**Bird Reflection Assignment**

_to do in class after the field trip, *before* the final classroom presentation_

1. **Students will read a couple paragraphs to reflect on topics introduced over the course of the school year.** The reading is available on the next page and online at oceanconnectors.org/resources.

   The reading contains new vocabulary, indicated by _italics_, so it is best if teachers read the material in advance and prepare to work through it with the children.

2. **After reading, students respond to the reflection questions inside their journals using complete sentences.**

3. **Please review the answers together in class.**

4. **This lesson covers 6th grade Common Core State Standards in ELA/Literacy, and Next Generation Science Standards MS-LS2-1, MS-LS2-2, and MS-LS2-4.**

5. **Project Based Extension: Have students work in groups to make a presentation** to inform an audience of public officials, students, investors, fishermen, natural resource managers, or the general public (choose one) about protecting birds and habitats.

   Let students choose the format of their presentation from one of the following: PowerPoint, theater performance, movie, persuasive essay/letter, or news/radio broadcast.

   To gather information for their presentation, encourage students to reach out to Ocean Connectors, the U.S. Fish & Wildlife Service, the San Diego Zoo, their local City/County office, and Scripps Institution of Oceanography.
This year you learned about birds, their habitats, and how people can help protect both for the future. Birds are highly vulnerable to habitat loss and pollution. Human developments have resulted in the destruction of coastal environments in many areas of the world, thus reducing the amount of habitat space for birds to nest, forage, and take shelter. Humans also create pollution that causes negative impacts at many levels of the food web. Pollution can include things such as oil, chemicals, pesticides, trash, and anything that does not belong in the natural ecosystem. Pollution can travel through the watershed, which is an area of land where water collects and drains into a large body of water, like a lake, bay, or ocean. Water drains from the highest point in the watershed down to the lowest point, known as sea level. Everyone lives in a watershed.

Habitat restoration is one way people are trying to undo past damage to the environment. Habitat restoration can involve litter removal, invasive plant removal, watering, applying mulch, and planting native plants. In addition to providing food and shelter for birds, some native plants also help pollinator insects. Invasive plants are harmful because they compete for space with native plants and they change the dynamics of the ecosystem. Since coastal watersheds lead to the ocean, you can help simply by picking up trash in your own neighborhood. Responsible pet owners always clean up after their dogs and cats because pet waste contains bacteria (poop pollutes!). When you visit natural areas, remember to stay on marked pathways and trails to minimize your impact.

Answer the questions below in your journal using complete sentences.

1. Why are coastal environments important for birds?

2. List 3 examples of pollution and explain how they are dangerous to birds.

3. How does pollution enter the ocean?

4. What is a watershed?

5. What is the purpose of habitat restoration and how does it improve resource availability?

6. List 3 parts of the habitat restoration process.

7. Why are invasive plants harmful?

8. What is one of the simplest ways to help the environment?

9. If you own a dog or a cat, how can you be a responsible pet owner?

10. How do you think the ecosystems of today differ from ecosystems of the past?
**Bird Reflection Assignment**

*Answer Key*

This year you learned about birds, their habitats, and how people can help protect both for the future. Birds are highly vulnerable to habitat loss and pollution. Human developments have resulted in the destruction of coastal environments in many areas of the world, thus reducing the amount of habitat space for birds to nest, forage, and take shelter. Humans also create pollution that causes negative impacts at many levels of the food web. Pollution can include things such as oil, chemicals, pesticides, trash, and anything that does not belong in the natural ecosystem. Pollution can travel through the watershed, which is an area of land where water collects and drains into a large body of water, like a lake, bay, or ocean. Water drains from the highest point in the watershed down to the lowest point, known as sea level. Everyone lives in a watershed.

Habitat restoration is one way people are trying to undo past damage to the environment. Habitat restoration can involve litter removal, invasive plant removal, watering, applying mulch, and planting native plants. In addition to providing food and shelter for birds, some native plants also help pollinator insects. Invasive plants are harmful because they compete for space with native plants and they change the dynamics of the ecosystem. Since coastal watersheds lead to the ocean, you can help simply by picking up trash in your own neighborhood. Responsible pet owners always clean up after their dogs and cats because pet waste contains bacteria (poop pollutes!). When you visit natural areas, remember to stay on marked pathways and trails to minimize your impact.

Answer the questions below in your journal using complete sentences.

1. Why are coastal environments important for birds?
   *Coastal environments are important for birds because they provide habitat space for birds to nest, forage (feed), and take shelter.*

2. List 3 examples of pollution and explain how they are dangerous to birds.
   *Examples of pollution include oil, chemicals, pesticides, trash, and anything that does not belong in the natural ecosystem. Birds sometimes get tangled up or eat trash, pesticides contaminate the water supply, oil and chemicals can affect their prey, etc.*

3. How does pollution enter the ocean?
   *Pollution can enter the ocean by traveling through the watershed.*

4. What is a watershed?
   *A watershed is an area of land where water collects and drains into a large body of water, like a lake, bay, or ocean. Water drains from the highest point down to the lowest point.*

5. What is the purpose of habitat restoration and how does it improve resource availability?
   *The purpose of habitat restoration is to undo past damage to the environment. Habitat restoration creates more natural resources (food, water, shelter) that animals need to survive.*

6. List 3 parts of the habitat restoration process.
   *The habitat restoration process may include litter removal, invasive plant removal, watering, applying mulch, and planting native plants.*

7. Why are invasive plants harmful?
   *Invasive plants are harmful because they compete for space with native plants and they change the dynamics of the ecosystem.*

8. What is one of the simplest ways to help the environment?
   *One of the simplest ways to help the environment is to pick up trash in your neighborhood.*

9. If you own a dog or a cat, how can you be a responsible pet owner?
   *If you own a dog or a cat, you can be a responsible pet owner by cleaning up your pet’s waste.*

10. How do you think the ecosystems of today differ from ecosystems of the past?
    *Ecosystems of today differ from ecosystems of the past because they are less natural and more developed as a result of human activities. Humans have altered the environment in so many ways that it is difficult for some wildlife to adapt and survive.*