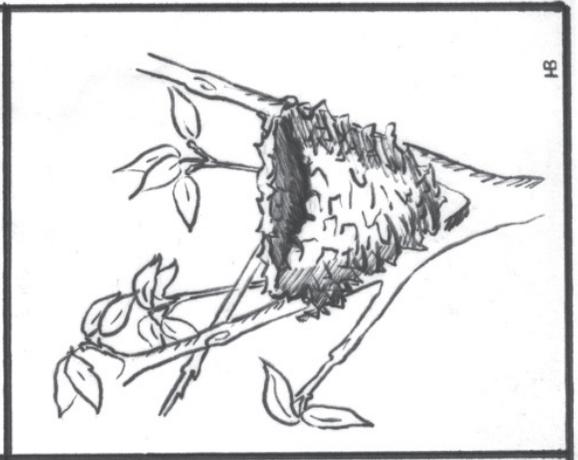
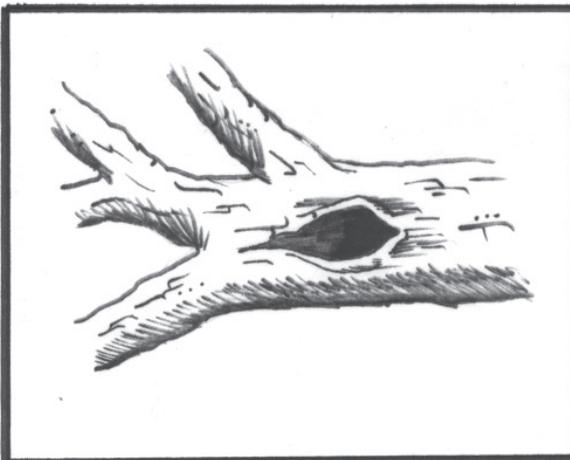


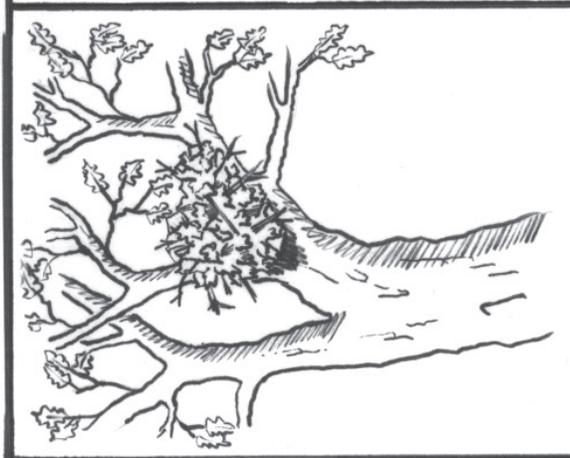
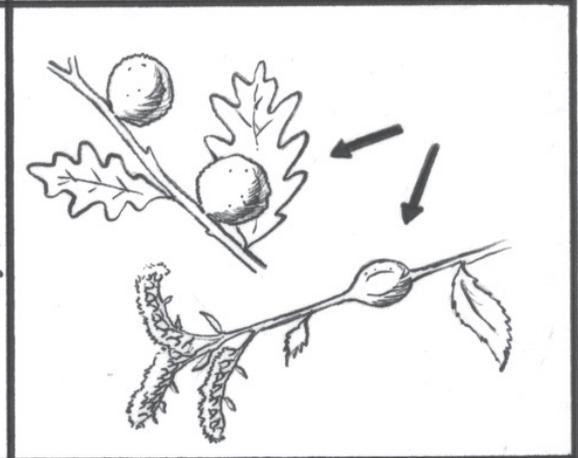
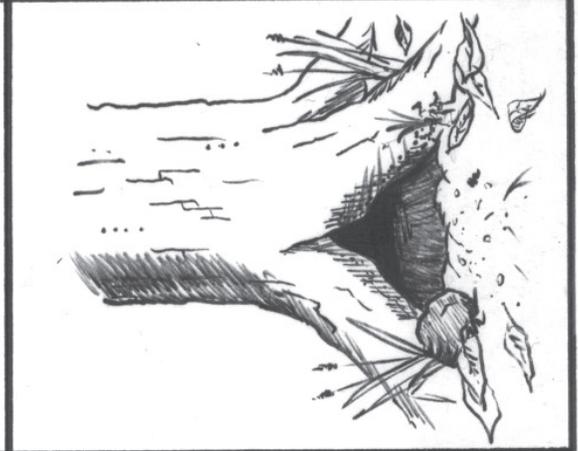
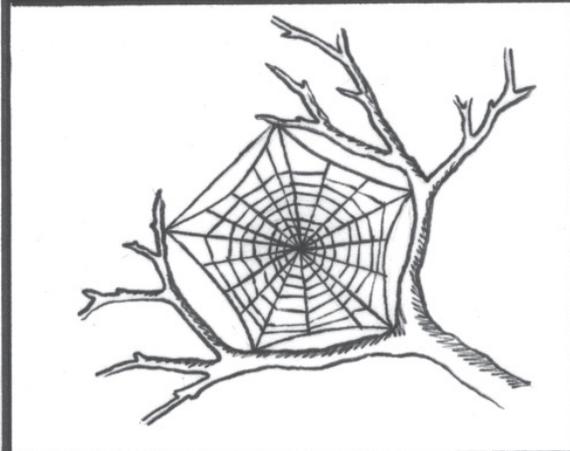
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nimal Homes



18



Community Songs

Our Community

Sung to: "I'm a Little Teapot"

We are all a part of a community
With our friends, neighbors and families
When we get together we eat and play
We help each other in every way

Community Song

Sung to: "London Bridge is Falling Down"

Our classroom is a community, community, community
Our classroom is a community,
We help each other learn.

Our school is a community, community, community
Our school is a community,
We work and play together.

Our neighborhood is a community, community, community
Our neighborhood is a community,
We live close together.

We belong to many communities, communities, communities
We belong to many communities,
What community do you belong to?

Community Helper Song

Sung to: "Farmer In the Dell"

The doctor makes us well.
The doctor makes us well.
Hey! Ho! What do you know?
The doctor makes us well.

Continue with other verses.
The farmer sows the field . . .
The chef cooks the food . . .
The mailman brings the mail . . .
The firefighter puts out fires . . .
Policemen keep us safe . . .

Track Patterns



Okay, Track Detectives, you are on your own! Use the secret code, and in dirt, mud, or snow, identify tracks wherever you go!

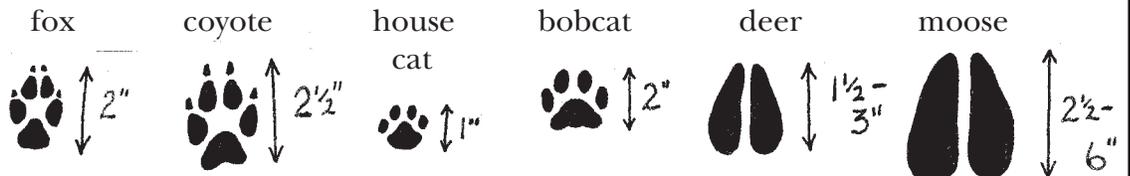
First, what **PATTERN** are the tracks in?

	STRAIGHT WALKER
	HOPPER
	WADDLER
	BOUNDER

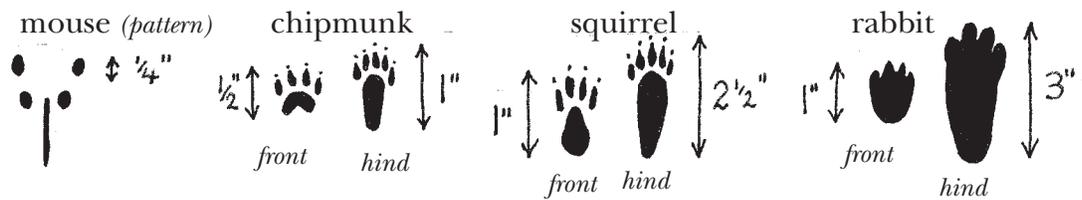
What **PLACE** are they found? Remember to look for homes, leftover food scraps, and other clues such as feathers, fur, blood, scat, etc. left at the scene.

Now check the **PRINT** of the animal's foot. Notice the overall shape, measure its size, note the presence or absence of claws, and count the number of toes.

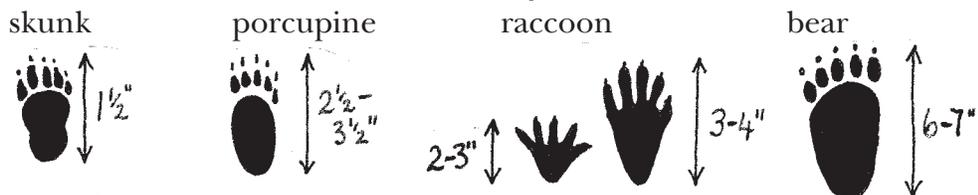
STRAIGHT WALKER



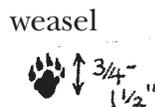
HOPPER



WADDLER

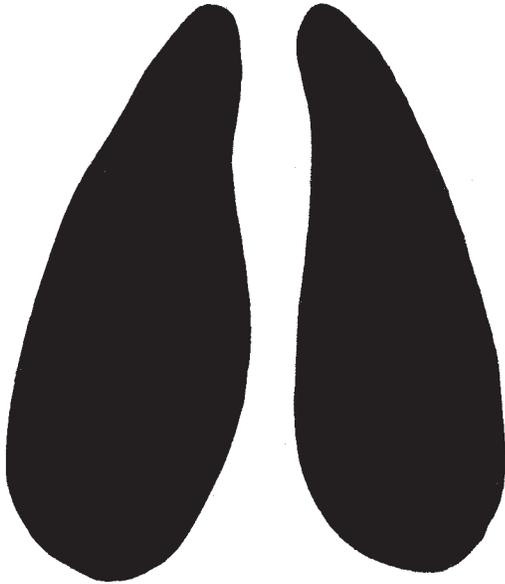


BOUNDER



Forest Animal Track Templates

DEER



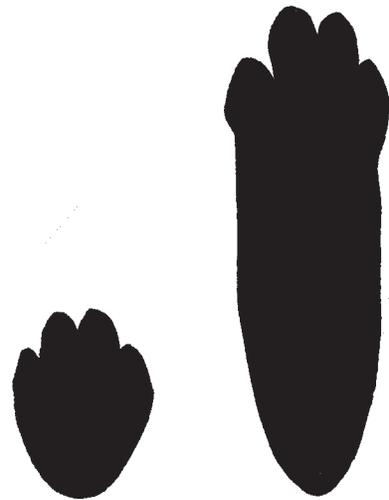
SKUNK



FOX



RABBIT



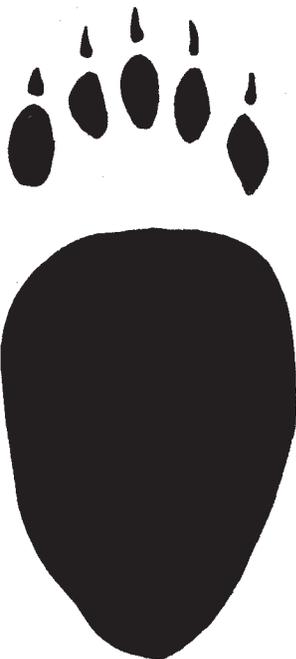
forefoot

hindfoot

WEASEL



PORCUPINE



MOUSE
(pattern)



