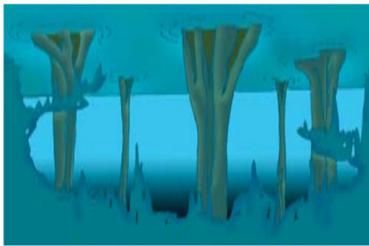


Color the wetland picture below using both warm and cool colors. Be sure to use the colors to give your picture a certain feeling.



Warm and cool colors can make people feel a certain way. Look at the two wetland pictures below. Discuss how the warm picture and the cool picture make you feel.

Two primary colors are warm and one is cool. Both warm colors are found in fire. The cool color is found in ice. Sunshine has warm colors. The sky is a cool color.

Clues:

All colors can be divided into two groups. There are warm colors and there are cool colors. Warm colors are exciting and look hot. Cool colors are calm and look cold. Read the clues below. Then write warm or cool next to each primary color listed above.



A primary color is a color that cannot be made from other colors. Write the three primary colors on the lines below.

Complete the color activities below.

Grade 2: Warm and Cool Colors

Warm Ups and Cool Downs

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Grade 3: Geographical Features

The Feature Attraction

Look at the geographical features in the boxes below. Label each one using the list provided. Circle the geographical features found where you live.

mountain, wetland, ocean, desert, lake



Each geographical feature provides a different habitat, or home for plants and animals. Habitat depends on the amount of sunlight and water, as well as the type of soil and weather found in the area. Discuss the habitat in each geographical feature shown above.

Describe the different plants and animals found in each habitat shown above. List two of your favorite plants and three of your favorite animals found in each habitat. Use books and the internet to help you.

Plants:

Animals:

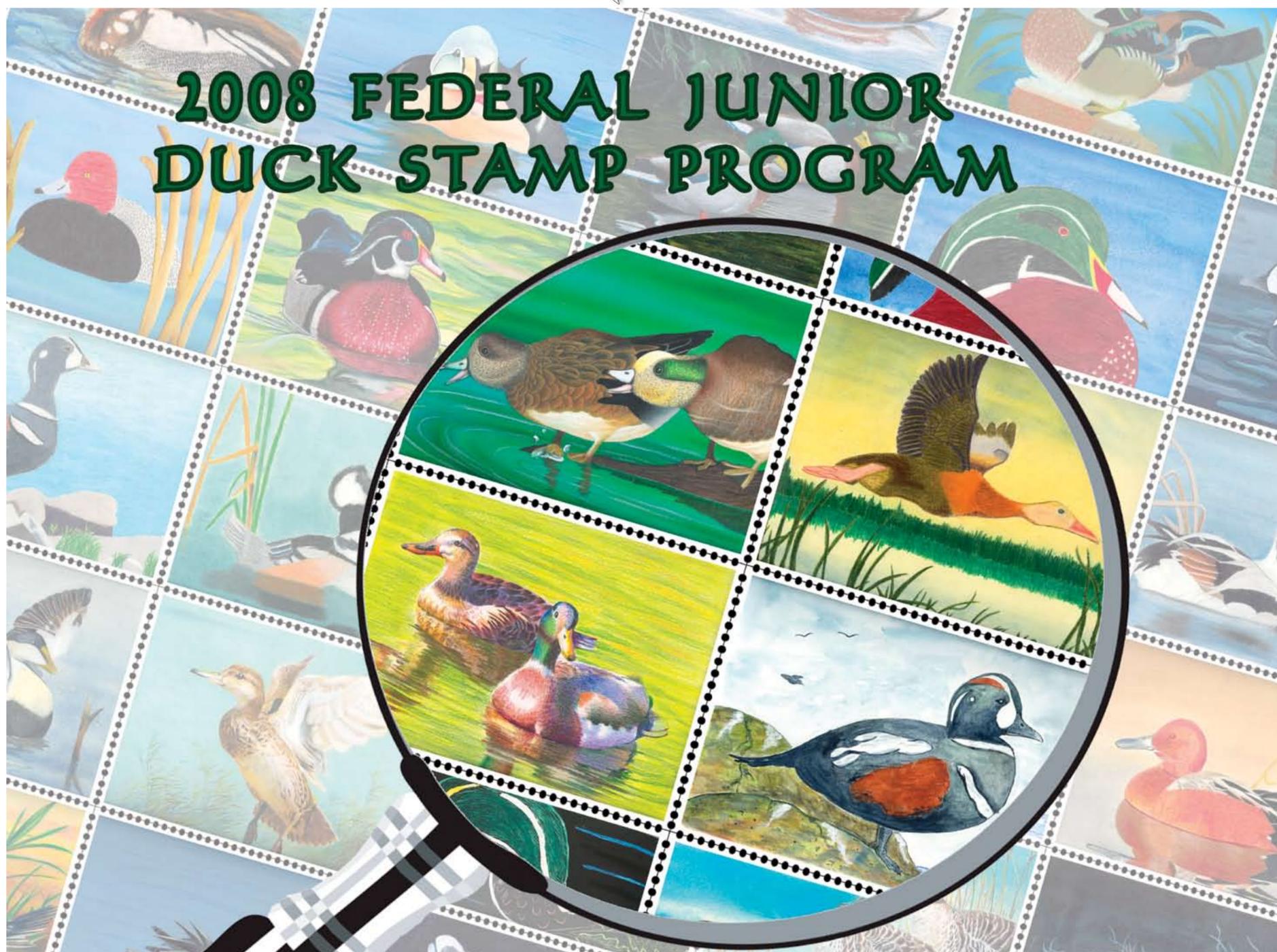
Blank lines for writing answers to the plant and animal questions.

