ocean, nearshore reef, mangroves, estuary). On the back of the postcard write a message from your tarpon to a person of your choice (it could be a friend of theirs, a family member or anyone you can imagine). In your writing please include details about where your tarpon lives, what it eats, and what life is like for it. Be sure to use this pre-writing page to guide your writing and to use the vocabulary learned in your life stages reading.

Vocabulary

(What vocabulary words can you use from your reading?)

Life Stages

(What are the different life stages of a tarpon and unique characteristics and habits/needs of each?)

Habitat

(What habitats do the life stages take place in and what are unique characteristics of those ecosystems?)

Activity Rubric:

Area	1 Does not meet expectations	2 Partially meets expectations	3 Meets expectations	4 Exceeds expectations
Science Content	The postcards do not mention life stage/ habitat or do not properly match the life stage with the correct habitat	The postcard mentions a life stage or habitat with details about either but does not go into adequate detail	The postcard mentions a life stage or habitat with details about either but does not go into adequate detail	The postcard mentions a life stage or habitat with details about either and goes into adequate detail
Use of science vocabulary	The postcard does not use any scientific vocabulary words from the life stage reading	The postcard uses some scientific vocabulary from the life stage reading but has major gaps where science vocabulary could have been used	The postcard uses multiple scientific vocabulary from the life stage reading with no major gaps where science vocabulary could have been used	The postcard uses a large amount of vocabulary from the life stage reading and has no obvious areas where a more scientifically informed word could have been used
Writing fluency	Writing flow and errors in sentence structure are multiple, making the postcard close to impossible to comprehend	Writing flow and errors are evident, but few, and make the postcard difficult to comprehend	Writing flow and errors are few, and the postcard is easy to read and understand	Writing flow and errors are not present, and the postcard is easy to comprehend and follow the information presented to the reader
Conventions	Spelling, capitalization, and punctuation errors are numerous and make the written narrative difficult to understand	Spelling, capitalization, and punctuation errors are evident and make the written narrative difficult to understand	Spelling, capitalization, and punctuation errors are few	Spelling, capitalization, and punctuation errors are not in the writing at all