Forest Animal Track Templates

COYOTE



RACCOON



forefoot

CHIPMUNK



forefoot

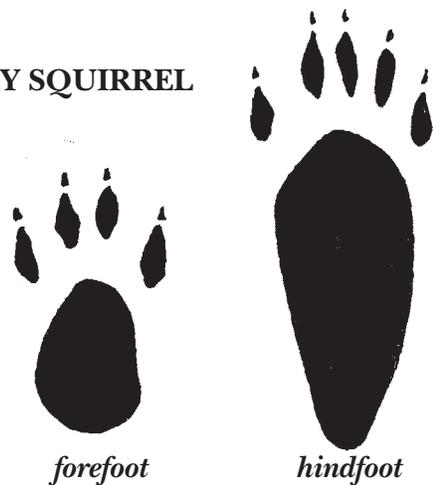
hindfoot

hindfoot

BOBCAT



GREY SQUIRREL

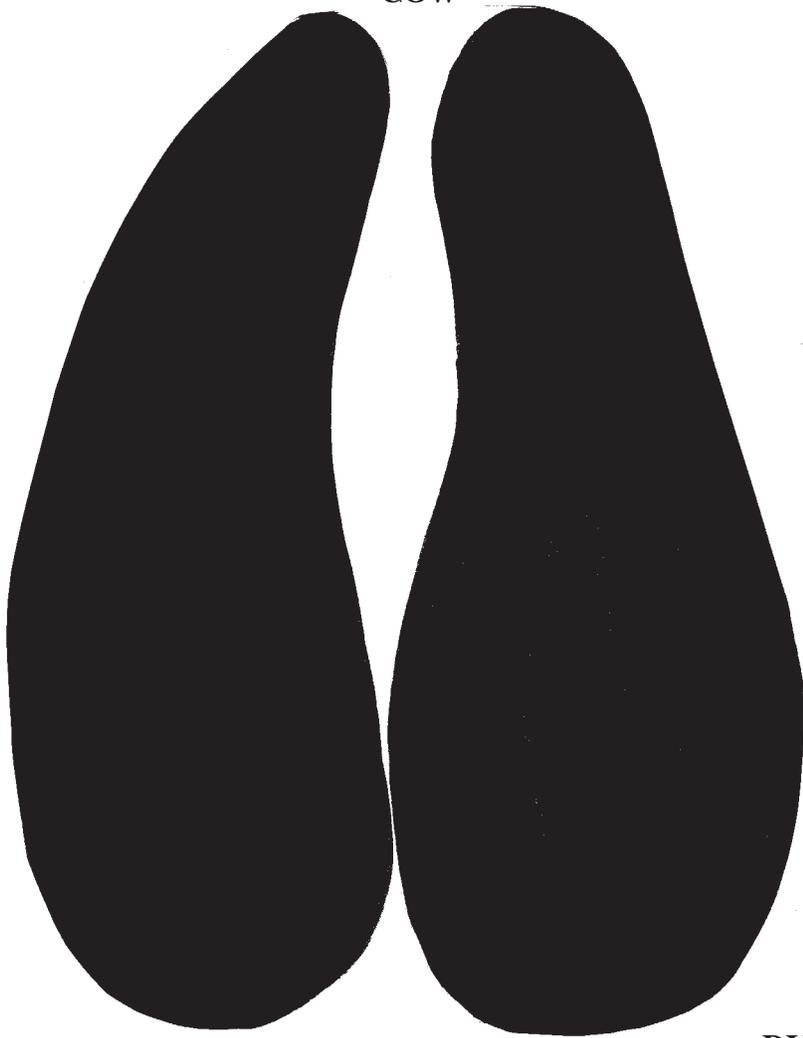


forefoot

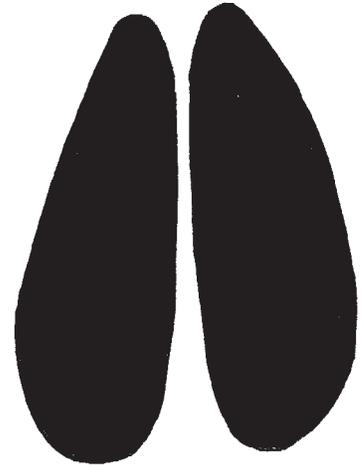
hindfoot

Farm Animal Track Templates

COW



SHEEP/GOAT



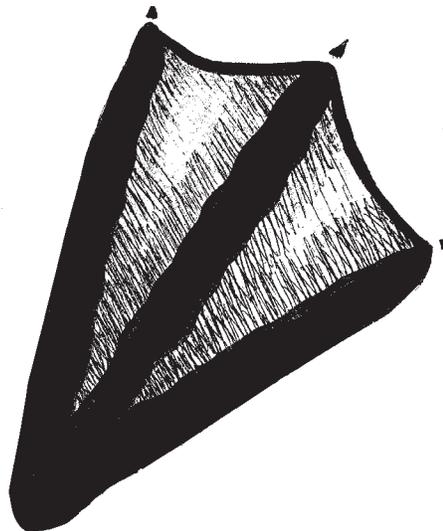
CHICKEN



DONKEY



DUCK



Winter Animal Cards



chipmunk



rabbit



woodchuck



warbler
(chestnut-sided)

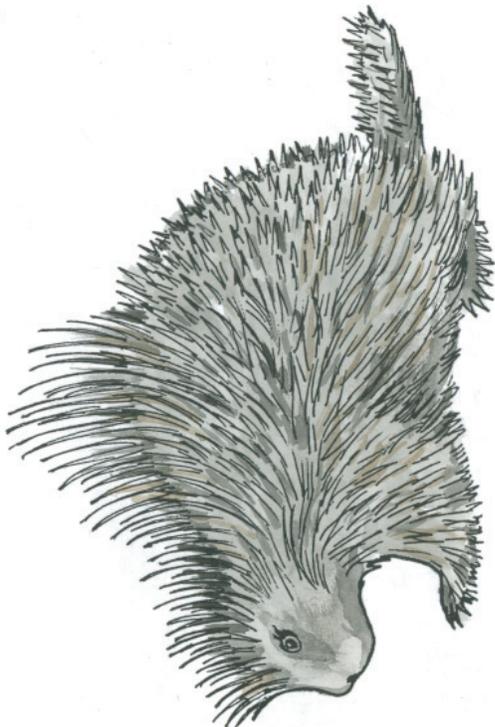
Winter Animal Cards



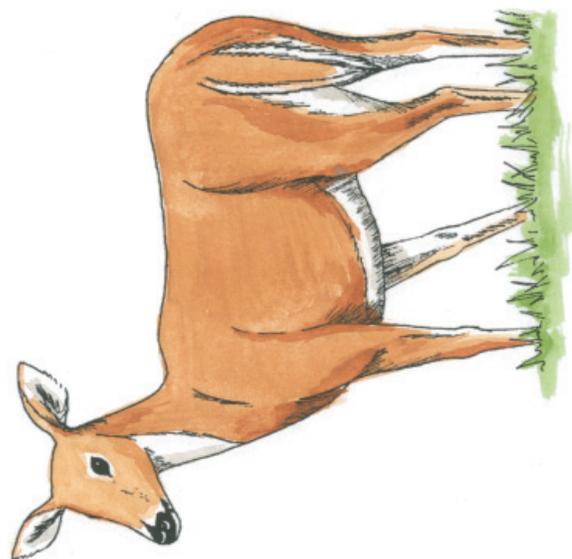
gray squirrel



red fox



porcupine



white-tailed deer

Winter Animal Cards



skunk



mouse

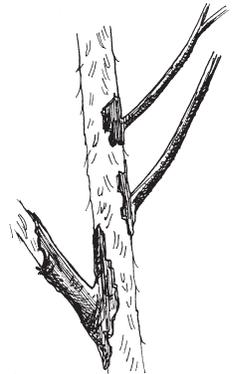


bobcat

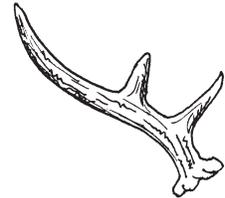


raccoon

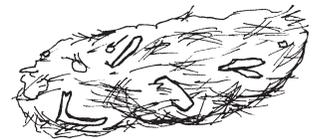
Animal Signs in Winter



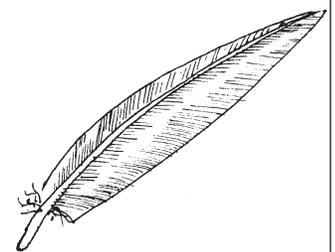
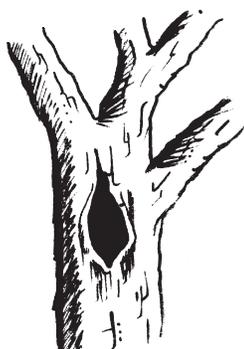
Look for the ends of twigs that have been gnawed, nibbled, or snapped off.



Look for bark that's been gnawed or stripped off, or the remains of nibbled nuts.



Look for poop! Animal poop (scat), can help us identify the animal and what it's been eating.

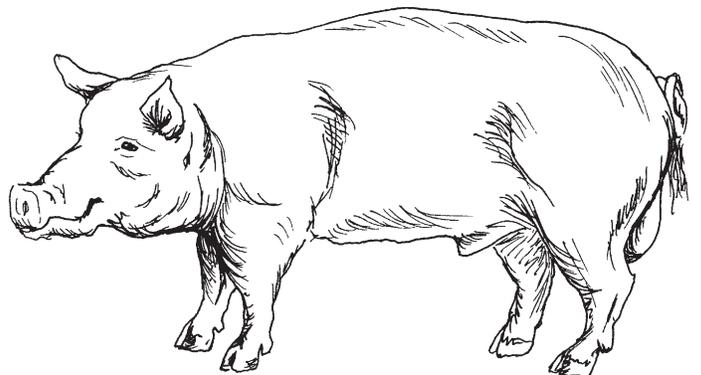
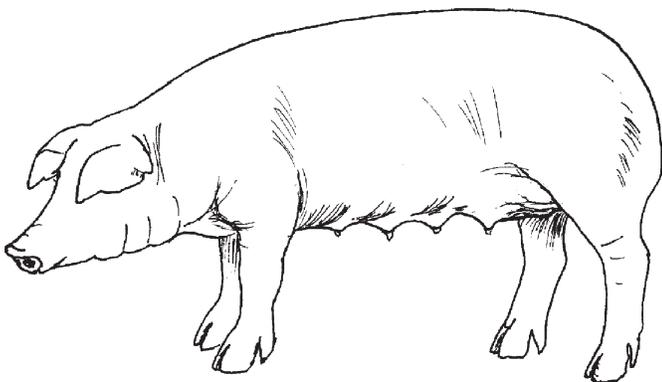
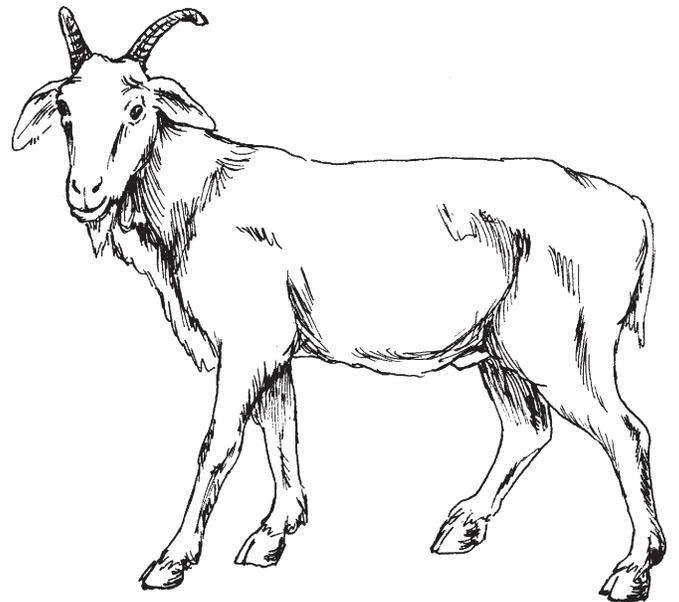
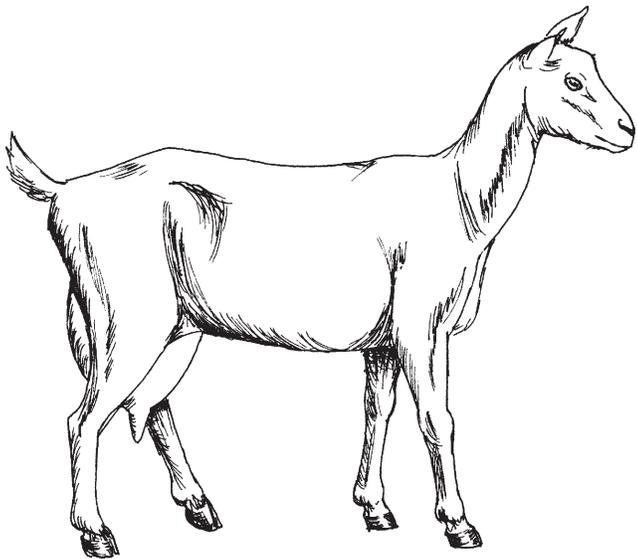
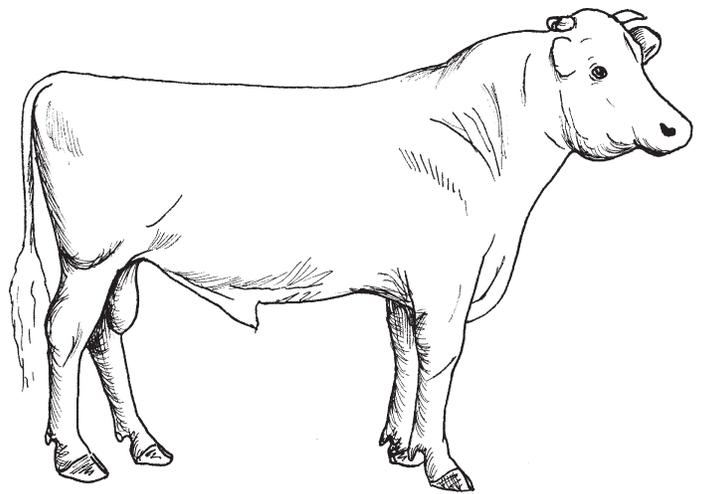
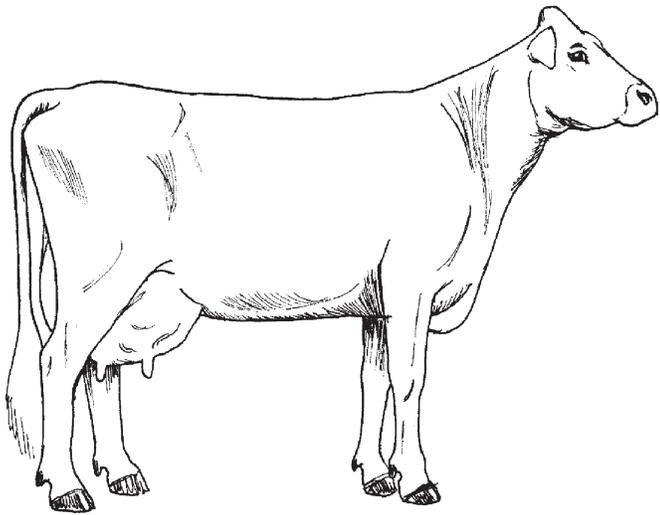


Look for animal homes.

