



## Lesson One: Providing for Pigs

*Level: Elementary*

### PURPOSE

This lesson introduces students to the care pig farmers provide for pigs, teaches that pigs need air, space, food, water, and shelter to survive, and introduces students to the life cycle of a pig.

### NEBRASKA STATE EDUCATION CONTENT STANDARDS CONNECTION

SC.K.7.2.a Use observations to describe patterns of what plants and animals (including humans) need to survive.

SC.K.7.2.C Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

### ESTIMATED TIME

40 minutes

### MATERIALS NEEDED

- » *How Many Hats Does a Farmer Wear* worksheet, 1 per student
- » Brand (fastener)
- » Crayons or Markers

### VOCABULARY

**Gestation:** pregnancy period of a sow - 114 days (3 month, 3 weeks, and 3 days)

**Gilt:** young female pig that has not yet given birth to a litter of piglets

**Sow:** full grown female pig that gives birth or farrows piglets

**Piglet:** a newborn/young pig

**Boar:** full grown male pig

**Farrow:** the act of giving birth to baby pigs

**Litter:** group of piglets that a sow gives birth to at one time

**Farrowing barn:** climate-controlled barn where piglets are born

**Pork:** meat that comes from pigs, including loin chops, ham, bacon, tenderloin, sausage, and 'picnic' roasts

### BACKGROUND INFORMATION

As in any species, the first step in a pig's lifecycle is birth. The process of a female pig giving birth to piglets or baby pigs is called farrowing. Young female pigs that have not yet given birth to a litter of piglets are called gilts; once they have given birth, they transition to being called sows. The gestation length of sows



is approximately 114 days (about 3 weeks, 3 months, 3 days). An average sow will give birth to a litter containing 8 to 12 piglets about twice per year. Sows typically give birth to seven litters in their lifetime.

From the time piglets are born, pork producers ensure that they are well cared for. Like humans and other animals, pigs have four basic needs—air, water, food, and shelter. Pigs also need social interaction with other pigs, treatment for injuries and diseases, and space to stand, stretch, and lie down.<sup>1</sup> Pigs raised on farms live in **environments** that are designed to help farmers meet these needs. Barns protect pigs from weather, disease, and **predators**. Farmers provide pigs with fresh air, clean water, nutritious food, and shelter.

When piglets are three to four weeks old, they are weaned. Weaning is when the piglets are removed from their mother's milk and moved to another barn, called a nursery, where they are housed with other similar-size piglets. At this time, sows are moved back into a gestation barn, where they are eventually bred again. Depending on the specific pig operation, the nursery building may be at the same site as the farrowing barn or located miles away on another pig farm which specializes in raising weaned pigs. Piglets are moved into the new barn or onto a truck using rattles which are gently shaken to encourage pigs to move yet remain as calm as possible. In this process, smaller pigs are sorted off and kept in a separate pen to ensure the large pigs don't trample or "pick on" these pigs.

The nursery, just like the farrowing barn, is climate controlled to keep the pigs comfortable. In the nursery, pigs are slowly transitioned from an all-milk diet to solid food, using a system called phase feeding. In phase feeding, pigs are gradually fed three to four different diets to allow their digestive systems to slowly adjust to the solid food diet they will primarily eat for the remainder of their growth and life. The first diets contain feeds high in specialized protein and dried milk products. Pig farmers gradually introduce corn and soybean meal until that is primarily what the pigs are eating. Pigs always have access to waterers, which enable them to drink as often and as much as they like. Weaned pigs are kept in the nursery from approximately 13 to 55 pounds.

Pigs continue to be well cared for and well fed until they reach market weight, which is between 250-280 pounds. At this time, they will be marketed or sold and processed into pork products. Examples of pork products include loin chops, ham, bacon, tenderloin, sausage, and 'picnic' roasts. Through the entire pig production process, careful measures are taken to ensure that pigs remain healthy. Safe pork comes from healthy pigs.

## Part One: Learning Activity

### INTEREST APPROACH

1. Ask students, "What do you need to survive?"
  - *food, water, air, and shelter*
2. Ask the students if they think pigs have the same or different needs.
  - Discuss their responses and guide them to the understanding that pigs have the same basic needs as humans. Just like humans, pigs also need space, social interaction, and treatment for injuries and disease.



3. As a class, watch *The Birthing Process of a Piglet*:  
[www.youtube.com/watch?v=469HeE4jlfY](http://www.youtube.com/watch?v=469HeE4jlfY)
4. Review the video by asking the following key questions:

What happens in the farrowing barn?

***Piglets are born.***

About how long will the piglets remain in the farrowing barn?

