

# Pre Curriculum: Teacher's Guide

## Objective:

Students will be able to

1. List at least three different locations/places food comes from
2. List at least three different types of farms
3. Identify an animal from a plant

## Day 1: Introduction

**K-1 LS2B** A *habitat* supports the growth of many different plants and animals by meeting their basic needs of food, water, and shelter.

**2-3 LS2A** *Ecosystems* support all life on the planet, including human life, by providing food, fresh water, and breathable *air*.

**Question:** Who likes to eat pancakes? What would we need to do to make pancakes?

Read: Pancakes, Pancakes! By Eric Carle {all books are available at your local library}

**Discussion:** That sounds like a lot of work just to get pancakes. Isn't it much easier just to go to the store to get our food? I like to buy my flour in bags instead of having to grind it myself. My eggs usually come in a nice carton just like my milk does. That way it only takes me a few minutes to make my pancakes in the morning. But how did my flour get to the store? How did the eggs get in the carton? Who milked the cow so I could have my milk?

Farmers! Almost all the food in the store came to us because of farmers. Do any of you know a farmer? Do you know all that farmers do? What do you think they grow or raise? What do you think of when you think of a farm?

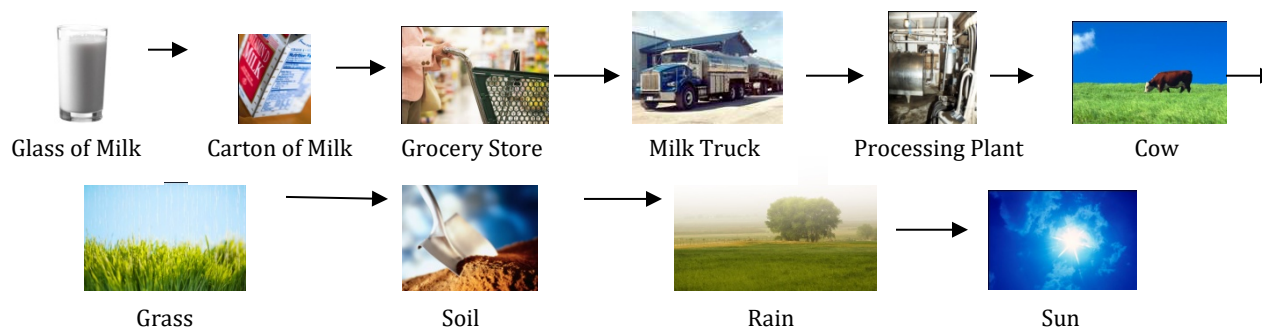
**Activity:** As a class build a farm: what will grow or live on your farm? What will we need to make it possible for these items to grow or live? Each living thing needs energy to grow, how can we help them get that energy? What food do they eat? Where can they get water? Where will they sleep or find shelter? (Draw or construct the farm as a class)

## Higher level Lesson:

**Question:** What did you eat today? Where did you get that item? How did it get there?

## Discussion:

Let's figure this out. (draw or write out the steps) How about we start with a glass of Milk....



Try a couple more examples with the class as a whole.

(Extension- Take it a step farther....cow exhales carbon dioxide...which feeds the plants; working on making it into a circle)

Explain that this is called a food chain. Every living thing plays into the food chain. They play the role of decomposer, consumers, and producers.

**Producers** are living things which take non-living matter from the environment, such as minerals and gasses and uses them to support life = green plants.

**Consumers** are living things that need the producers for their food source = herbivores is an example (plant eaters like deer or cows) Also Carnivores (meat eaters) are considered consumers and are a link farther along on the food chain since they need the herbivores for their food. Animals and people who eat both animals and plants are called omnivores, and they are also part of the consumer piece of the ecosystem.