Plants and animals have special parts or adaptations, that help them live in their habitat. Discuss what adaptations plants and animals have to live in each habitat shown above.

Draw and color a picture of a wetland. Be sure to include plants and animals adapted to live around water. Circle the part of each plant and animal that is adapted for water. Use books and the internet to help you.

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Program Partners:



Wild Wetland Activities

Read the description below to complete the activities.

People go to different environments in California depending on what they want to do. For example, we might hike in deserts such as Death Valley, but we would not pump water.

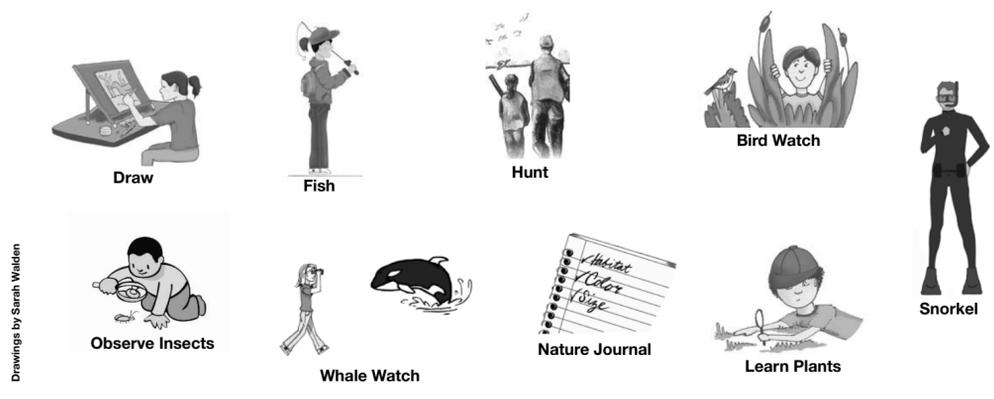
California has many wetlands. A wetland is where water meets land. Make a list of the **biotic**, or living, and the **abiotic**, or non-living, items found in a wetland environment. Discuss how each part affects peoples' activities around wetlands.



Biotic: _____

Abiotic: _____

People can enjoy many fun activities while visiting a wetland. Look at the pictures below. Circle the activities people can enjoy in wetlands. Put an X through the activities people cannot enjoy in wetlands.



Draw a picture of yourself doing the wetland activity you enjoy most.

Possible Answers: Biotic: cattail, duck, goose, swan, fox, deer, tule, pond weed, beaver, Abiotic: water, clay soil, rock, sunlight, rain, cloud. Place a circle around observe insects, draw, bird watch, nature journal, learn plants, learn journal, nature journal, whale watch, whale watch.

Wetland Webs

Read the following information and complete the activities.