***About 21 days.***

Why are there 2 different types of flooring in the barn?

***To keep the sows and piglets at different temperatures where they are comfortable.***

Why are the sows kept in separate stalls from the piglets?

***To protect the piglets and the people caring for them.***

Why do sows need to eat so much (16 pounds) each day?

***They need the extra nutrients to provide milk to their piglets.***

What are some of the job duties of pig caretakers?

***Check on pigs, clean and disinfect barns, move pigs.***

### CONDUCT ACTIVITY

1. Ask students what they need for their bodies to be healthy and well cared for. Students should recognize their need for food, clothing, and shelter. If necessary, ask more guiding questions to lead them to these answers. Point out that these necessities are provided by their caregivers, in most cases this will be their parents. Farmers are the caregivers of animals. They are responsible to provide for the needs of the animals they raise.
2. Ask your students to name some of the jobs that farmers do each day. Help students recognize that farmers grow and raise plants and animals that provide food for us to eat and clothing to wear. There are many kinds of farmers.
3. Ask your students, "What would it be like to be a pig farmer?"
  - A pig farmer is responsible for many things. They must be very knowledgeable of pigs and be capable of feeding and caring for them properly to keep them healthy and happy.
4. Provide each student with a copy of the *How Many Hats Does a Farmer Wear* worksheet. Ask them to color the farmer and the hats.
5. Instruct the students to cut out the three circles on their activity sheets and stack them on top of each



other so that the largest circle (the one with the career descriptions) is on the bottom and the smallest circle (the one with the farmer) is on the top. Fasten them in the center with a brad so that all three circles spin separately.

6. Ask the students to find a hat in the middle of the circle to put on top of the farmer's head and then match up the words that best describe what the farmer does when wearing the hat.
7. Discuss the "hats" or needs a pig farmer provides to pigs:
  - Veterinarian – Must be able to recognize early signs of disease in pigs, assist in the birth of animals, and administer medicine to sick animals.
  - Engineer – Must know how to construct a barn, control the flow of water, create enough space in a pen for the pigs.
  - Mechanic – Must be able to operate machinery such as waterers, feed troughs, and trucks, make repairs, and keep machines in good working order.
  - Business Manager – Must be able to balance accounts, sell pigs to the market, and be responsible for making payments to purchase food.
  - Nutritionist – Must know how to prepare a diet for best growth and production of pig.
  - Scientist – Must be able to conduct experiments that help answer agricultural questions like what helps a pig to grow comfortably.
  - Weather Forecaster – Must understand weather and climate, be aware of possible weather changes, and know how to prepare for the changes to adjust temperatures in the pig barn.
  - Truck Driver – Must safely transport their animals to other barns

### FOLLOW UP QUESTIONS

1. Why is it important for a farmer to have a basic understanding of all these careers?
  - **By having the knowledge of each of these careers, farmers can provide better care for their pigs.**
2. What other careers must a farmer use to meet a pig's needs?
  - **Construction Worker – farmers must repair fences, chutes, and pour concrete.**
  - **Truck Driver – farmers must transport their animals to other barns.**
  - **Athlete – farmers must be able to lift heavy buckets and feed for pigs.**
  - **Computer Technician – farmers need to know how to use and/or fix the computers in their barns.**
  - **Teacher – teaching other people how to do their job.**
3. Do you know people in your community who have these careers?
  - **Answers will vary.**



## Part 2: Attend a Virtual Field Trip

Biosecurity is a procedure to protect animals against disease. Farmers limit travel to their pig barns by practicing biosecurity. This ensures they can raise their pigs in a safe and healthy environment.

Virtual Field Trips allow farmers to open their barn doors to show students what happens inside. The farmer uses a tablet to connect with classrooms to be a part of a live, video-chat allowing students to have their questions answered in real time.

Visit the Nebraska Farm Bureau Foundation website, [www.nefbfoundation.org/educators/get-involved/virtual-field-trips](http://www.nefbfoundation.org/educators/get-involved/virtual-field-trips), to see a list of upcoming Virtual Field Trips and to sign up for a time to attend. If you have questions, please contact Nebraska Farm Bureau Foundation at [foundationforag@nefb.org](mailto:foundationforag@nefb.org) or (402) 421-4747.