**Decomposers** are living things that feed off of dead plants and animals and reduce their remains to minerals and gases again = fungi

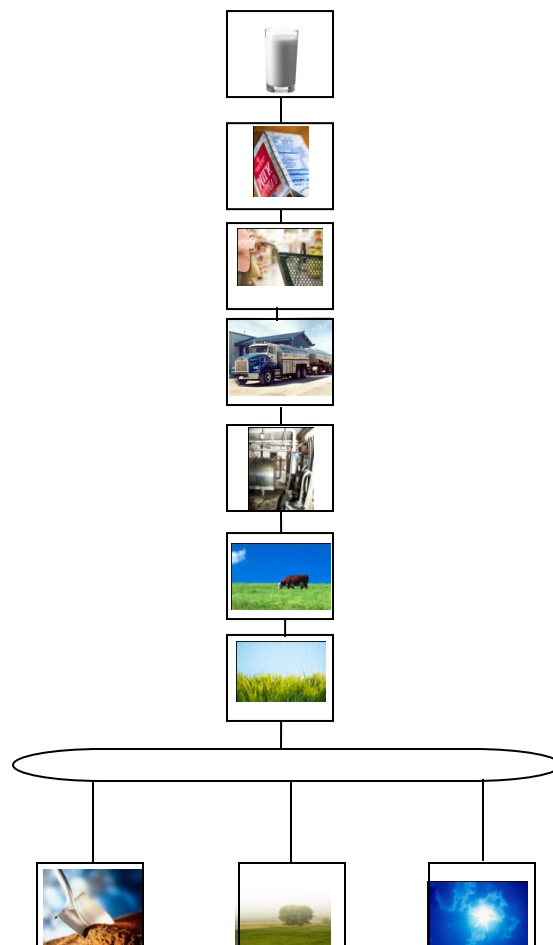
### Activity (Basic): Food Chain Mobile

Materials: Index Cards, hole punch, string, scissors, dowel rod or popsicle stick

Have the student work in a group to create their own Food Chain. Have them start with something they eat and follow it back to the basic minerals and gases i.e. sun, rain and soil.

Draw their steps on the index cards, hole punch top and bottom of cards and run string through to attach the steps. The bottom of the mobile will need the dowel rod with sun, rain and soil attached to the rod. See Figure A

Figure A



## Day 2: Types of Farms

### **K-1 APPB**

Different materials are more suitable for some purposes than for other purposes

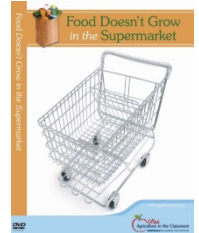
### **K-1 LS2C**

Humans can change natural *habitats* in ways that can be helpful or harmful for the plants and animals that live there.

**Question:** Do you think our milk and rice come from the same farm?

**Discussion:** Earlier we discussed where most of our food comes from. We are going to learn more about farms today. Whisper to your partner what you predict you will see on the farms in this video.

**Activity:** Watch: Food Doesn't grow in the Supermarket; Length: 28:36 minutes -This DVD, follows "The City Guy", an adult who thinks he knows where food comes from (the grocery store) as he visits three different farms to learn where food really comes from and what it takes to produce it. (Video can be borrowed from the Washington State Fair, purchased for ten dollars at <https://extension.usu.edu/aitc/cart/> or viewed on YouTube at <https://youtu.be/0CsuzhWsenQ> )