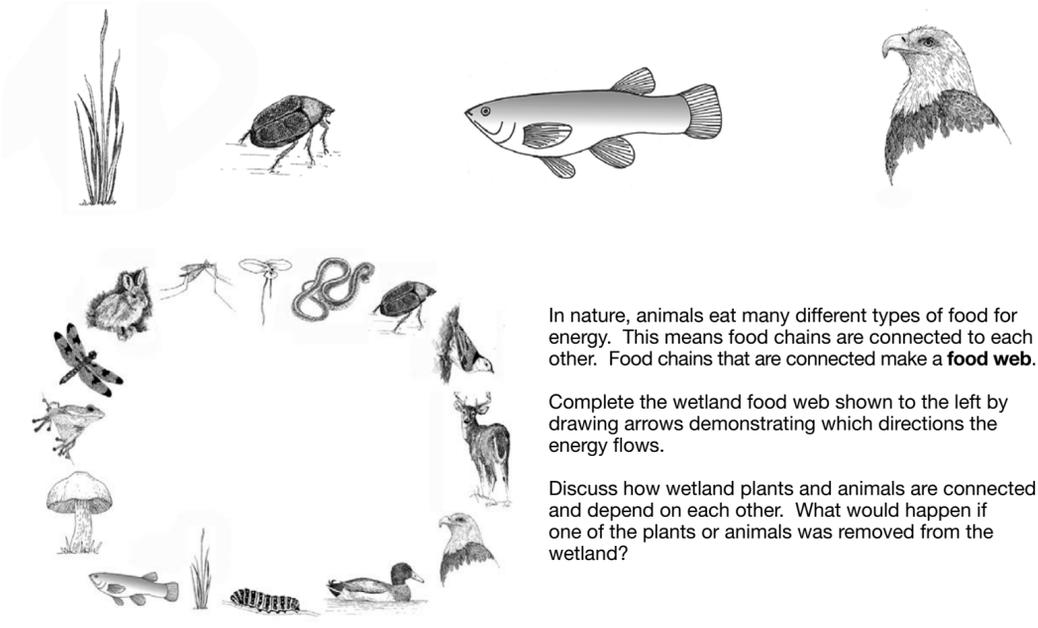
Every living creature needs energy from food to move and grow. Plants are called **producers** because they use sunlight to make food for energy. This process is called **photosynthesis**. Animals are called **consumers** because they cannot make their own food for energy. Instead, animals eat plants and other animals for energy. Bacteria and fungi are called **decomposers** because they feed on dead matter. Decomposers help recycle nutrients back into the soil.

Label each picture below as a **producer**, **consumer**, or **decomposer**.



A **food chain** is a diagram that shows who eats whom. Plants are always at the bottom of the food chain because they produce their energy through photosynthesis.

Use the wetland pictures below to create a food chain by placing an arrow that shows which direction the energy flows between each plant and animal.



Answers: Decomposer: Producer; Consumer. Food chain arrows point to the right. Suggested food web arrows point from rabbit to frog, frog to snake, eagle; frog to snake, eagle; grass to rabbit, beetle, deer, caterpillar; fish to frog, eagle; frog to snake, eagle; dragonfly to bird, eagle; caterpillar to frog, bird; grass to rabbit, beetle, deer, caterpillar; fish to frog, eagle; frog to snake, eagle; dragonfly to bird, eagle; bird to hawk, mushroom, mosquito; eagle to mushroom, mosquito; eagle to mushroom, mosquito; duck to mushroom, mosquito, mosquito, snake, eagle, mushroom; mosquito to bird, fish, frog; duck weed to duck, snake to eagle, mushroom; beetle to bird, fish, frog, frog.

In nature, animals eat many different types of food for energy. This means food chains are connected to each other. Food chains that are connected make a **food web**.

Complete the wetland food web shown to the left by drawing arrows demonstrating which directions the energy flows.

Discuss how wetland plants and animals are connected and depend on each other. What would happen if one of the plants or animals was removed from the wetland?

Wetland Water

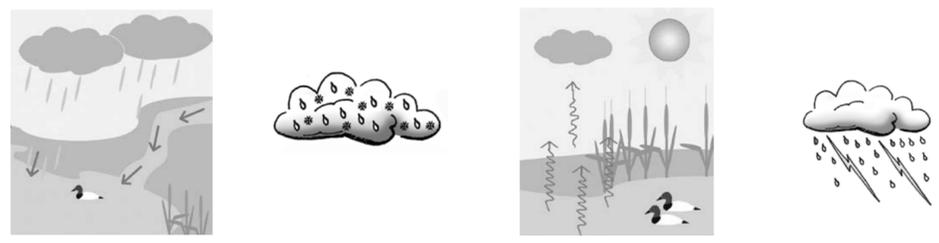
Read the description below and follow the directions to learn about the water cycle.