Farmyard Animal Cards

females

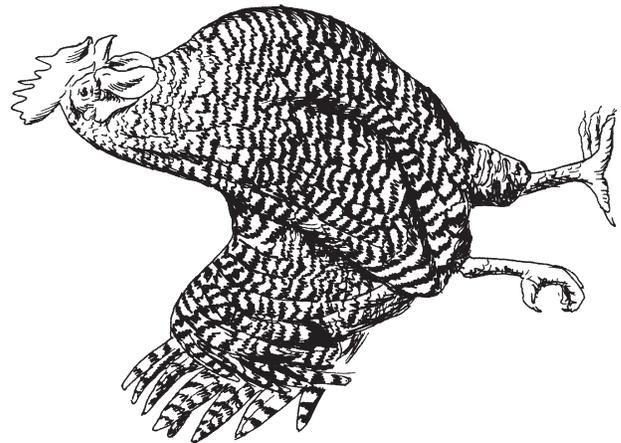
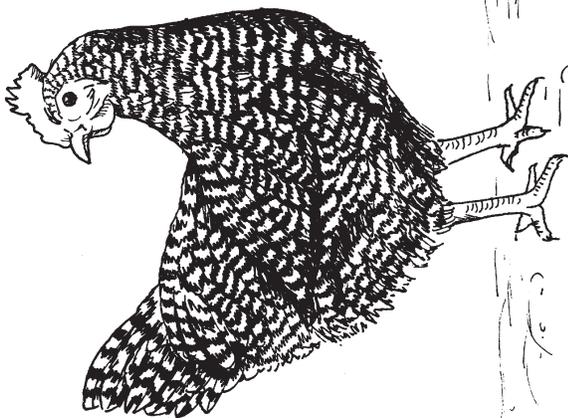
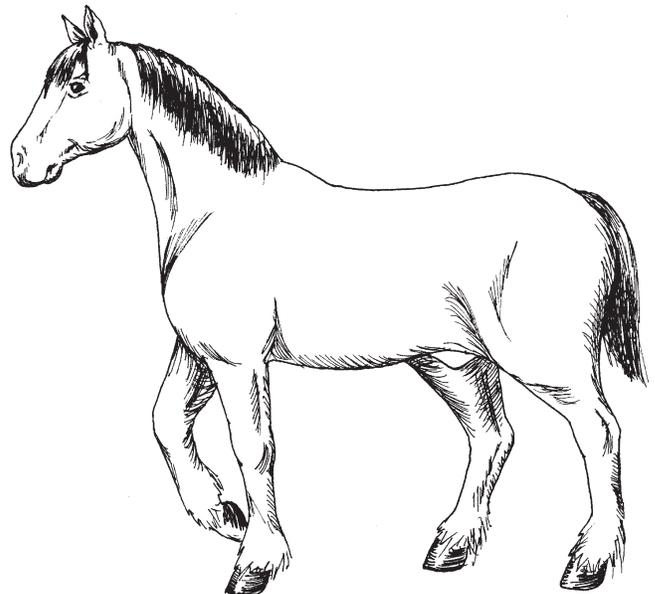
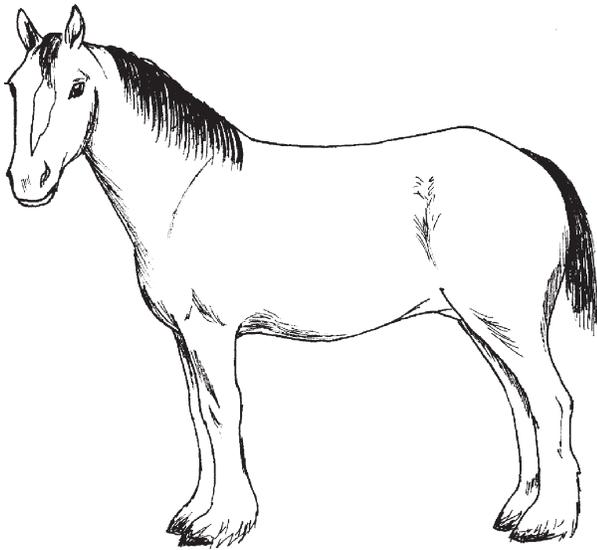
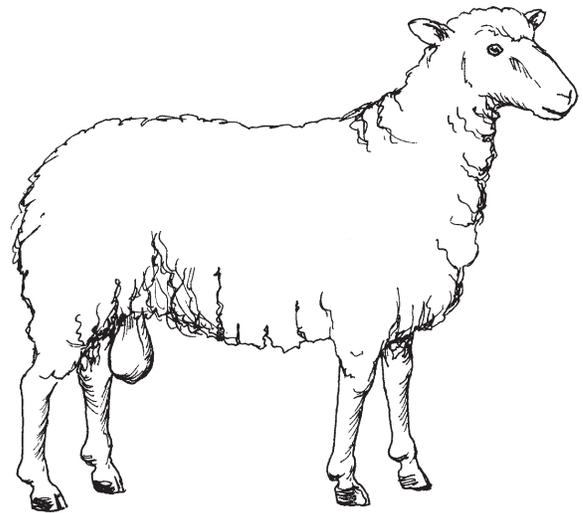
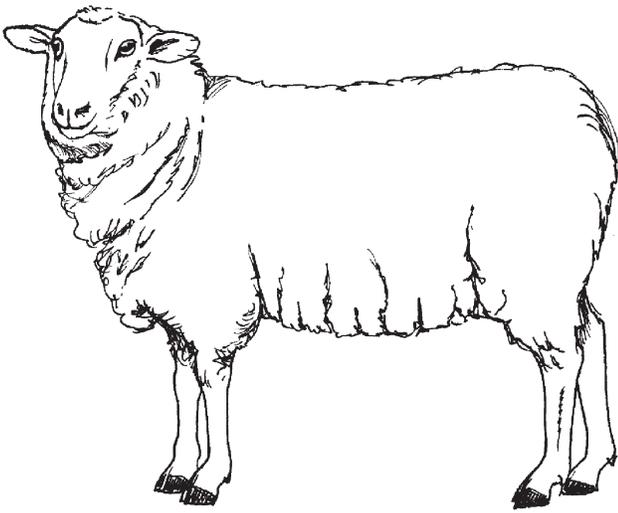
males



Farmyard Animal Cards

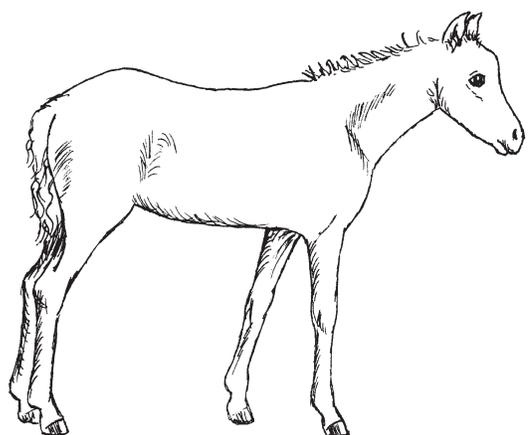
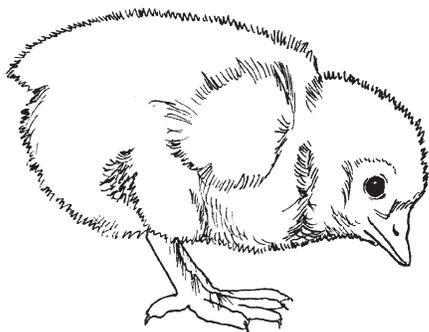
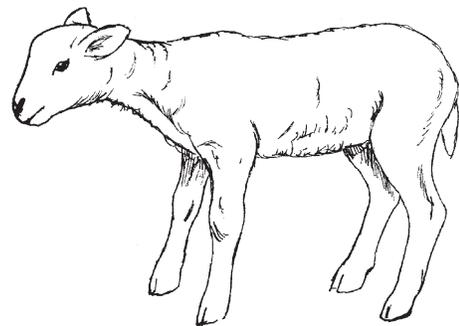
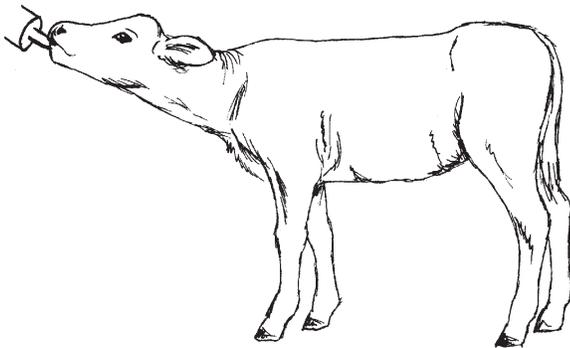
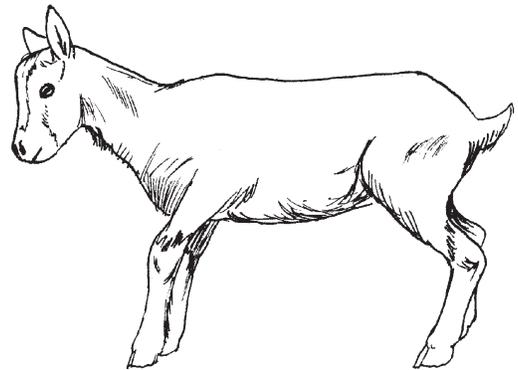
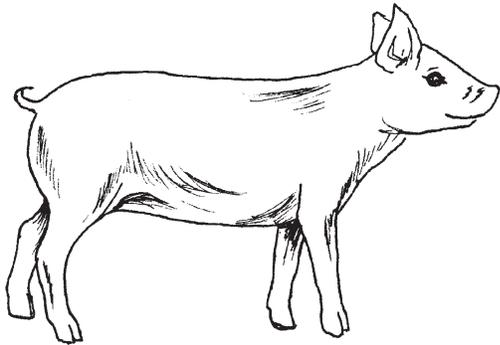
females

males

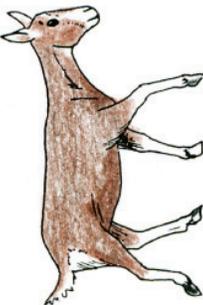
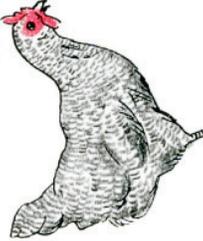
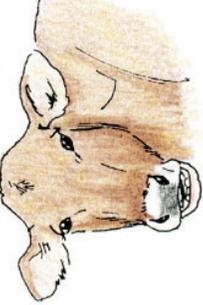
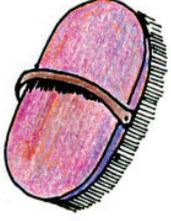
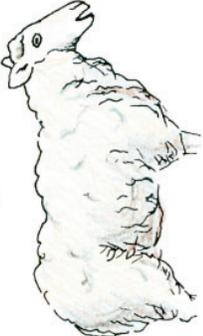
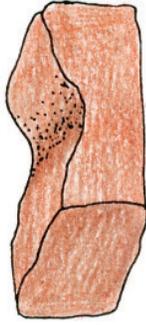
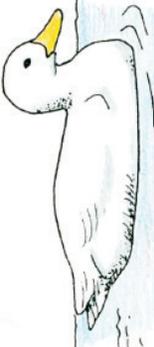
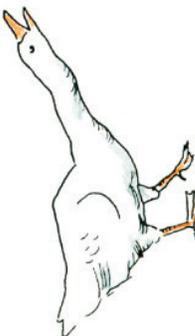
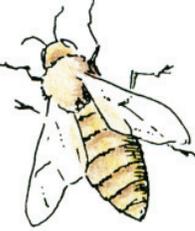
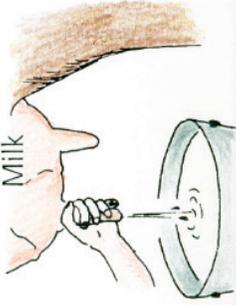
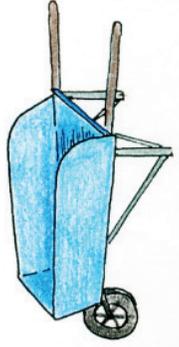


Farmyard Animal Cards

babies!

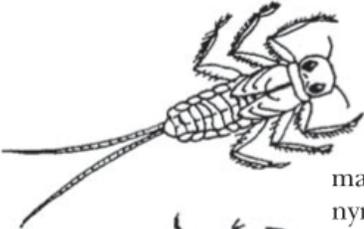
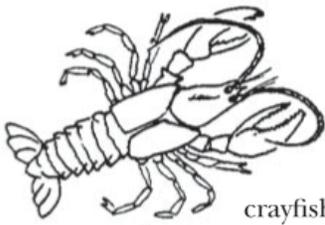
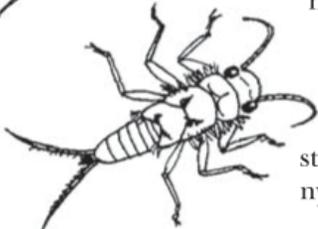
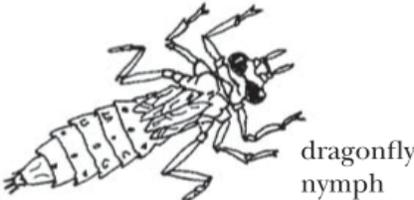
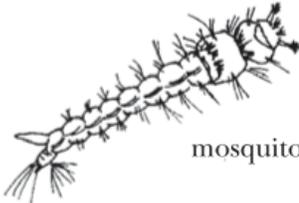
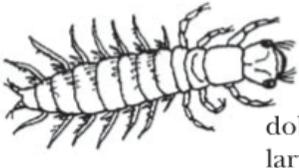
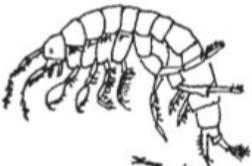
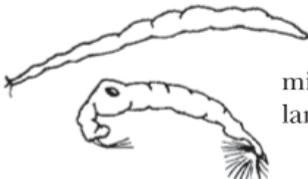
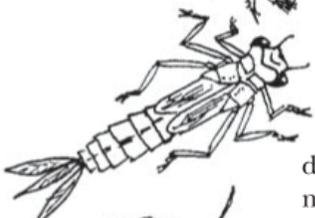
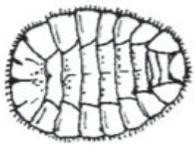
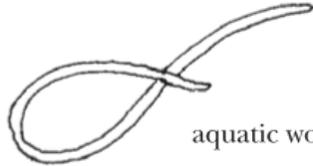


MOTION, MUSIC & MANNERISMS: A Farm Animal Scavenger Hunt!

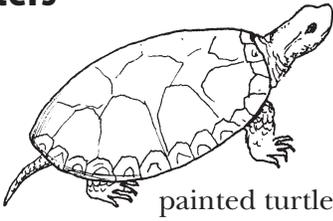
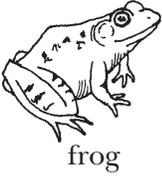
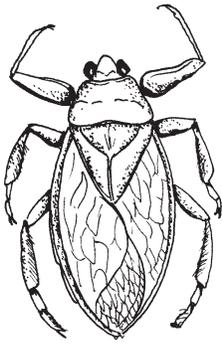
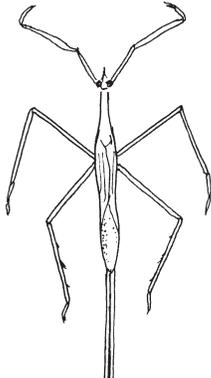
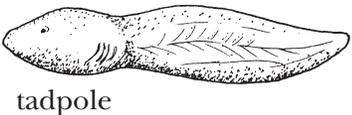
MOTION	MUSIC	MANNERISMS	ANIMAL PRODUCTS	MYSTERY
An animal that is walking 	A chicken "clucking" 	An animal chewing its cud 	Fleece from the sheep 	A tool to brush the cow 
An animal moving quickly 	A sheep "baaaing" 	An animal drinking 	Feather duster 	A salt lick 
An animal that is swimming 	A pig "snorting" 	An animal sleeping 	Manure 	A sign that tells you not to touch the fence! 
An animal moving on 2 legs 	An insect "buzzing" 	An animal scratching itself 	An egg 	A tool to move manure 
An animal moving on 4 legs 	A farmer "talking" 	An animal eating hay 	Milk 	A wheelbarrow 

Water Critter Chart

The water critters that you find in any pond or stream are clues to the health of that water ecosystem.