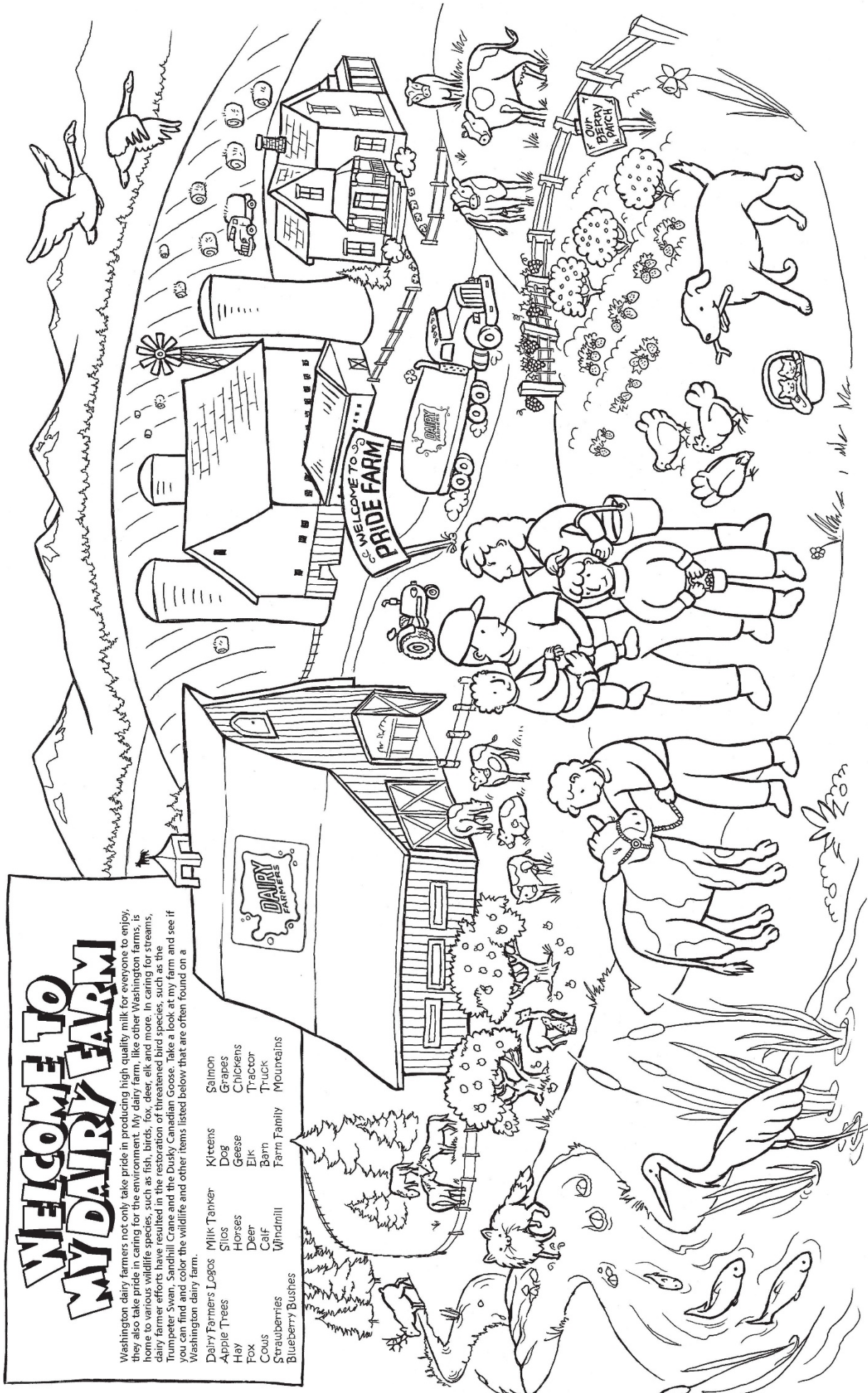
Draw and label: one product from each of the 3 farms from the video.

Individually students can color the Dairy Farm coloring page from Washington Dairy Farmers provided below.

# WELCOME TO MY DAIRY FARM

Washington dairy farmers not only take pride in producing high quality milk for everyone to enjoy, they also take pride in caring for the environment. My dairy farm, like other Washington farms, is home to various wildlife species, such as fish, birds, fox, deer, elk and more. In caring for streams, dairy farmer efforts have resulted in the restoration of threatened bird species, such as the Trumpeter Swan, Sandhill Crane and the Dusky Canadian Goose. Take a look at my farm and see if you can find and color the wildlife and other items listed below that are often found on a Washington dairy farm.

Dairy Farmers' Logos: Salmon  
 Apple Trees: Kittens  
 Hay: Dog  
 Fox: Geese  
 Cows: Elk  
 Strawberries: Barn  
 Blueberry Bushes: Farm Family  
 Mountains



## Day 3: Animal or Plant

<b>K-1 LS3A</b>	Some things are alive and others are not.
<b>K-1 LS1E</b>	Animals have various ways of obtaining food and water. Nearly all animals drink water or eat foods that contain water.
<b>K-1 LS1F</b>	Most plants have roots to get water and leaves to gather sunlight.
<b>K-1 LS3C</b>	External features of animals and plants are used to <u>classify</u> them into groups.