### SOURCES UTILIZED

NATIONAL AGRICULTURAL LITERACY CURRICULUM MATRIX LESSONS:

How Many Hats Does a Farmer Wear? – Utah Agriculture in the Classroom

[www.agclassroom.org/teacher/matrix/resources.cfm?rid=306&search\\_term\\_cr=farm](http://www.agclassroom.org/teacher/matrix/resources.cfm?rid=306&search_term_cr=farm)

Animal Life Cycles – Minnesota Agriculture in the Classroom

[agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=81&author\\_state=0&search\\_term\\_lp=pig](http://agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=81&author_state=0&search_term_lp=pig)

### NATIONAL AGRICULTURAL LITERACY OUTCOMES

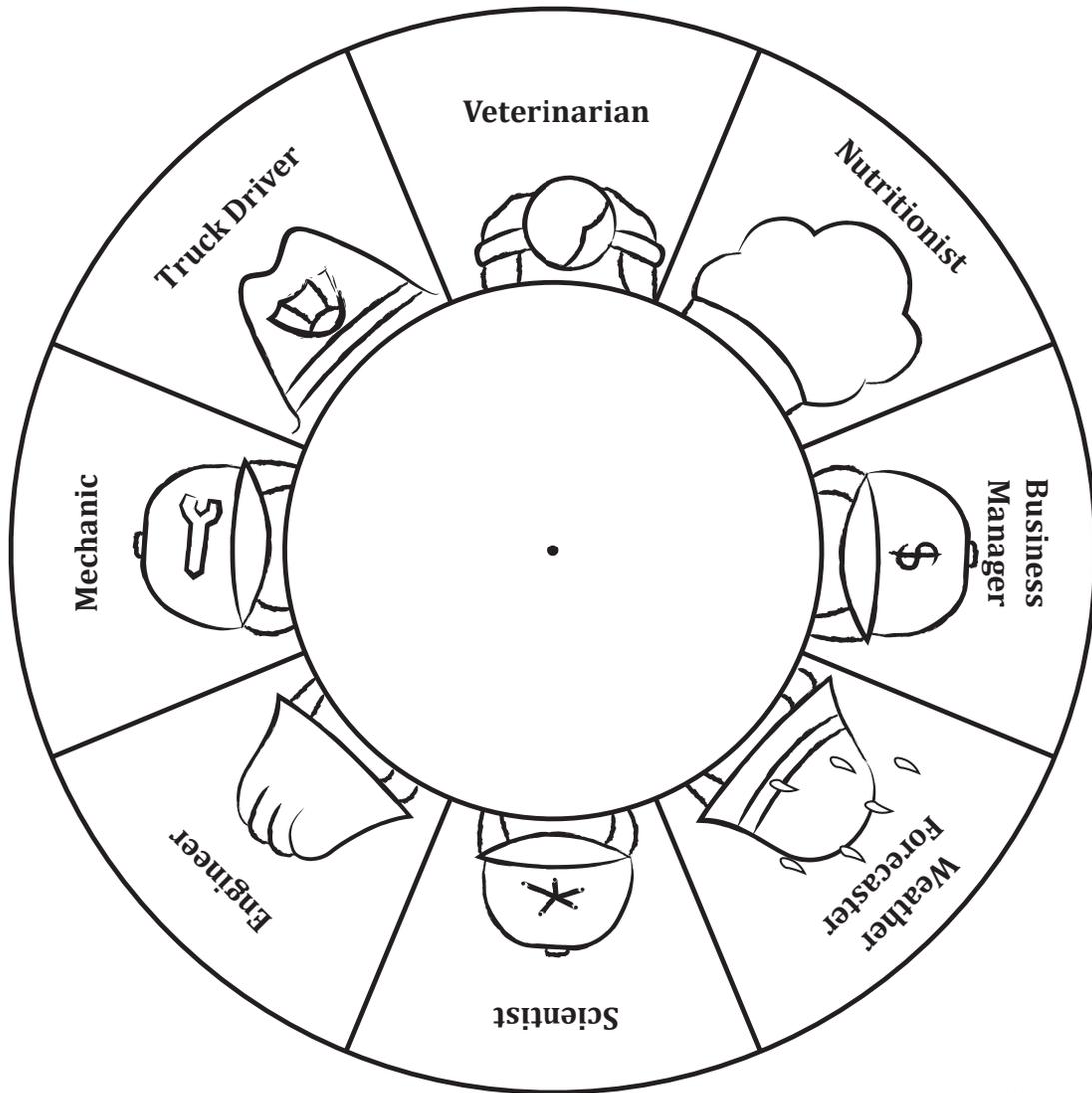
Plants and Animals for Food, Fiber & Energy

T2.3-5d. Provide examples of specific ways farmers/ranchers meet the needs of animals.

Food, Health, and Lifestyle

T3.3-5b. Diagram the path of production for a processed product, from farm to table.

# How Many Hats Does a Farmer Wear?



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