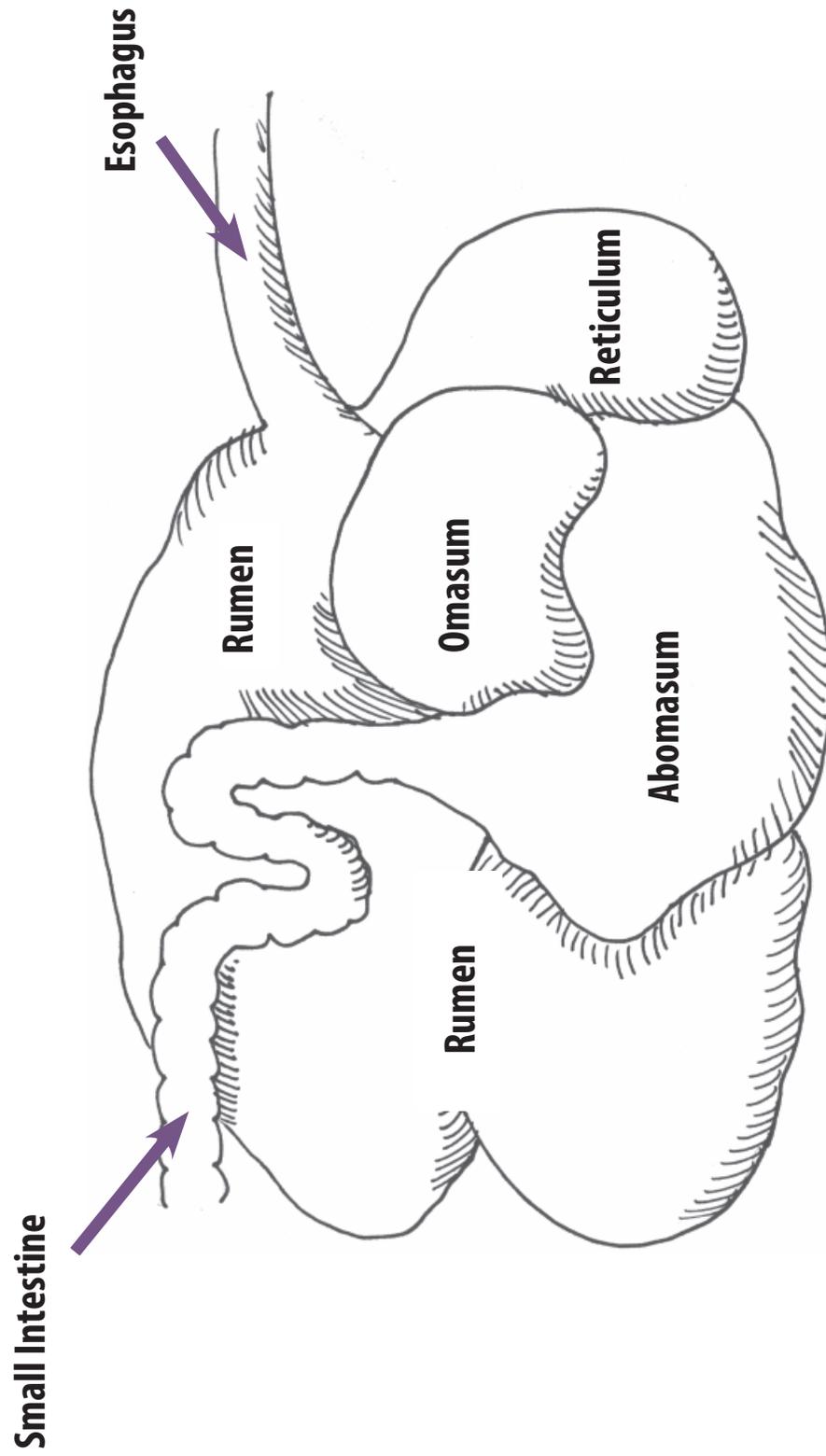
Good water quality	Range of water quality conditions	Poor water quality
 <p>mayfly nymph</p>	 <p>crayfish</p>	 <p>black fly larva</p>
 <p>stonefly nymph</p>	 <p>dragonfly nymph</p>	 <p>mosquito larva</p>
 <p>dobsonfly larva</p>	 <p>scud</p>	 <p>midge larvae</p>
 <p>caddis fly larva</p>	 <p>damsel fly nymph</p>	 <p>leech</p>
 <p>water penny</p>	 <p>sowbug</p>	 <p>aquatic worm</p>

More Water Critters

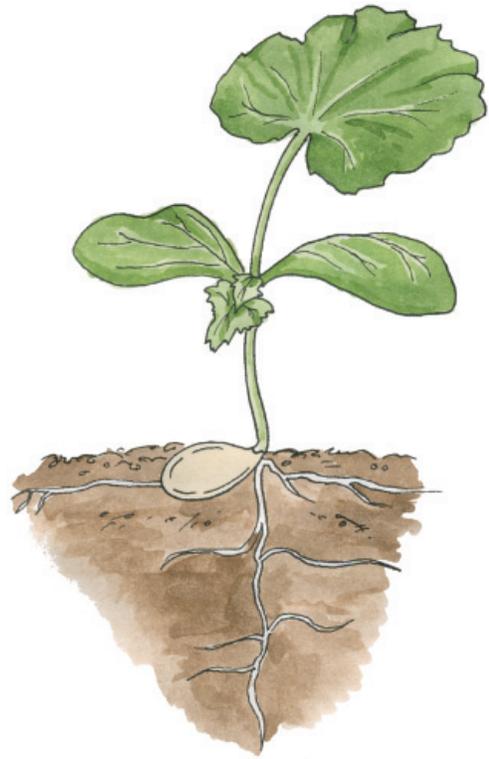
 <p>water boatman</p>	 <p>painting turtle</p>	 <p>frog</p>	 <p>giant water bug</p>	 <p>water scorpion</p>
 <p>tadpole</p>	 <p>snail</p>			

SOURCE: THIS LAKE ALIVE! An Interdisciplinary Handbook for Teaching and Learning about the Lake Champlain Basin.

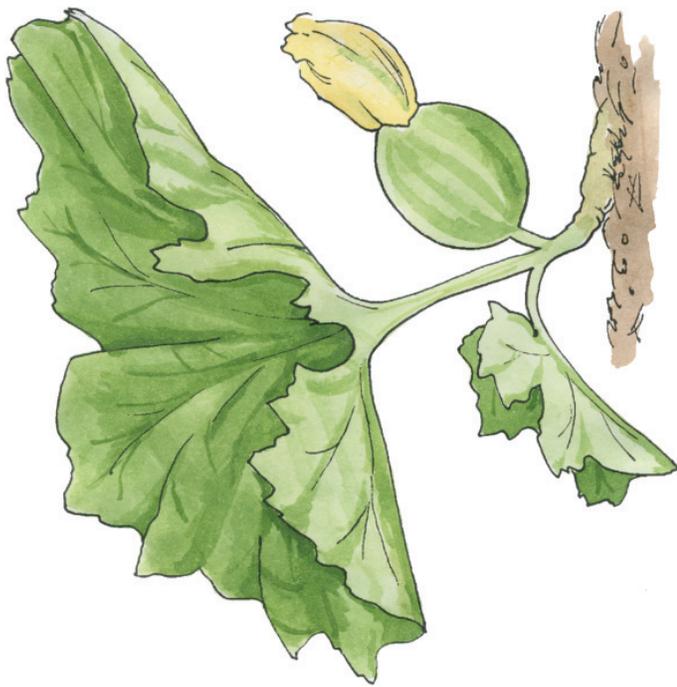
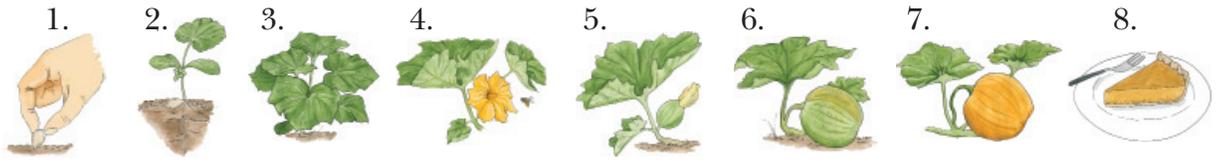
A Cow's Stomach



Pumpkin Life Cycle Cards



Key:

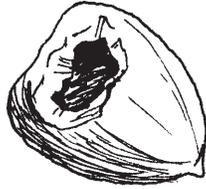


Seed Scavenger Hunt

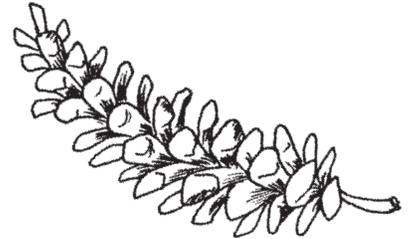
Find a seed that...



... is dispersed by wind.



... has been nibbled on by an animal.



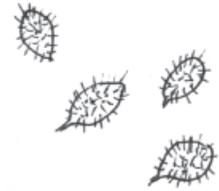
... is protected by the scales of a cone.



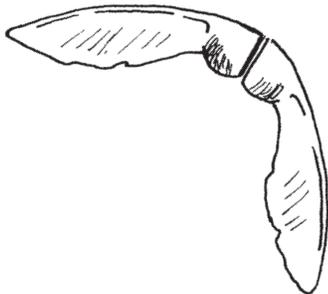
... has three sides.



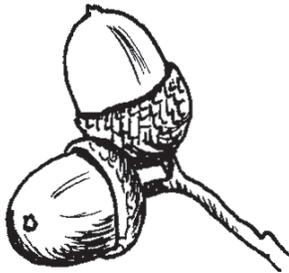
... is protected by spines.



... attaches to your clothes.



... has wings.



... has a cap.



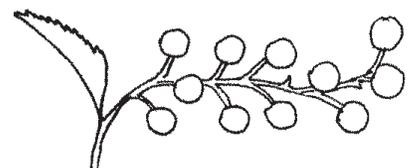
... has a sticky coat.



... is round.



is dispersed by water.



... is surrounded by a berry.

K.I.M.'s (Keep In Mind) Game

This activity can be used as an introduction to a topic that has many pieces to it or as an assessment of children's understandings after an activity unit.

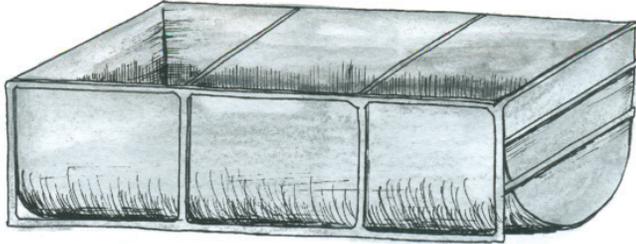
K.I.M.'s Game (Keep In Mind Game) is a takeoff on the memory game. If you have items that you want your students to become familiar with, KIM's game is a great activity. For example, if you're learning about gardening, you might have items used in planting a row of seeds;

- seeds
- string attached to two sticks to make a straight line in the garden
- a trowel or hoe
- watering can
- sign to indicate what is growing

1. Lay the items out on the floor or table, cover with a cloth. The number of items should be appropriate for the age of the students. Explain that the cloth will be removed for a minute so children can see what is underneath and children should try to remember as many as possible before the cloth is placed over the items. Discuss strategies for remembering the items; knowing how many there are may help, make associations with the items, take a "picture" with your mind's eye.
2. Uncover the items and let the children observe them for a minute. Then cover the items again.
3. Once the cloth is returned, begin listing the items as children take turns remembering them. After they have exhausted their memories, pull back the cloth and check the list with what is there. As you check items off the list, talk about what that item is and how it is used.

As an extension, after all the items have been discussed, have a child remove one item while the others close their eyes. At the count of three, eyes are opened and they try to guess what item has been removed.

