**Pork STEM Challenge**

Introduction

* Review last month’s lesson
* Introduce today’s topic and gauge where students are in their understanding of hog production. We want them to state common misconceptions that we will address in the lesson (pigs in mud, eating slop, all of them are pink etc.)
* *This month we are going to learn more about pigs, the farms where they’re raised and the important products we get from pigs. We will have the chance to put brains to work with an activity, too!*
* *What do we know or think we know about pigs? (what do they eat? Where do they live? Who takes care of pigs?)*
* *What do we want to learn about pigs?*

Show Video or Read Book

* My Family’s Pig Farm
* Ohio Pig Farm video <https://youtu.be/rAw7Fs_IAW4>
  + Review Video
* *What are some things you noticed or learned from this video? Where do pigs live? What is their food made of? What do we call their food? How big are full grown pigs? How long does it take for them to be market ready?*

Activity

* Introduce activity
  + *Now that we’ve learned about pigs, let’s put that to the test. Humans rely on a few key items to survive, what are they? (*food, water and shelter) *Who provides these things for us? As kids, our parents. Who provides these for pigs? FARMERS. We are going to be farmers and provide these things for our pigs in building them a barn.*
* Students will act as farmers, scientists and engineers and build a barn for their pig, providing shelter, food and water.

1. **Give instructions (1-2 minutes)**

* *Scientists, engineers and farmers have worked very hard to provide the best place possible, for pigs to be raised. Pigs live in barns for this reason. We are going to make our pig a barn and provide them shelter, food and water! First, take out a piece of paper and pencil. We must think like an engineer and design our barn, this will be our* ***blueprint****! (3-5 minutes) Give your blueprint a* ***title, write your name and begin designing.*** *After your blueprint is complete, we will build our barns.*
  + *The barn must stand and you can only use the supplies given***.**

1. **Students write up blueprint (2-3 minutes)**
2. **Give each student spaghetti sticks and marshmallows**
3. **Students construct barns**

**Conclusion**

* **Review that pigs are cared for by farmers who raise pigs in barns, safe from predators, weather and disease.**

**Quiz:** Ask the following questions to review:

* What do we call the meat that comes from pigs? (pork)
* Name two reasons why pigs would be kept in barns? (temperature, diseases, predators)
* What is a mom pig called? (sow)
* What is a baby pig called? (piglet)
* What is the first stage on a pig farm called? (farrowing)
* What is the term we use to call a group of piglets? (litter)
* How much does a piglet weigh at birth? (2-3 lbs)
* What is the barn called where piglets go once weaned? (nursery)
* How much does a weaned piglet weigh? (15-20 lbs)
* What is pig feed made of? (corn, soybeans, micronutrients)
* Where is the feed kept? (bin)
* Name the only animal that will not over eat? (pig)
* What is the final barn called before they go to market? (finishing barn)
* How old are pigs when they go to market? (6 months)
* How much do pigs weigh at market? (280 lbs)

**Extra resources:**

* Iowa Ag Today- Issue 2