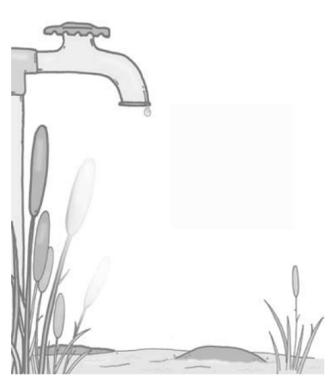
Water is naturally recycled through a process called the **water cycle**.

All air contains water vapor. Clouds are made when water vapor forms small water droplets or ice crystals that float in the air. This is called **condensation**. When clouds condense further, or make bigger water droplets and ice crystals, they become very heavy and fall as rain, sleet, or snow from the sky to the earth. This is called **precipitation**. Once on the ground, water makes its way into streams, rivers, wetlands, lakes, and the ocean. This part of the water cycle is called **collection**. As the sun heats the surface of water, it turns back into water vapor. This is called **evaporation**. The water cycle starts over.

Using the bold words from above, label each step of the water cycle shown below.



Draw a diagram illustrating the water cycle. Be sure to label your diagram with the key words listed above and to include a wetland as the main source of water collection for your water cycle.



On the back of your diagram, answer the following questions:

What would happen to wetland plants and animals if there was no water? Why is it important to conserve water? List 3-6 ways you can conserve water.

Answers: Collection; Condensation; Evaporation; Precipitation. Possible answers for conserving water: fix leaky pipes and faucets, turn off water while brushing teeth, take a bath instead of a shower, take a short shower, make sure toilet water does not run, water grass at night, do not water grass every day, save unfinished drinking water for later.

Junior Duck Stamp Conservation and Design Contest Entry Form
<http://www.fws.gov/juniorduck>

For Office Use Only

Before Mailing Did You:

- Read the contest guidelines?
- Select a permitted waterfowl species?
- Is your entry on 9" x 12" paper? A horizontal design?*
- Affix entry form to the back of the entry?
- Obtain required signatures?
- Postmark Materials by March 15?
- Email questions to the **STATE COORDINATOR**?
- Do you have the address of the **STATE RECEIVING SITE**?

For California, send to:
 U.S. Fish and Wildlife Service, Sacramento NWR Complex
 Attn: Junior Duck Stamp Contest
 752 County Rd. 99W, Willows, CA 95988

* Entry size must be 9" x 12" and HORIZONTAL; no more than 1/4" thick; do not mat or frame, do not have lettering, signatures, or borders on the front.

AUTHENTICITY AND LIABILITY STATEMENT
DO NOT COPY THE WORK OF OTHERS. PLAGIARISM IS A CRIME!
STUDENTS, PARENTS, AND TEACHERS, DO NOT SIGN ENTRY FORM WITHOUT READING THE FOLLOWING STATEMENT:

I hereby certify that this is my original work and not copied or traced from published photos, magazines, books, illustrations, artists' published works or other materials protected by copyright laws. I understand that the U.S. Fish & Wildlife Service and other sponsors are not responsible for loss or damage to my artwork. I grant exclusive rights to the U.S. Fish & Wildlife Service and its designees to use, alter, copy, publish, and display my artwork for reproduction and promotional purposes as they see fit without compensation to me, including the use of my photograph if taken at related Junior Duck Stamp program functions or submitted to a state or national coordinator. I further understand that the U.S. Fish & Wildlife Service has the exclusive right to disqualify any entry whose authenticity is questionable.

Signature of Student _____ Date _____
 Signature of Parent _____ Date _____
 Signature of Teacher _____ Date _____

How did you hear about the Junior Duck Stamp Contest?

School Art Studio Parent/Guardian Art Show
 Friend Internet Other _____

Supervising Adult/Teacher: Please fill in the following information (Print Clearly)

First Name _____ Last Name _____
 School/Studio/Organization/Troop Name _____ Daytime Phone _____
 Mailing Address _____ City _____ State _____ Zip _____
 Email Address _____
 Please check one of the following: Parent Teacher Counselor Troop Leader Other _____

Supervising Adult: Fill in the STATE RECEIVING SITE address here (before duplicating)
 Participants: Mail your art to this address