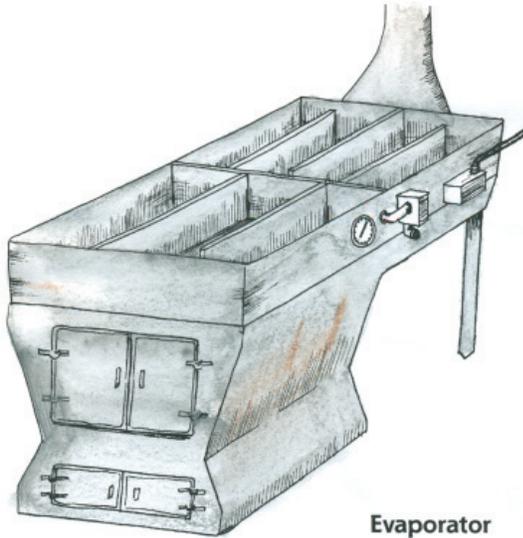
Sugaring Tools



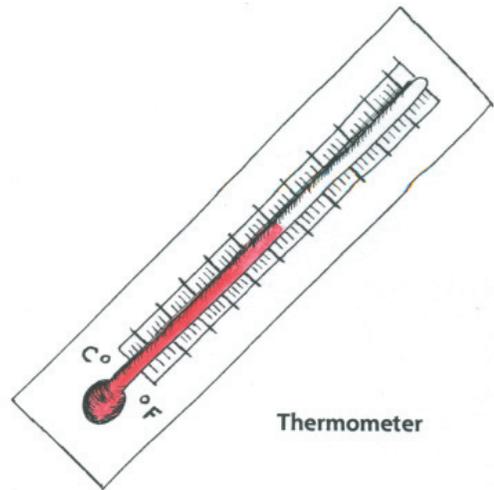
Holding Tank



Arch or
Firebox



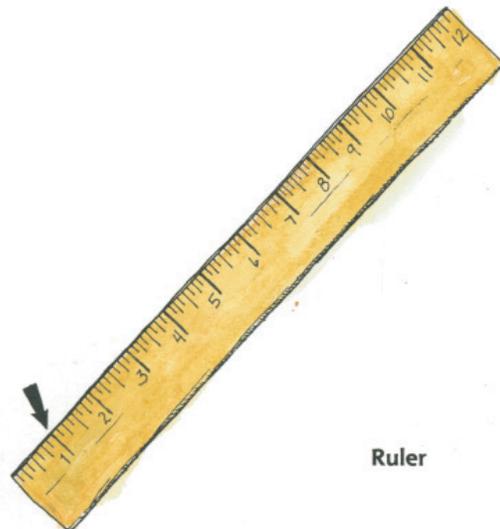
Evaporator



Thermometer



Wood



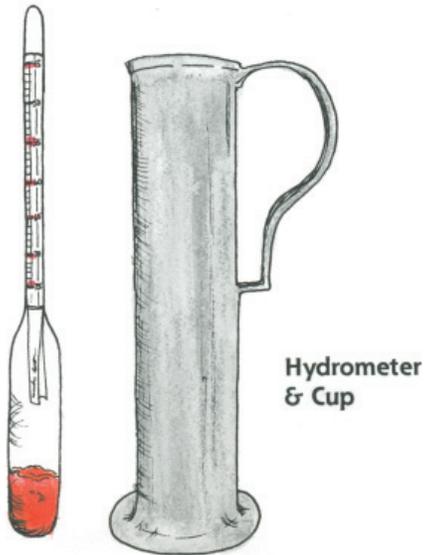
Ruler



Scoop for Sheeting



Screen Scoop



Hydrometer
& Cup



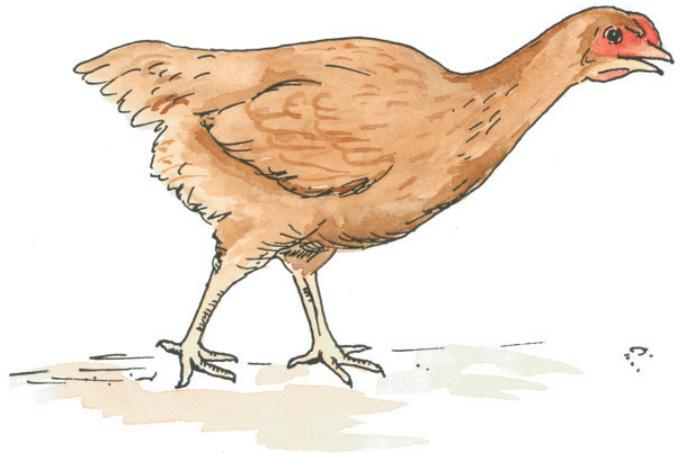
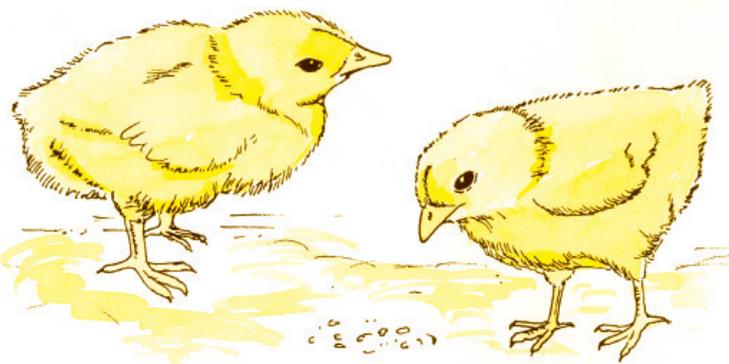
Gloves



Grading Kit



Chicken Life Cycle Cards



Key:



1.



2.



3.



4.



5.

Worm Exploration Sheet

How many worms can you find?

Look closely to find the worm's mouth.

Can you find worm eggs?

What do worms eat? Find a piece of their food.

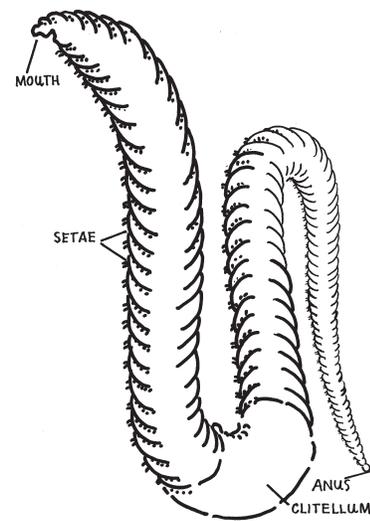
Can you see the food in their bodies?

Do worms like it wet or dry? Use the squirt bottle to find out.

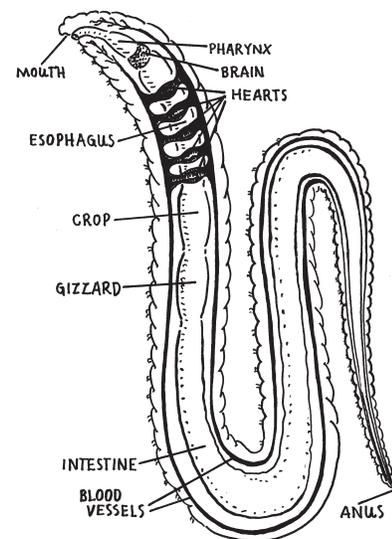
Do worms like it dark or light? Use the flashlight to find out.

Moisten your hand and hold a worm. How do they feel?

Find the different parts of the worm: the head, rear, brain, blood vessel, clitellum, mouth, and setae.



