Michigan Farm Bureau Ag in the Classroom – Connections to Michigan Content Standards

Kindergarten Lesson – “Here, There & Everywhere – Michigan Agriculture”
Michigan Farm Bureau Promotion and Education Committee

This lesson meets the following Michigan Grade Level Content Expectations:

Social Studies:

Geography:

G1 The World in Spatial Terms: Use geographic representations to acquire, process and report information from a spatial perspective.

- K—G1.0.1 Recognize that maps and globes represent places.
- 3—G1.0.1 Use cardinal directions (north, south, east, west) to describe the relative location of significant places in the immediate environment.
- 1—G1.0.2 Give examples of places that have absolute locations (e.g. home address, school address)
- 3—G1.0.2 Use thematic maps to identify and describe the physical and human characteristics of Michigan.
- 1—G1.0.4 Distinguish between landmasses and bodies of water using maps and globes.


- 2—G4.0.1 Construct maps of the local community that contain symbols, labels, and legends denoting human and natural characteristics of a place.
- 3—G4.0.1 Describe major kinds of economic activity in Michigan today, such as agriculture (e.g. corn, cherries, dairy), manufacturing (e.g. Automation Alley, life sciences corridor, university communities), and explain the factors influencing the location of these economic activities. (E)

G5 Environment and Society: Understand the effects of human-environment interactions.

- K—G5.0.1 Describe ways people use the environment to meet human needs and wants (e.g. food, shelter, clothing)
- 2—G5.0.1 Suggest ways people can responsibly interact with the environment in the local community.
“Here, There & Everywhere - Michigan Agriculture”

Kindergarten Lesson
Written by: Laurie Isley & Deb Schmucker
Presented by: Michigan Farm Bureau Volunteers

Introductions /Welcome
(2-3 Minutes)

We are ________________ and ________________ from the Michigan Farm Bureau – that means that we live in Michigan and we are farmers. Raise your hand if you think you know what a farmer does.
(take one or two answers)

That’s right; a farmer is someone who raises plants or animals that people use.

Now, look at this picture.
(map of Michigan)

Who can raise their hand and tell me what it shows.... That’s right – it is the state of Michigan. You live here (point) and we live here and here (point).

Today we are going to talk to you about different kinds of farms around Michigan. But before we do, we have to learn some words that help us find things on a map. These words are north, south, east & west.
If we visit the Upper Peninsula – we have to travel north. If we want to go to Lake Huron, we would go east, Lake Michigan is west (although not far from here) and if we travel south, we should be in Lansing or Battle Creek.

Let’s practice. I’ll point to the word and you say it.
Point to north (blue), south (green), east (red) and west (purple)

Good job, let’s try it once more! Point to north (blue), south (green), east (red) and west (purple)

Now that we understand that, we can learn about all the cool things that farmers all around Michigan grow.

Identifying Exercise
(10 minutes)

I’m going to give each of your groups a paper bag with something in it – reach in the bag and see if you know what it is without looking. Keep it a secret until everyone has touched it. When everyone in your group has had a turn – see if you know what it is. You can peek in your bag to be sure.

Let’s see what everyone found!

If not already in groups, put in 8 small groups.

If in less than eight groups, give more than one bag to some groups or keep the extra bags up front.
Which group found a carton of milk? Take it out of your bag and hold it up. Milk comes from cows and cows are raised in lots of places in Michigan, but especially in the Thumb.  
(put label on big map)

How about some soft wool – which group has that? Wool comes from sheep many of which are raised in Southern Michigan.  
(label)

Which group has the potato?

Potatoes grow under the ground and have to be dug up with machines – they grow a lot of these in Michigan’s Upper Peninsula.

Does anyone here like to eat apples? Me too! Which group found an apple in their bag?

A lot of apples grow on the west side of Michigan (not too far from here.)  
(label)

Did anyone have a flower in their bag?

It’s not a real flower, of course. Farmers grow lots of flowers in southeast Michigan, Often in big greenhouses covered with glass or plastic.  
(Label)
How about a little tree? Do you put up a Christmas tree? Those trees are grown in northern Michigan and the Upper Peninsula and shipped all over the country.

(Labels)

Only a few left. Anyone find little round yellow seeds? These are soybeans. They are grown in the middle or the southern part of Michigan.

(Labels)

The last one is corn! We grow lots of this! Corn grows across the state - almost everywhere in Michigan and other places. So we'll put corn right in the middle of the state.

You can see that lots of different plants and animals are found on farms across Michigan.

We are going to give each of you a map and a sheet of stickers that matches the pictures we have up here. We want you to put the stickers in the right places on the map, so you have one to take home.

(monitor groups)

- (Remind students pictures on stickers match The map – have students put their names on their lab sheets.)

You did a great job putting those stickers in the right places – let’s put your maps at the top of your desk so we can do another activity.
Raise your hand if you remember the product on the map that grew everywhere? (corn)

Seed Explanation/Lab Sheet #2
(15 minutes)

Corn is a grain crop that is fed to animals like pigs and cows. Farmers plant corn seeds in the spring and plants grow all summer until they are taller than I can reach – then farmers harvest (or pick them) in the fall with big machines called combines.

