AgMag 1st Grade - Fall Edition

WHY AG IN THE CLASSROOM?

Agriculture means survival. Over time, fewer and fewer people have close contact with farming and the total agricultural sector. They're not aware of their own and society's total dependence on agriculture. People must be agriculturally literate to make responsible decisions affecting this giant lifeline.

Using authentic agricultural examples as a context for core curricular concepts brings learning to life! Helping students understand the farm-to-table connection is important in our consumer-driven society. That's what the student Minnesota AgMag Series is all about.

ABOUT YOUR AGMAG

The AgMag is a great supplement to your social studies, science, or language arts curriculum. You'll get two issues per school year: **October (Fall) and March (Spring).**

AgMag Theme: Grown in Minnesota!

- **Minnesota Grown**
- **Animal Parts**
- **Corn on the Move!**

Sight Words to Pre-Teach

Transportation	Machinery	Crop
Market	Grocery Store	Agriculture
Country	Community	

Integration Ideas

Science and Math

- Use the Corn on the Move content on **page 4** to sort transportation types into near and far categories and compare which group has more.
  - Truck = Near
  - Train, Barge, Ship = Far
- Use the Animal Parts content on **page 3** as a starting point for students to brainstorm how living things (plants, animals and humans) use external parts to survive.
  - **Examples**: Human skin protects our internal organs, turtles have shells to protect them from other animals and humans, roses and other plants have thorns to protect them from animals and insects who might try to eat the flowers, leaves, bark and stems.
- Explore how plants need water, sunlight, air, and soil to grow. Tie into photosynthesis or the basic needs of plants with diagrams or outdoor observations.

Social Studies

- Use the map on **page 2** for identifying cardinal directions (north, south, east and west) and for describing different parts of Minnesota with positional words.
- Have students locate your city or town, then determine what crops or animals grow nearby. Extend by comparing where different agricultural products are found across the state.
  - **Extension Idea: A Journey Around Minnesota K-2 Lesson Plan: bit.ly/ag-mag-journey** builds awareness of agricultural products through literacy, math and mapping activities.
- Extend the activity on **page 4** by asking students to think about how fast the different modes of transportation travel (truck, train, ship) and how fast they could move corn and other products from one place to the next.
  - You can also have students think about the different paths that are taken - roads, railroads, rivers, etc. What are examples of important roads in your community and our state? How about rivers and other waterways? Are there any railroads near you?

English Language Arts

- Use the AgMag to identify target sight words and vocabulary.
- Have students describe illustrations in the AgMag and explain how they relate to the text. Practice retelling using key details.
- Encourage students to write about their favorite Minnesota-grown product using descriptive words, sequence, and complete sentences.

GLOSSARY

Some words in your AgMag may be unfamiliar to your students. Many are defined in the articles. There is also a **Glossary** on the AgMag website: **bit.ly/agmag-glossary**. Words you might wish to pre-teach are:

Agriculture

Growing plants and raising animals that people use for food, clothing and many other things every day. It's also harvesting those farm products and getting them to us so we can use them. Agriculture is the industry that grows, harvests, processes, and brings us food, fiber, fish, forests, sod, landscaping materials, and more. It uses soil, water, sun, and air to produce its products. The process starts on farms, orchards, gardens, and ranches with the growing and harvesting of crops and livestock, then moves to processing plants before finally traveling as finished products to stores, farm markets, lumberyards, greenhouses, and more, where consumers buy the products. Agriculture is connected in some way with almost everything we eat, wear, and use.

Quote from an Unknown Source: "Agriculture is not simply farming. It's the supermarket, the equipment factory, the trucking system, the overseas shipping industry, the scientist's laboratory, the houses we live in, and much more. It affects the air we breathe, the ground we walk on, the water we drink, and the food we eat.

MINNESOTA ACADEMIC STANDARDS CONNECTION

SUBJECT	STANDARD CODE	BENCHMARK
Science	1L.3.1.1.1	Develop a simple model based on evidence to represent how plants or animals use their external parts to help them survive, grow, and meet their needs. (P: 2, CC: 6, CI: LS1) Examples of external parts may include acorn shells, plant roots, thorns on branches, turtle shells, animal scales, animal tails, and animal quills.
Social Studies	1.3.13.1	Create sketch maps and describe the location of items and places shown using positional words or addresses. Ask spatial questions about the map.
Social Studies	1.3.15.1	Describe patterns of movement of particular people, goods or ideas within and between different communities and countries.
English Language Arts	1.2.10.10	With prompting and support, read informational texts appropriately complex for grade 1, as well as select texts for personal enjoyment, interest, and academic tasks.
English Language Arts	0.2.7.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

AGMAG COVER: AGRICULTURE IS EVERYWHERE!