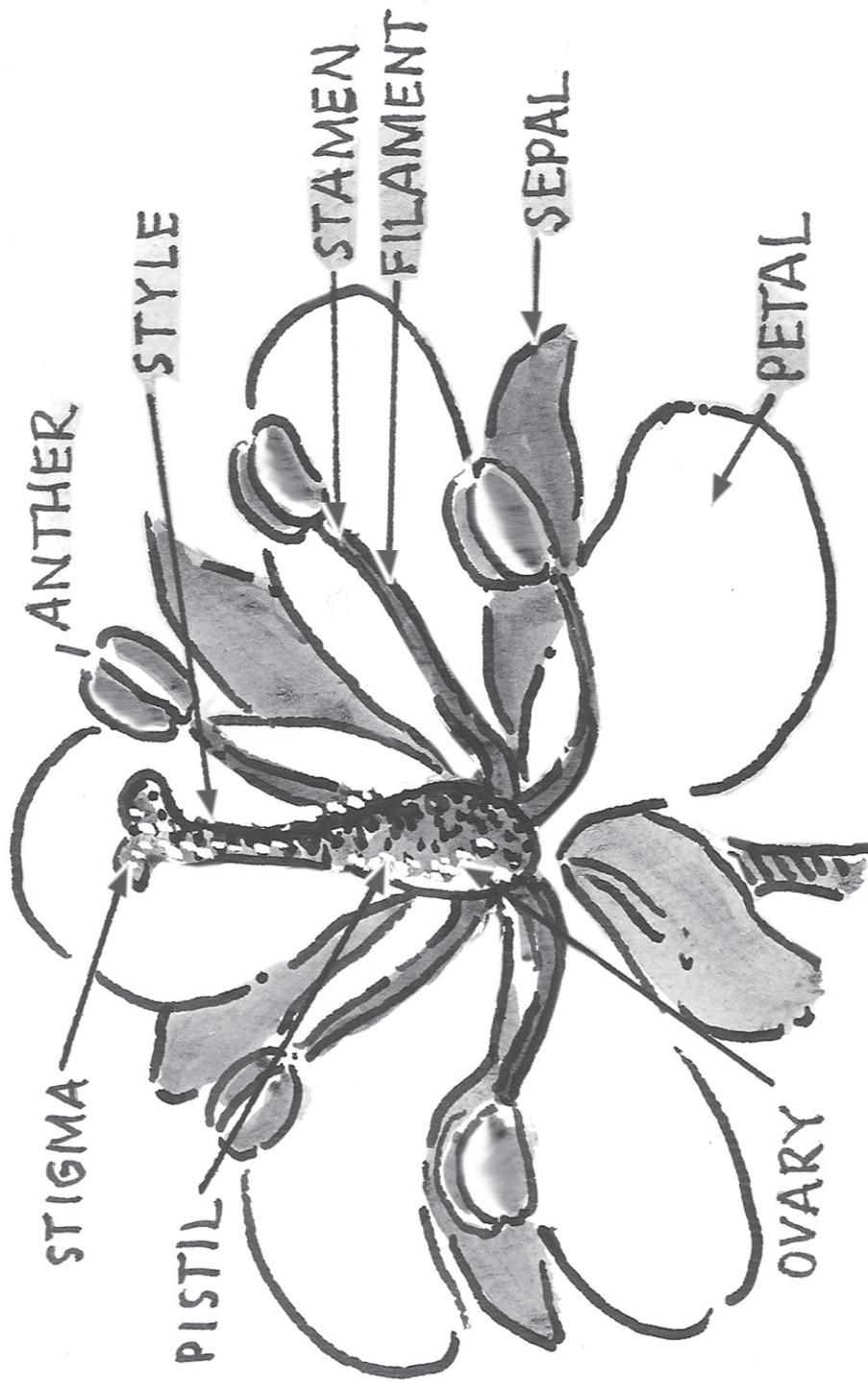
The Outside of a Worm



The Inside of a Worm

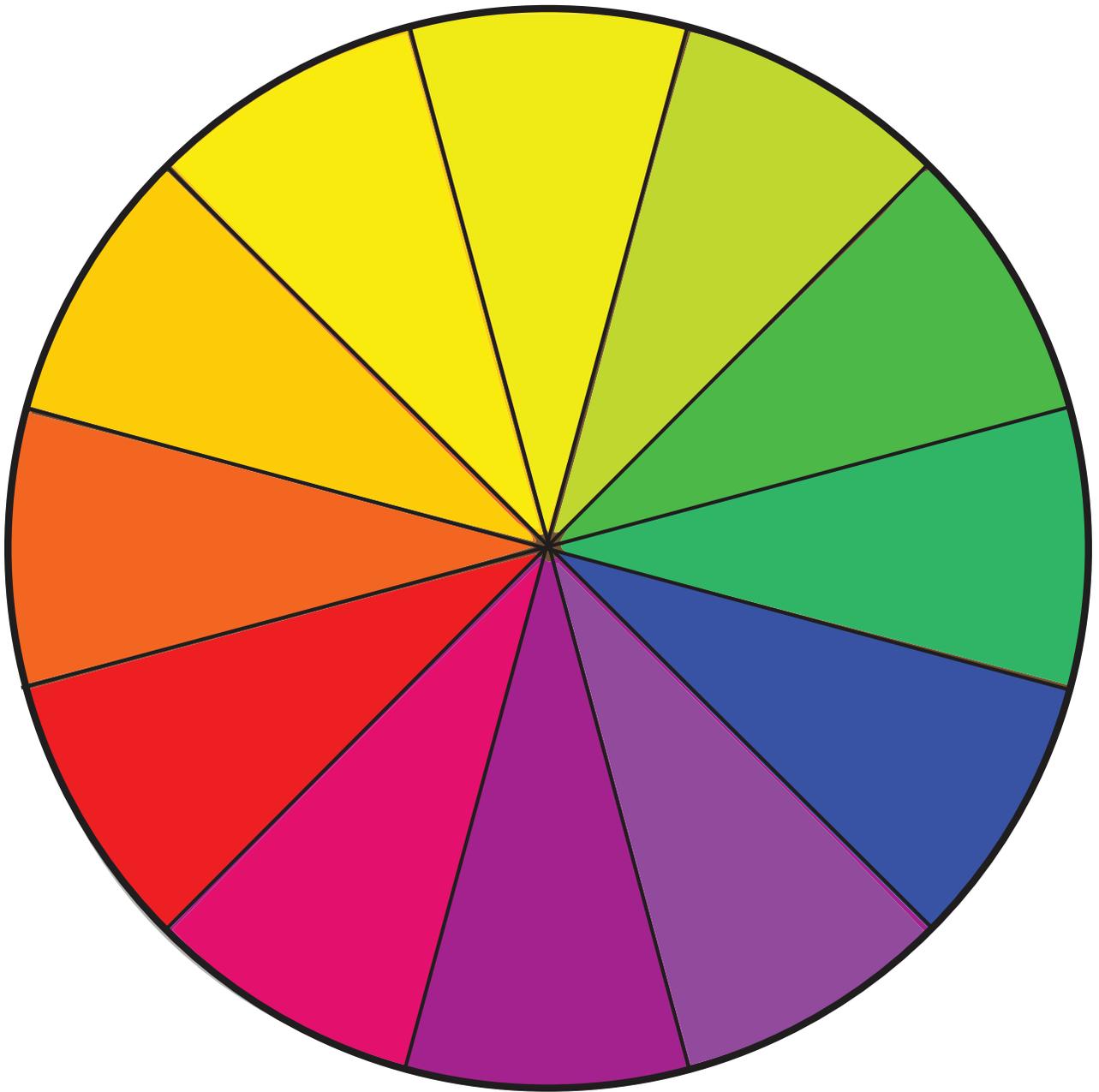
Illustrations: PROJECT SEASONS

The Parts of a Flower

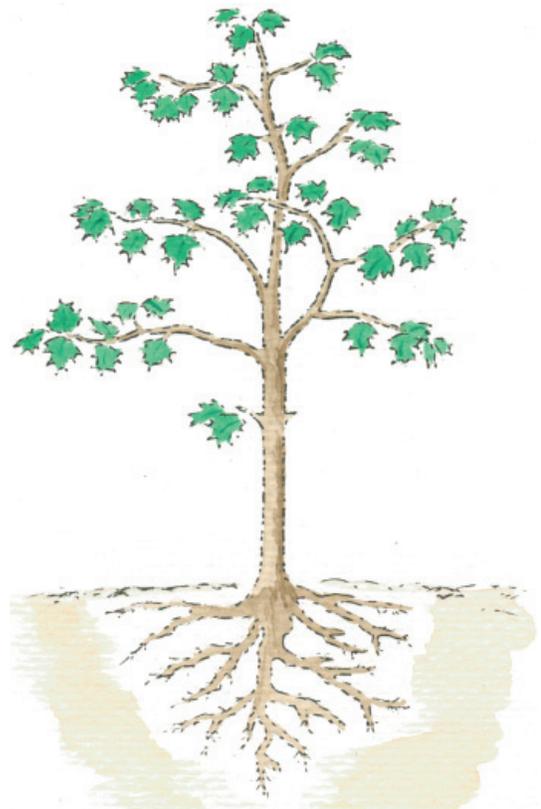
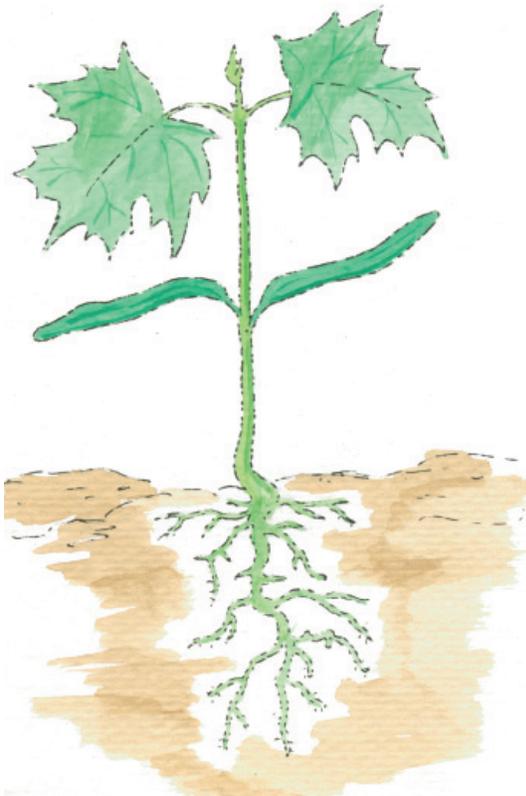
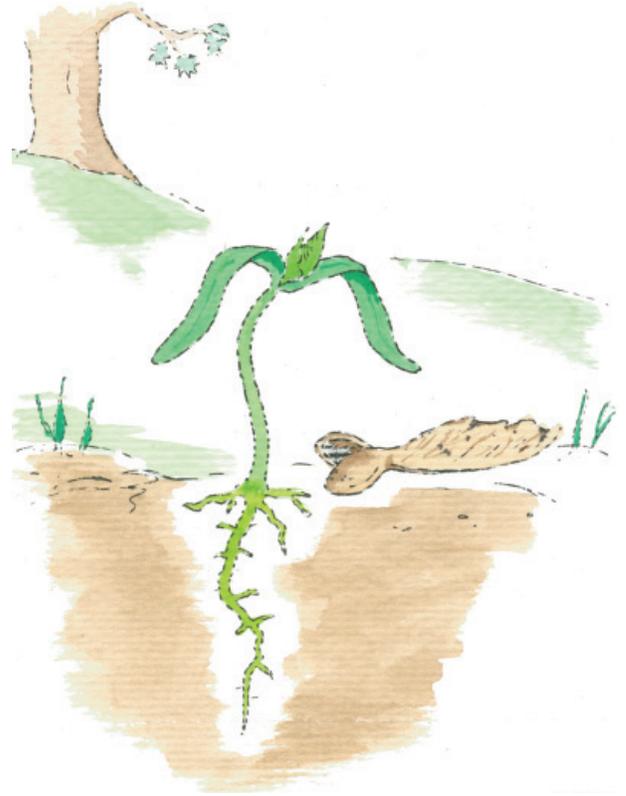
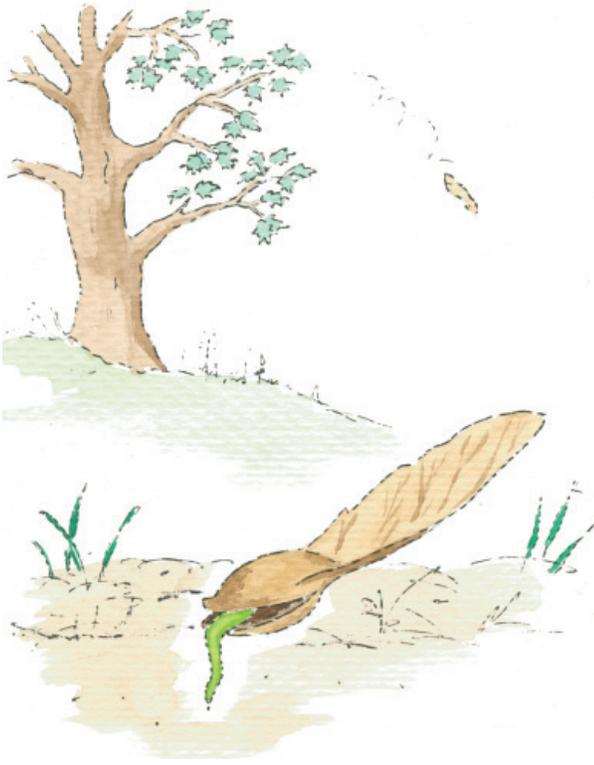


Color Wheel

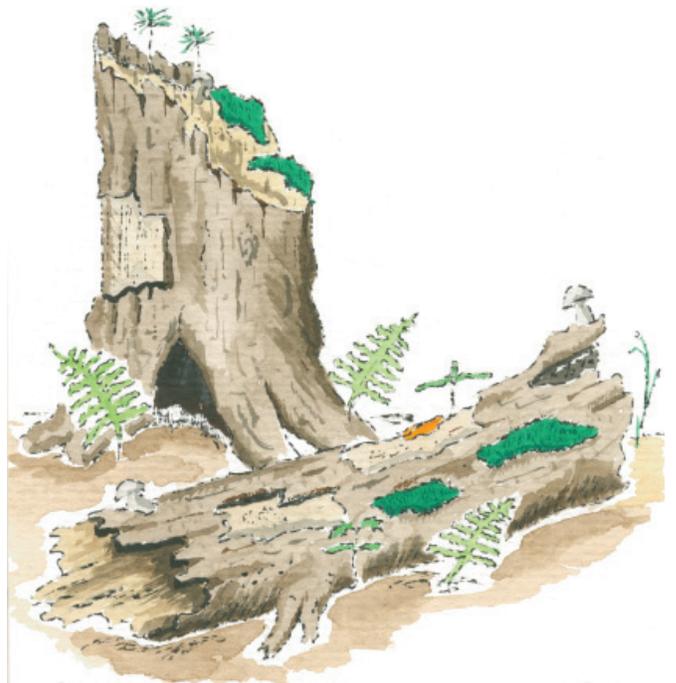
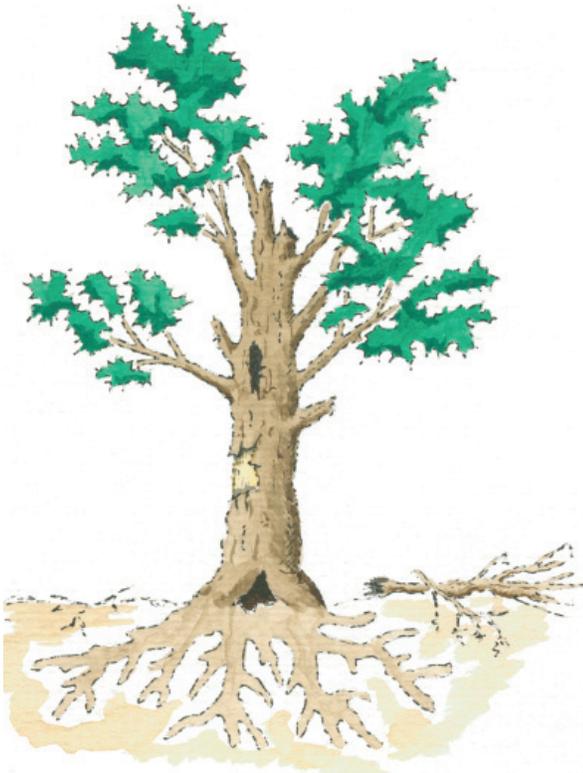
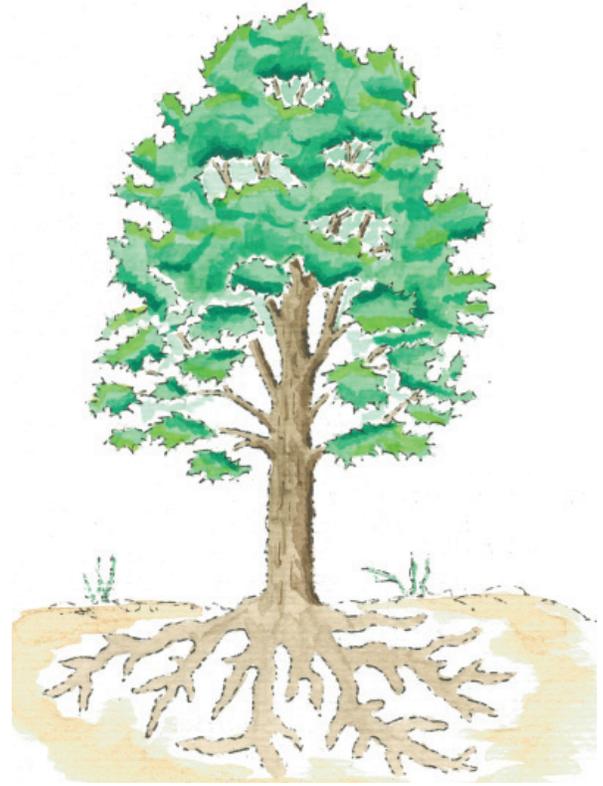
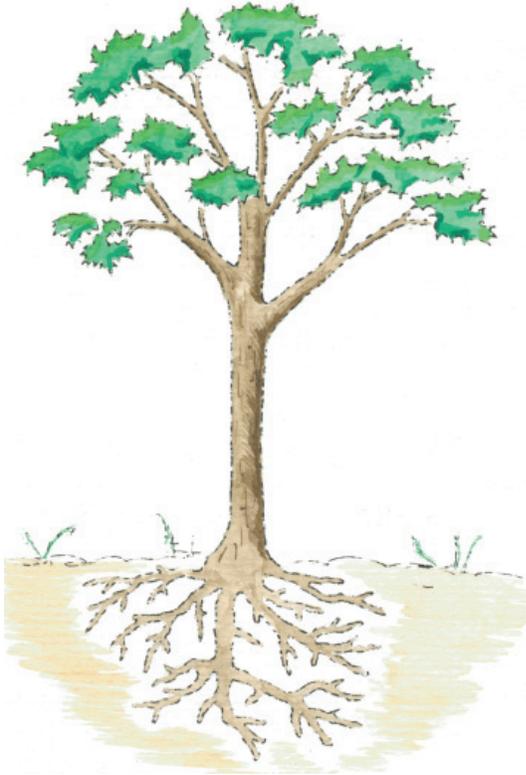
Find flowers that match the colors on the color wheel.



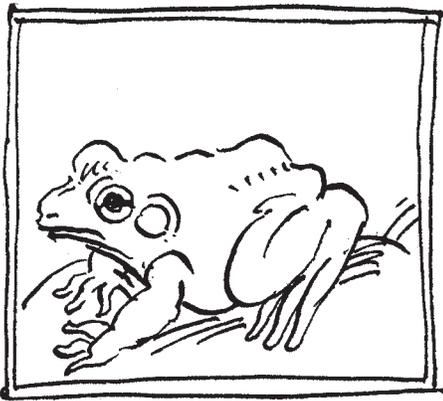
Tree Life Cycle Cards



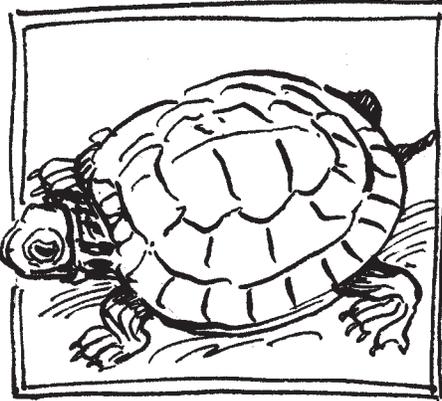
Key:



