CONNECTING YOUTH, FARMS & FOOD
Little Farmers Agriculture Adventure and Activities Guide

MINNESOTA STATE FAIR
FFA

Connecting Youth, Farms & Food
Little Farmers
Connect the Dots

Connect the Dots to reveal a picture of a cow.
The water cycle is the journey that water makes in its life, from one place to the other, and from one state to the other. As the word ‘cycle’ suggests, there is no starting point. This means that we can begin at any point and follow its path until it gets to where we started again.

The water cycle is made up of 4 primary stages:

1. **Evaporation & Transpiration**
2. **Condensation**
3. **Precipitation**
4. **Runoff & Infiltration**

**Sun** - The sun is the source of all energy on earth and powers the water cycle.

**Water Vapor** - The part of the water cycle where water is suspended in the air or is steam and humidity.

**Clouds** - Form when water vapor condenses but is still in the air.

**Rain** - Is moisture from clouds that become too heavy and falls to the earth as a liquid.

**Erosion** - Is caused by falling rain where soil is unprotected by vegetation. Soil particles are suspended in water run off.

**Lakes** - Collect water from streams, rain run off, and ground water. It is evaporated by the sun starting the cycle all over again.

**Plants** - Take water in through the roots and evaporate water into the atmosphere through its leaves by a process called Transpiration.
Do you know where the things you eat, wear and build with start out?

Farms, fields and forests produce our agricultural products. Most of these products must be processed in some way before we can use them. Processing changes raw agricultural products into thousands of things we use every day. Think about a cheeseburger, for example. The parts of a cheeseburger come from many different raw agricultural products.

**WORD BANK**
- Milk
- Cucumbers
- Eggs
- Wheat
- Tomatoes
- Lettuce
- Onions
- Tomatoes
- Cattle

**Lets Build a Burger!** – From the words in the word bank, choose the name of the agricultural product that is the source of each part of the cheeseburger. Write it in space below.
How do fruits & vegetables grow?

Fruits and Vegetables come in lots of different shapes and sizes. They even grow in very different ways.

**Tap Root or Root Vegetables:** are one big root that grows down in the ground and has smaller roots that come out of it. Some examples of root vegetables are potatoes, carrots, radishes, beets & turnips.

**Ground Sprouts:** grow up above the ground with strong roots holding them up. Some examples are leeks, broccoli, cauliflower, lettuce, cabbage, brussels sprouts & corn.

**Vines Plants:** grow long tubular structures that sprawl out and are flowering plants in which the fruit of vegetable then grows from the flower. Some examples of vine plants are grapes, pumpkins, kiwi & peas.

**Bushes:** woody multiple stemmed plants that are low growing. Examples of bush plants are tomatoes, peppers, eggplants and raspberries.

**Trees:** woody plant having one stem (trunk) and at least 3” in diameter with a crown of leaves at least 4 ½ ‘ above the ground. There are only fruit trees. Examples of fruit that grow on trees are apple, pear, almonds and coconut.

**Vegetables:** are plants that are cultivated for food.

**Fruits:** the part of a plant that has seeds and flesh. MOST fruits are sweet and can be eaten raw.

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**Did you know!** – Scientists think of fruit as a part of a plant that contains seeds. The fruit might not be sweet. In fact, it might not be edible at all. But it’s still a fruit. Which vegetables do you eat that are really fruit?

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**Matching!** – Now that you know how fruits and vegetables grow can you match the fruits and vegetable on left with the way they grow on right. Draw a line from the fruit or vegetable on the left to the tree, bush, vine or the soil for underground on the right!
## What names do we use for livestock?

Fill the chart with the names you learned about each specie in the animal barn!

<table>
<thead>
<tr>
<th>WORD BANK</th>
<th>Cattle</th>
<th>Pigs</th>
<th>Sheep</th>
<th>Goats</th>
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<tr>
<td>BOAR</td>
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<td>Mother’s Name</td>
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<td>Father’s Name</td>
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<td>Newborn Name</td>
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<td>Days Pregnant</td>
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Take a look at these amazing tools that farmers use to grow and harvest crops!

Match the photos of the Farm Equipment with their names

__ Combine  __ Semi Truck  __ Sprayer
__ Planter  __ Silo  __ Tractor

A. B. C. D. E. F.
The kernel is the seed. The seed is planted in the soil. The stalk begins to grow. The stalk is the stem. Leaves grow from the nodes.

Below are labeled pictures showing the process in which corn grows.

Did you know! – The number of kernels per ear can vary from 500 to about 1,200. A typical ear has about 800 kernels, according to corn experts. Imagine how many kernels are found in an acre of corn!

Soybean Scramble

Unscramble the following list of items that contain soybeans!

RACOYNS

LTPASIC

KIN

DCEASNL

EENRSCUNS

What food products are made from soybeans?

What machine is used to harvest soybeans from the field?

When are soybeans planted?

Maize Maze! Help the chicks find their ways through the Maize Maze and return to the chicken coop.

- Corn is called maize by most countries, this comes from the Spanish word ‘maiz’.
- An ear or cob of corn is actually part of the flower and an individual kernel is a seed.
- Corn will always have an even number of rows on each cob.
- As well as being eaten by the cob, corn is also processed and used as a major component in many food items like cereals, peanut butter, potato chips, soups, marshmallows, ice cream, baby food, cooking oil, margarine, mayonnaise, salad dressing, and chewing gum.
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My Plate Planner

The plate method is a simple way to learn healthy portion sizes.

Just split the plate into 3 parts, the largest part for vegetables.

Note to adults planning meals for smaller children: Remember to use a smaller plate or serve smaller portions if you don’t have different plate sizes.

Your hand can help you measure the right amount of food to eat.

Use your hand to measure out portions:

- **Palm of Hand**
  - Amount of lean meat

- **A Fist**
  - Amount of rice, cooked pasta, or cereal

- **A Thumb**
  - Amount of cheese

- **Thumb Tip**
  - Amount of peanut butter

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Places We Get Food From

Match the definition to the place food might originate, be processed at or come from.

___ 1. Bakery  
___ 2. Store  
___ 3. Cheese Factory  
___ 4. Orchard  
___ 5. Processing Plant

A. Fruit trees produce apples, bananas, cherries and oranges.

B. Where milk is processed, cheese is aged and packaged here.

C. Mix the flour with water, add sugar and yeast, knead the dough and bake.

D. Vegetables are washed and packed here.

E. Where food products are sold to customers.
Minnesota Growing Areas

Match the images to the place our food or products come from. Draw a line from the image to the area on the map.

SOYBEANS  SWINE
PAPER  MILK
Match the images to the place our food or products come from. Draw a line from the image to the area on the map.
**HOW MY SEED GROWS**

*Keep track of your seed as it grows!*  
After you plant your seed, measure and write down the DATE and HEIGHT as it grows 😊

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CUT ON DOTTED LINE