**Question:** What is a living thing?

**Discussion:** Share examples of living and non-living things. Help students see that all living things are “alive” – they are not dead but will die someday. All living things grow, need food for energy and reproduce.

**Question:** What is an animal?

**Discussion:** Share examples of animals. Help students see that animals have to eat, but they cannot produce their own food. They eat other animals and plants and need water and air. Most animals can move around from one place to another. Animals don’t all get around in the same way. Some run, while others walk, creep, fly, or hop.

All animals depend on plants whether they eat plants for food or eat other animals that eat plants.

**Question:** What is a plant?

**Discussion:** Discuss examples of plants. Then think about what makes all these plants alike or similar. For example, plants all grow and need air, nutrients, water, and sunlight. Plants can produce other plants like themselves.

Many plants are green. Share the idea of that plants get their energy from sunlight – photosynthesis; while animals get their energy from eating plants and other animals. Add that most plants can’t move around and get from one place to another.

**Activity:** Sort: Print out a selection of animals and plant pictures. Have the students sort the pictures with plants on one side and animals on the other side.

**2-3 INQB Investigate** A scientific *investigation* may include making and following a plan to accurately observe and describe objects, events, and organisms; make and record measurements, and *predict* outcomes.

Scientist Walk: Take the students on a walk outside and have them be scientist. Looking for plants and animals around the school’s neighborhood, they are all over but so often we do not notice them.

Have the students fold a piece of paper in half and draw a picture of a plant at the top of the left and a picture of an animal at the top of the right. Tell them they are going to record what they see on their walk and if they see an example of a plant draw it or write it out under the plant’s side of their paper. If they see an animal have them draw it or write it out on the animal side. Work with them to see that animals usually move around and plants usually stay in one spot. Once the students are back in the classroom have them display their discoveries and share with the class what they have learned.

### **Higher level lesson: Lifecycles**

<b>2-3 LS1A</b>	Plants have <u>life cycles</u> that include sprouting, growing to full size, forming fruits and flowers, shedding seeds (which begins a new cycle), and eventually dying. The details of the <i>life cycle</i> are different for different plants.
<b>2-3 LS1B</b>	Animals have <i>life cycles</i> that include being born; developing into juveniles, adolescents, then adults; reproducing (which begins a new cycle); and eventually dying. The details of the <i>life cycle</i> are different for different animals.

**Question:** As you get older do you change? Do your responsibilities change? Do you think it is the same for other living things?

**Read:** Life Cycles by Michael Elsohn Ross

**Discussion:** What is a life cycles? We all go through a life cycle, a life cycle is a series of stages through which a living thing passes through during its lifetime.

**Read:** The Honey Makers by Gail Gibbons or The Magic School Bus Inside a Beehive by Joanna Cole

**Activity:** Now that we know a little more about the honey bee. Let's see if we can map out the honey bee's lifecycle. As a class work through worksheet 1 to draw out the honey bees lifecycle.

Extension: Assign groups different living things and have them map out the lifecycle of the item. There are great books on Chickens, Apple Trees, etc... life cycles to assign the groups to go off of. Have each group present their findings. At this point the whole class can pick two different living things and do a Vin Diagram to see the differences and similarities.

### **Preparing to visit the Washington Fair Traveling Farm**

- Things to Discuss or talk about prior to visit:
- Working with a partner
- Sharing: ideas, thoughts and activities and taking turns
- Using time wisely: make sure to spend time at each exhibit; also do not spend too long at one place
- Walking vs. running
- Touching Animals: Be sure not to touch your face or your clothes after touching animals; **wash your hands as soon as you are done with visiting the animals** (Hand washing area will be right next to animal encounters area); if you do a germ lesson prior to the visit remind them about what they learned.