Corn is a seed and different seeds grow into different plants. Seeds come in lots of different shapes and colors and each kind of seed grows into a plant that is different from any other plant.

Some seeds grow into pretty flowers, others grow into vegetables like carrots or peas and others like corn grow into grain crops.

We are going to give each of you a little bag with some different seeds in it. We want you to separate the seeds into piles that look alike so that each pile has a different kind.

Now we are going to make something called a graph to show how many seeds we have of each kind. How many of you have made a graph before? Good! Let’s start by putting our name on the top.
(to help know how much help is needed)
Do you see the pictures at the bottom? You should have seeds that look like those pictures. Let’s start with corn. Count your corn seeds …. Do you know how many you have? Good! Now color in the same number of squares above the picture on your graph. You might find it easier to put the seeds on the squares and then color them in. (pause)

Good job! Move these seeds aside so you don’t mix them up. Now let’s look at the sunflower seeds – they are flatter and have stripes. These seeds grow into great big beautiful sunflowers that are used for cooking oil or bird food or just to look pretty. Now, count your sunflower seeds and color in the boxes. (pause)

You should have two kinds of seeds left and they look more alike than the others we just did. These are both different kinds of beans – soybeans and navy beans. The soybeans are rounded and more yellow. We grow lots of these in Michigan and around the world. They usually get ground up and either fed to animals or put in food that we eat. They can even run our cars. Let’s count the soybeans next. (Don’t forget to fill in your chart.) (pause)

The last seeds you have are navy beans – they are the all white seeds. Did you know that more of these seeds are grown in Michigan than anywhere else in the world?
Let's count these and fill in your chart.
(pause)

Does everyone have their chart filled in? Good! Look at your chart and see which tower is the tallest. I'm going to say the name of each seed and I want you to raise your hand when it's the one you had the most of. If you have two that are tall – then raise your hand for both.
(Go through each seed name – corn, sunflowers, soybeans, navy beans)
(When farmers plant seeds they use thousands of them.)

Now, we need you to put all of your seeds back in their bag and join me on the rug for a story.

(Read story)

Connor and Stephanie sure saw a lot of Different kinds of agriculture, didn't they? Can you raise your hand and tell me some of what they saw?

You guys sure were good listeners. Let's go back to our seats now and do a craft that you can keep to remember what we have learned today.
Farm Charm Activity
(10 minutes)

Pass out the plastic bags first.

Have each helper place an item in each student’s bag as it is being explained and remind them what it represents.

Pass out tie strings for Farm Charms last.

Farm Charm:

Plastic bag: place each of the following in your bag:

Coffee: This represents soil. Soil is needed to grow seeds into plants.

Blue Confetti: which is for water – plants, animals and people need water to survive.

Gold Confetti: is for the sun – we need sun for warmth and plants need the sun to grow.

Trees: which represent plants. Plants provide food for animals and us.

Corn: used as food for animals and us.

Soybeans: used as food for animals and us and also used as fuel.

Animals: provide food and clothing for us.

(Be sure to close the bag, run a piece of yarn through the hole and tie in a knot.)
Let’s see if we can remember all the parts of our farm charm - Coffee – soil; Gold glitter – sun; Blue glitter – water; Corn & Soybeans – crops that farmers grow; Trees & animals – other things that Michigan farmers grow.

**Conclusion**
(2 -3 Minutes)

So, what did we learn today?

We learned that Michigan has lots of different farms from north to south and east to west.

Then, we learned that all seeds are different and each kind grows into a different plant that might be a flower or food for us or for animals.

After that, we got to travel with Captain Food Fabulous as we explored lots of farms across Michigan with Connor and Stephanie.

And, finally we put all those things together into our very own farm charm.

So, when you go home today, you can show your family your farm charm, your graph and your sticker map so they know some new things about Michigan Agriculture, too.

Thanks for being such good listeners.
“Here, There & Everywhere - Michigan Agriculture”
Material list
(Designed for 2 classes of 35)

1 Michigan Map Poster
1 Set of direction tags (North, East, South, and West)
1 Set of small Product Tags
8 Bags filled with:
   1 Milk carton (small)
   1 Piece of wool
   1 Potato
   1 Apple
   1 Silk flower
   1 Small tree
      Soybeans
      Corn
70 Lab sheet #1 - Map
70 Lab sheet #2 - Graphing
70 Sets of labels
70 Small jewelry bags with hole punched in top
   1 bag of farm animal confetti
   1 bag of blue confetti
   1 bag of gold confetti
   1 bag of tree confetti
   1 bag of Corn kernels
   1 bag of Soybeans
   1 bag of coffee
70 pieces of yarn
70 bags of assorted seeds (corn, soybeans, sunflowers, navy beans)
1 Picture of Combine
1 roll masking tape
LAB SHEET #2

NAME___________________

COUNTING SEEDS

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