Discussion Prompts

- What grows in Minnesota?
- Have any of you ever grown plants at home? Perhaps you have a garden or a fruit tree. What grows here?
- What are the things that come from Agriculture in Minnesota? As this may be the first time your students are hearing this word, you may need to help prompt them in the right direction. (Food, clothing, paper, glue, etc.)

Find it Activity

- Your students may need a little guidance on what plants and animals grow on farms in Minnesota.
  - Discuss why a pineapple does not grow well here (Pineapples need a warmer climate than what Minnesota has), or where Kangaroos are found (in Australia).
  - Pine Trees, Potatoes, Peppers, and Sunflowers can be grown in Minnesota.
  - Pigs, Horses, and Sheep are raised in Minnesota

Define

- Because agriculture is probably new to many of your students, make sure to go over the definition of agriculture.
  - **Agriculture**: Agriculture is making things that grow on farms, like plants and animals, into things that we use.

PAGE 2: MINNESOTA GROWN

Discussion Prompt

- Where are we located on the map? Students might not know where they live in relation to the overall state of Minnesota, so make sure to help them identify which county they live in. Have them draw a star in that county to help them remember.

Make sure to note that vegetables can grow almost anywhere in Minnesota! This map will give students a good idea of what can grow where, but it isn't all encompassing–many plants and animals will be found growing in other parts of Minnesota too.

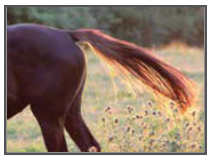
PAGE 3: ANIMAL PARTS

Discussion Prompt

- Ask students what parts make a cow unique? A Horse? A pig? Explain that animals have special parts that help them grow and live.

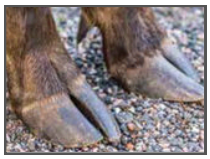
Photo Matching

- 1st Photo → Tails
- 2nd Photo → Udders
- 3rd Photo → Split Hooves
- 4th Photo → Wool



TAILS

UDDERS



SPLIT HOOVES

WOOL

PAGE 4: CORN ON THE MOVE!

Discussion Prompts

- What other Minnesota crops might be transported by truck? Encourage students to think of crops grown in local fields or found in stores.
  - **Examples**: soybeans, sugar beets, potatoes.
  - **Follow-up**: Why do you think trucks are used first to move crops?

- What other Minnesota crops might be transported by train? Ask students to think about crops that go long distances and are shipped in large amounts.
  - **Examples**: corn, soybeans, wheat.
  - **Follow-up**: Why are trains good for moving a lot at once?

- What do animals use corn for? Explain that most corn grown in Minnesota is field corn and is not for people.
  - **Examples**: Feed for animals like pigs, chickens, and cows.
  - **Follow-up**: Can you name an animal that eats corn?

- What do we use corn for? Help students explore how corn is used in everyday things.
  - **Examples**: Food like tortilla shells and corn syrup, fuel/ethanol, crayons, glue, cardboard, plastic, tires, batteries, hand sanitizer
  - **Follow-up**: Can you point to something in our classroom that might be made with corn?

- What do we use corn for? Help students explore how corn is used in everyday things.
  - **Examples**: Food like tortilla shells and corn syrup, fuel/ethanol, crayons, glue, cardboard, plastic, tires, batteries, hand sanitizer
  - **Follow-up**: Can you point to something in our classroom that might be made with corn?

- What's the difference between field corn and sweet corn? Which one do you think you've eaten before? Help students compare the **Two Types**: bit.ly/agmag-corntypes .
  - **Field corn** has hard kernels and is used for animal feed, fuel, and other products.
  - **Sweet corn** has soft, sweet kernels and is eaten by people.

Map Activity

You could extend this activity by having students map out how corn is transported.

Materials Needed

- A large classroom map (U.S. and world map)
- Printable icons: corn, trucks, trains, barges, ships, and destination flags (U.S. cities, Mexico, Canada)
- Yarn or string
- Tape or push pins

Instructions

1. **Start in Minnesota:** Place a corn icon on Minnesota.
2. **Discuss and Place Transportation Icons:** Have students place transportation method icons (truck, train, barge, ship) along the route as you read the AgMag page together.
3. **Mark Destinations:** Place flags on destination locations (other U.S. states, Mexico, Canada).
4. **Connect with String:** Use yarn to connect the movement of corn from Minnesota through each transportation method to its destination.
5. **Extension:** Have students draw their own "Corn on the Move!" journey map and label the different transportation methods.

Students will visualize and explain how corn moves from Minnesota to the rest of the country and world, reinforcing movement patterns and the concept of goods being traded globally.