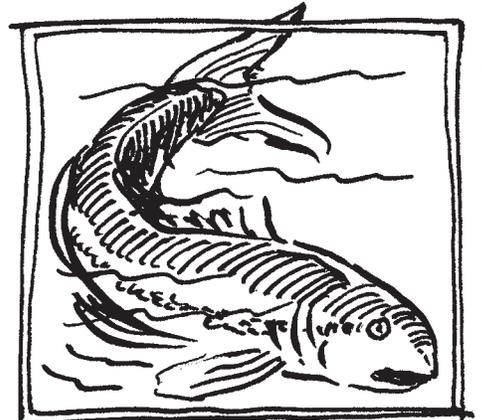
Adult Animal Cards



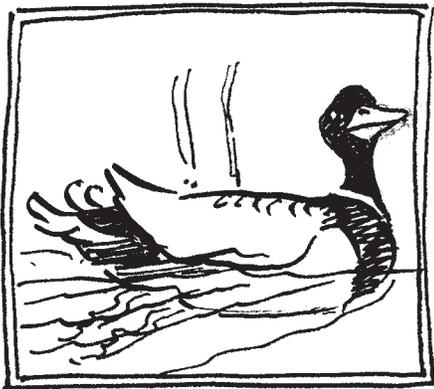
FROG



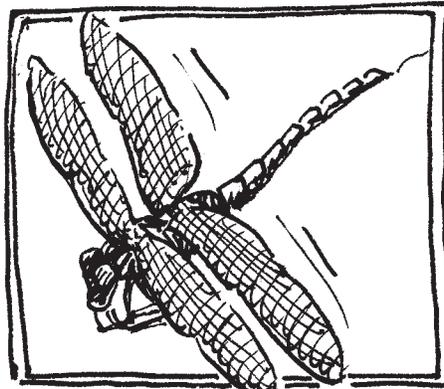
TURTLE



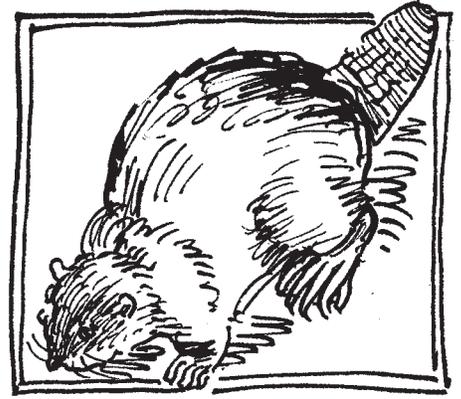
FISH



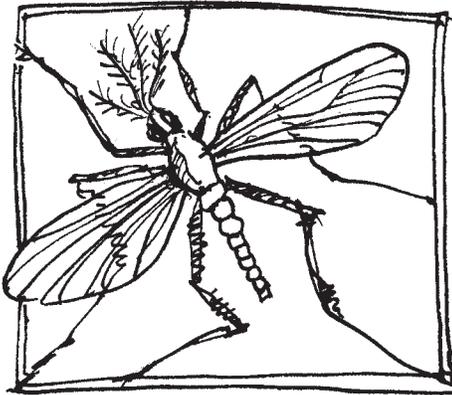
MALLARD DUCK



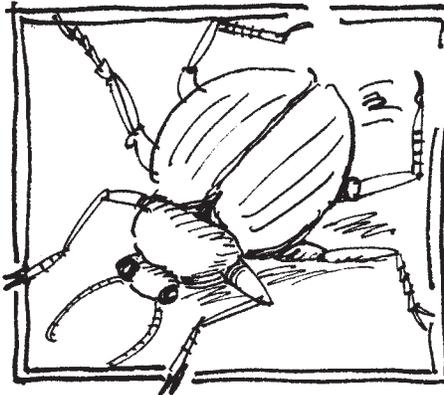
DRAGONFLY



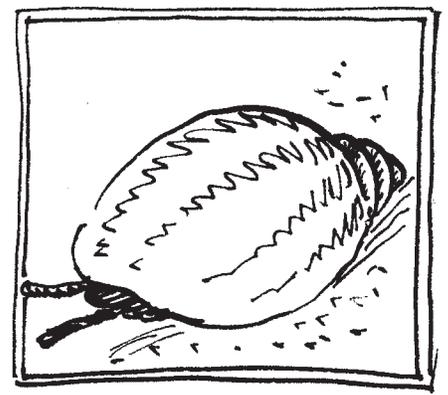
BEAVER



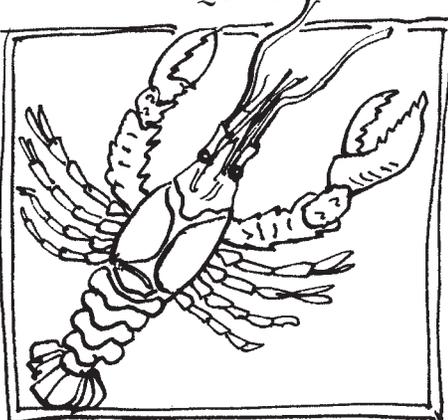
MOSQUITO



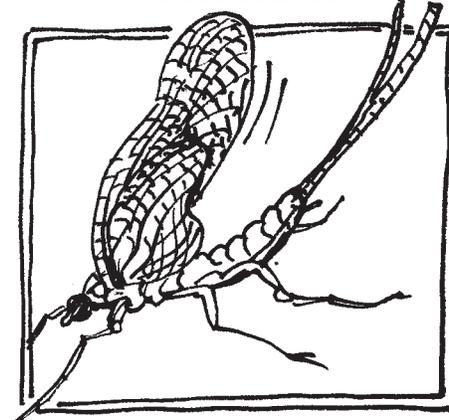
RIFFLE BEETLE



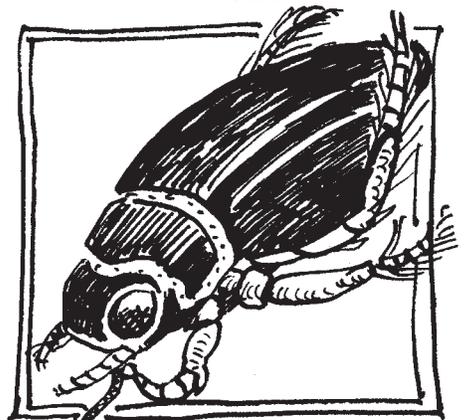
SNAIL



CRAYFISH

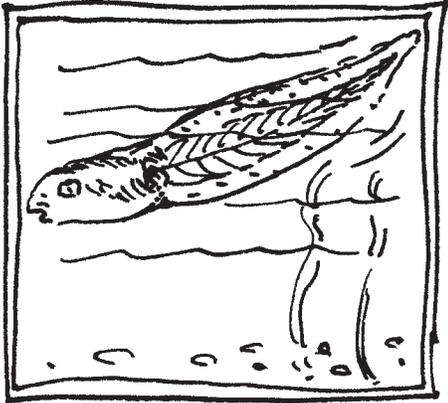


CADDISFLY

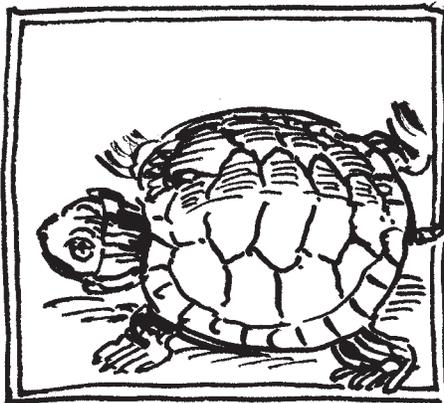


DIVING BEETLE

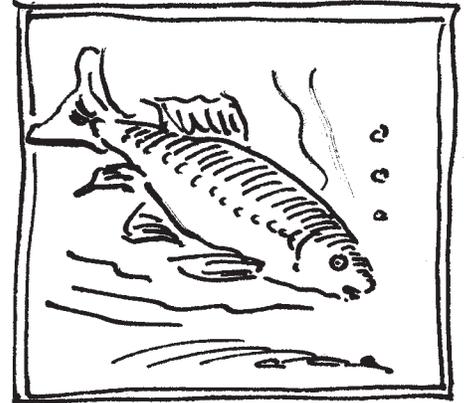
Baby Animal Cards



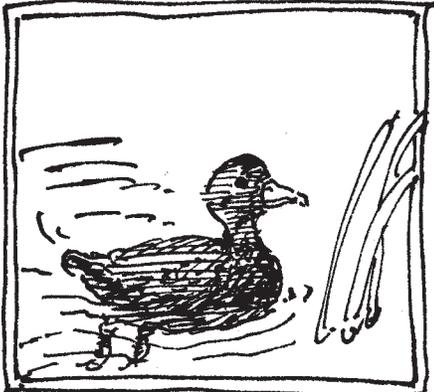
TADPOLE



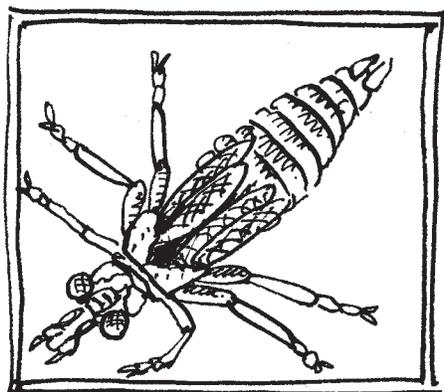
TURTLE



FISH FRY



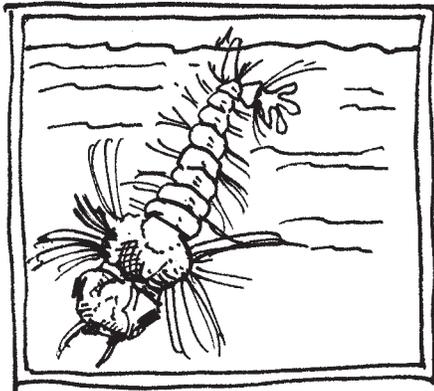
MALLARD DUCKLING



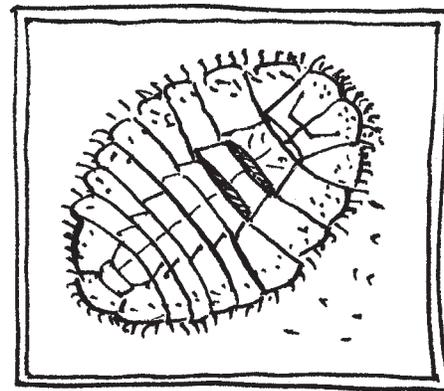
DRAGONFLY NYMPH



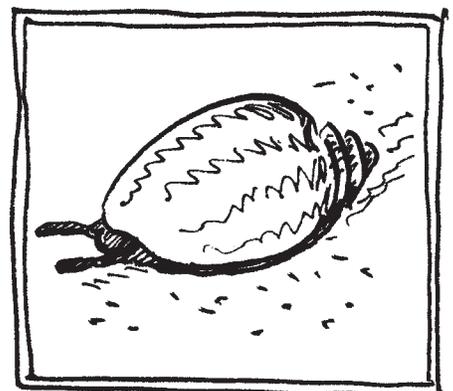
BEAVER KIT



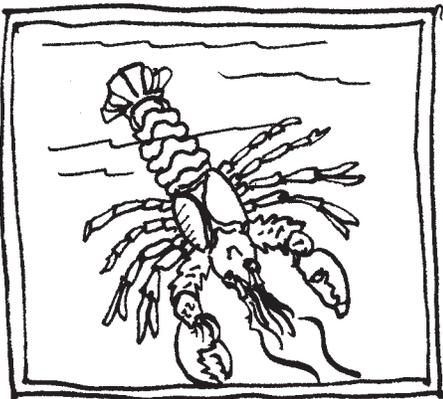
MOSQUITO LARVAE



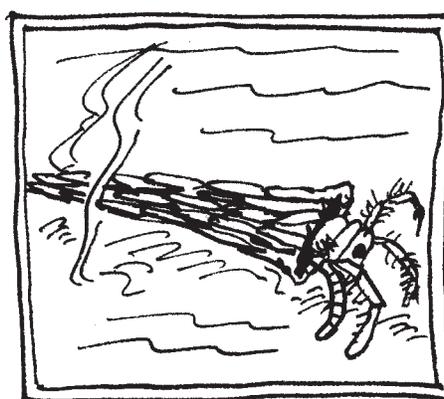
WATER PENNY



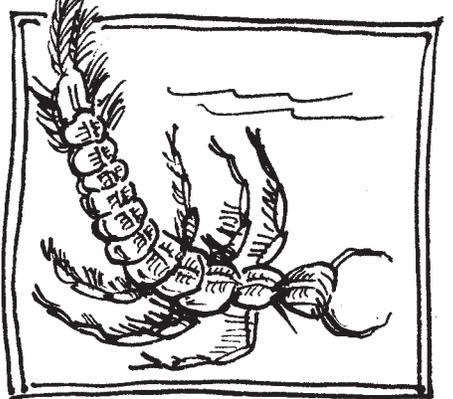
SNAIL



CRAYFISH

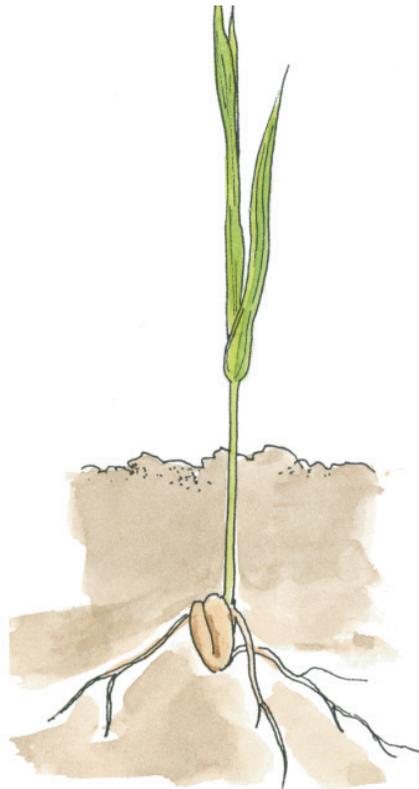
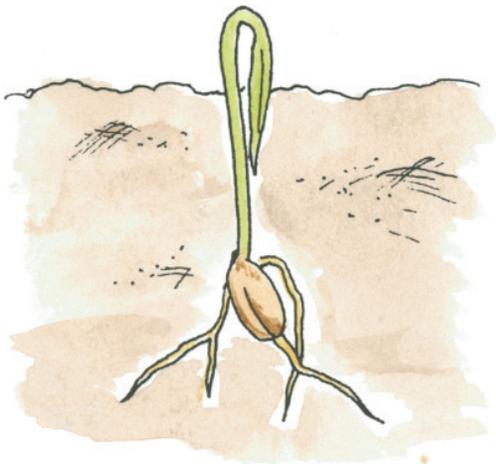
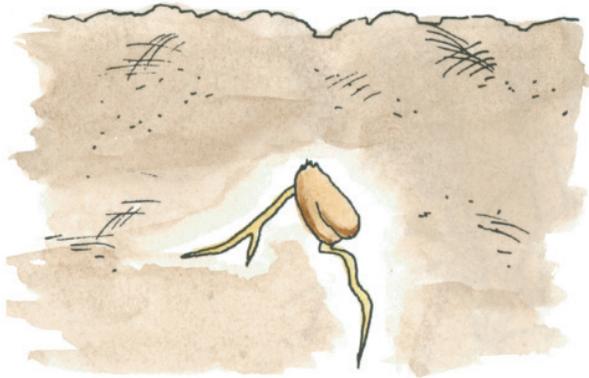


CADDISFLY LARVAE

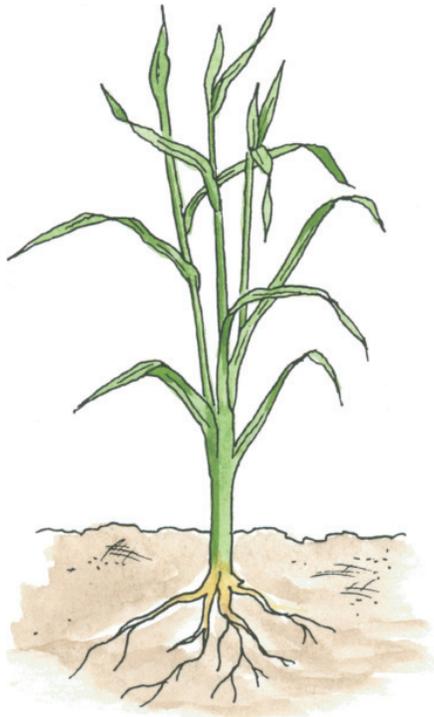


DIVING BEETLE LARVAE

Wheat Life Cycle Cards



Wheat Life Cycle Cards



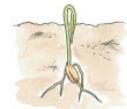
Wheat Life Cycle KEY CARD



1



2



3



4



5

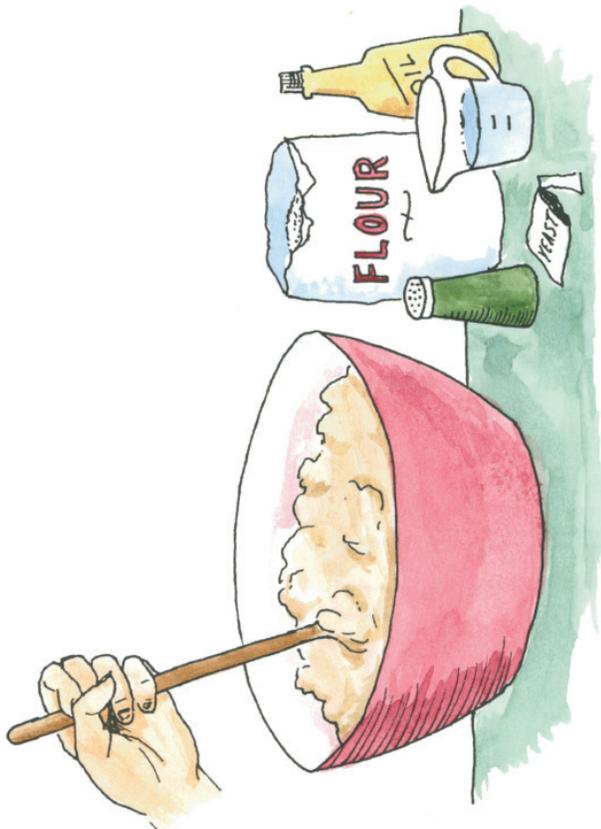
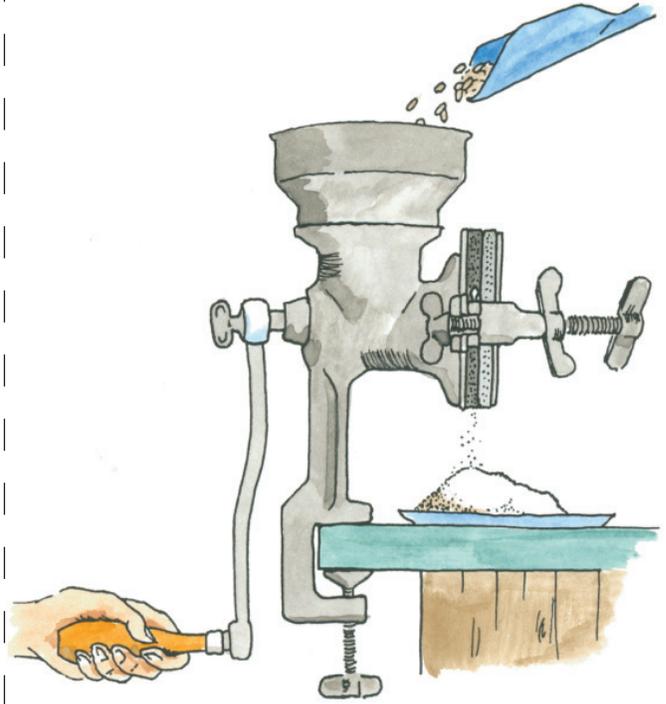


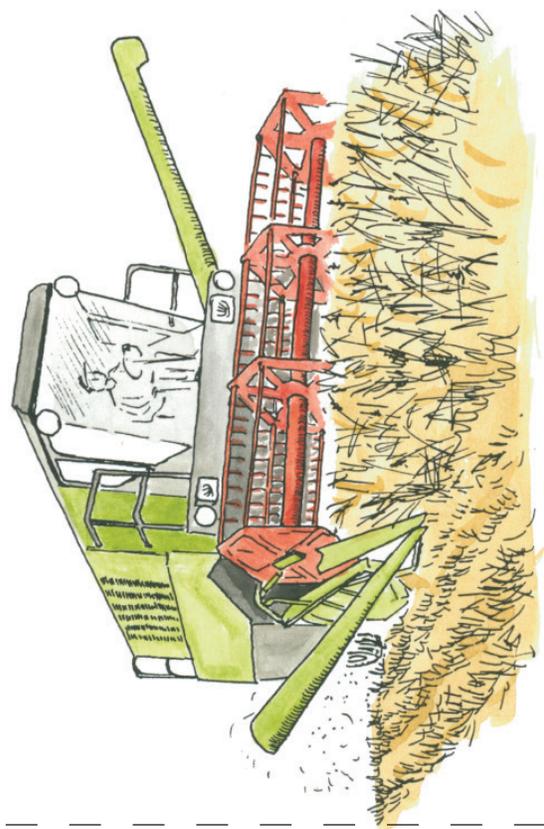
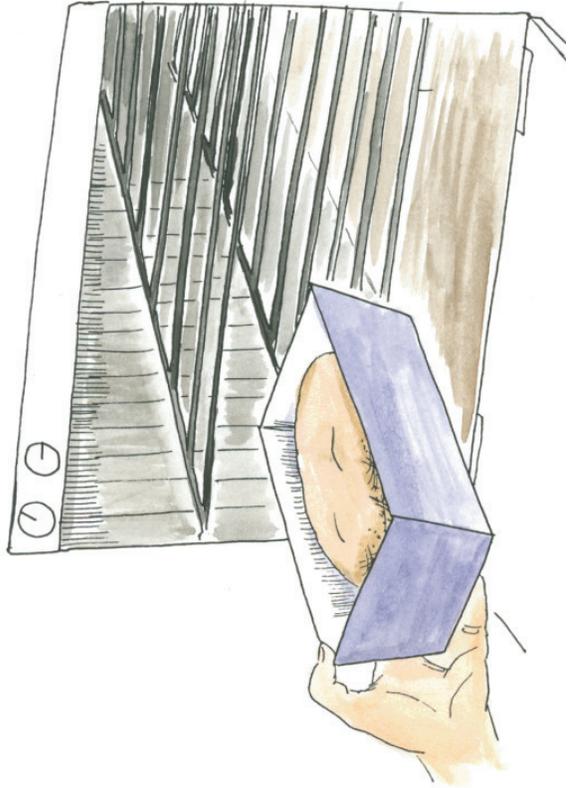
6



7

Wheat to Bread Cards





Mix It Up: Make Potting Soil

Invite students to make potting soil by following a recipe. The recipe below can be blown up onto a poster for students to read together, or handed out like a recipe card, together with the explanations of what each ingredient contributes to the soil mix. You can find the ingredients for making potting soil at your local gardening center.

Blood meal: Rich in nitrogen

Bone meal: Rich in phosphorus

Egg shells: Rich in calcium

Wood ash: Adds potassium

Lime: An alkaline, it can help neutralize acidic soil

Perlite: A naturally occurring volcanic glass that pops like popcorn when heated. It improves aeration by keeping soil loose and preventing compaction.

Peat moss: holds water and air; contains few nutrients

Potting Soil Recipe

BASE FERTILIZER

- ¼ cup blood meal
- ¼ cup bone meal
- ¼ cup egg shells
- ½ cup wood ash

ADDITIONAL INGREDIENTS

- ½ bucket peat moss (5 gallon bucket)
- 2 tbsp. lime
- ⅓ bucket perlite
- 1 ¼ c. Base Fertilizer (see above)
- ¼ bucket top soil
- ⅓ bucket compost

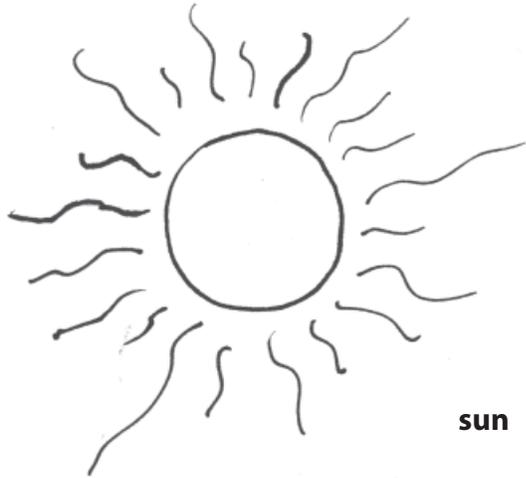
INSTRUCTIONS

1. First, mix together ingredients for Base Fertilizer.
2. Mix remaining ingredients together. *(To help students measure the correct amount of "bucket" ingredients, make lines for ¼'s and ⅓'s on the bucket)*
3. Add water until damp.

Use your potting mix to start seeds for your school garden or to take the plants home for the summer.



Soil Recipe Cards



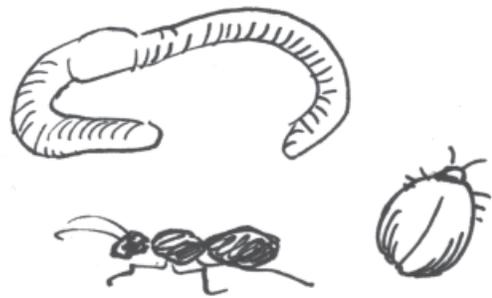
sun



water



time



worms and insects



wind



bacteria

Individual Voting Ballots for Taste Tests Parties

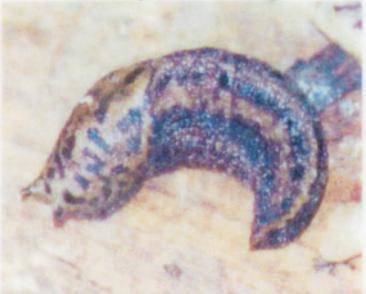
Cut out and give one ballot to each child

<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>
<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>
<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>
<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>	<p>TASTE TEST</p> <p>Product _____</p> <p>Date _____</p> <p>(circle one):</p> <p>Like! Sort of... Don't Like</p> <p>  </p>

adapted from Kathy Alexander, Ferrisburgh Central School, Ferrisburgh, VT, 2009

Source: VT-FEED, A GUIDE TO TASTE TESTING LOCAL FOOD IN SCHOOLS, 2010

Life under a Log: Critter ID

<p>Worm</p> 	<p>Harvestman (Daddy Long Legs) *This Arachnid is NOT a spider!*</p> 	<p>Millipede</p>  <p>Size- []</p>
<p>Centipede</p>  <p>Size- []</p>	<p>Red Backed Salamander</p> 	<p>Sow Bug (Wood Louse)</p>  <p>Size- []</p>
<p>Carpenter Ant</p>  <p>Size- []</p>	<p>Turkey Tail</p> 	<p>Mycelium</p> 
<p>Red Eft</p> 	<p>Leopard Slug</p> 	<p>Ground Beetle</p>  <p>Size- []</p>
<p>Garter Snake</p> 	<p>American Toad</p> 	<p>Subterranean Termite</p>  <p>Size- []</p>

Life under a Log: Critter ID

American Toad: These toads can live all over the United States. They can live up to 10 years in the wild, and they shed their skin every few weeks while they are still growing. They eat insects and lay their eggs in fresh water.

Carpenter Ant: These ants are $\frac{1}{4}$ to $\frac{3}{4}$ inch in length and black (sometimes red) in color. They naturally live in dead logs and eat insects, honeydew from aphids and plant juices.

Centipede: These arthropods are reddish-brown in color and are generally about one inch in length. They feed on live insects and do not damage plants.

Garter Snake: These small common snakes live in a variety of habitats and prey primarily on worms and amphibians.

Ground Beetle: There are many different species of ground beetles that differ slightly in appearance, although most are black. They are most active at night and they eat insects, which makes them beneficial to agriculture.

Harvestman: Often called Daddy Long Legs; harvestmen are neither spiders nor insects. Over 6,400 different species have been discovered world wide. They are omnivorous, eating small insects as well as decaying plant and fungal matter.

Leopard Slug: These slugs eat plants, the remains of dead animals, fungus, and other slugs. They are mostly nocturnal and like damp shady places. They have four antennae on their head: two long and two short.

Millipede: Common species of millipedes have between 80 and 400 legs. They are powerful burrowers and eat plant material.

Mycelium (mi se'le em): This branching structure is the underground part of a fungus. The mushrooms that we see above ground are the fruiting bodies of these underground organisms.

Red Backed Salamander: These salamanders live their whole lives in forests throughout eastern North America. They require a moist environment since they breathe partly through their skin. They eat insects, bugs, and spiders and they lay their eggs in freshwater ponds close to or in the forest.

Red Eft: This is the middle life stage of the Eastern Spotted Newt. Its larval (newborn) stage is aquatic (lives in fresh water), until it emerges and lives in a forest for 1-3 years as a red eft. Then the newt changes again into their aquatic adult stage. They eat insects, mollusks and crustaceans, and even young amphibians and frog eggs.

Sow Bug: This isopod is a scavenger and feeds on dead and decaying plants and animals. They breathe with gills and therefore need to live in a wet environment.

Subterranean Termite: These white soft-bodied termites are the workers in a termite colony. They are responsible for caring for eggs, constructing tunnels, foraging for food, and feeding and grooming other colony members. They eat cellulose, which is found in wood.

Turkey Tail: This is one of the most common types of bracket fungi that are found in the forest. They are important decomposers of wood, helping to recycle the nutrients in the wood back in to the soil.

Worm: There are over 4000 species of worms worldwide. They help to aerate the soil and return essential nutrients from rotting plant material back to the soil.



Tips for Cooking with Kids

Adapted from VT-FEED Food, Farm & Nutrition Curriculum Units.

- Be sure to wash hands with soap and water before touching food. Tie long hair back and push up long sleeves before washing hands.
- Remind children that if they have to cough and/or sneeze, they should turn their bodies away from the cooking area and sneeze or cough into their upper arm sleeve. Fingers need to stay out of eyes and noses. Repeat washing of hands if this happens. If children cook on a regular basis this will eventually become second nature. Be patient but vigilant.
- Gloves can be used if the products will be served raw. If the products will be cooked, gloves are not required.
- Start with a clean cooking area.
- Be careful with cutting implements such as knives and food graters. Teach the correct protocol with sharp tools. For example, knives are never passed but rather laid down on the counter to be picked up by the user. Get child-sized appropriate tools. Have enough adult supervision when young children are using knives.
- Do only one job at a time and avoid multiple distractions. Try to provide a calm and focused environment so that the students can engage in the task at hand.
- Work in small groups with an adult for each small group.
- Play it safe. When it comes to buying, preparing, cooking and storing food, check the expiration dates, wash the produce well, cook food thoroughly and store foods properly so they don't spoil.
- Clean up with everyone's help.
- Have fun! What a gift you have given to children to allow them to prepare their food. They are more likely to try new foods that they have prepared.

Bean Life Cycle Cards

