

# READY-MADE RESOURCES

## The growth and development of pigs

Welcome to the growth and development of pigs lesson, designed to help you become more aware of the science behind the raising of pigs for the food industry in Ohio. You will need access to the book *Welcome to Our Farm* by the Ohio Pork Council, a computer with internet access, a writing utensil, various cereals, raisins, and a plastic sandwich bag.

### Activity 1: Where do pigs live?

Read *Welcome to Our Farm* and answer the following questions in either a class discussion or group format.

1. Where do pigs live?
2. What do they need to be healthy and grow in their environment?
3. How does their environment help keep them healthy as they grow?

Create the perfect habitat for pigs to grow up in. Remember to list the items pigs need to keep them healthy in the top right box and explain why they are necessary in the bottom right box!

#### Draw a picture of where pigs live.

Be sure to include the items from the top right box in your drawing!

#### What do pigs need to be healthy and grow?

#### How does this environment keep them healthy?

## Activity 2: How fast does a pig grow?

Make a prediction! How long does it take a pig to reach market weight? Watch the video **“What do pigs eat?”** ([https://youtu.be/tGfIS\\_8Orgo](https://youtu.be/tGfIS_8Orgo)) and answer the following questions:

1. What types of foods do pigs eat?
2. Why does this feed change as the pigs grow larger?
3. How large will a baby pig grow as it gets ready to go to market?

When the video is complete, check your answers with a partner. Was your prediction correct?

Plot the following coordinates on the graph below and draw a line connecting the points.

### Birth

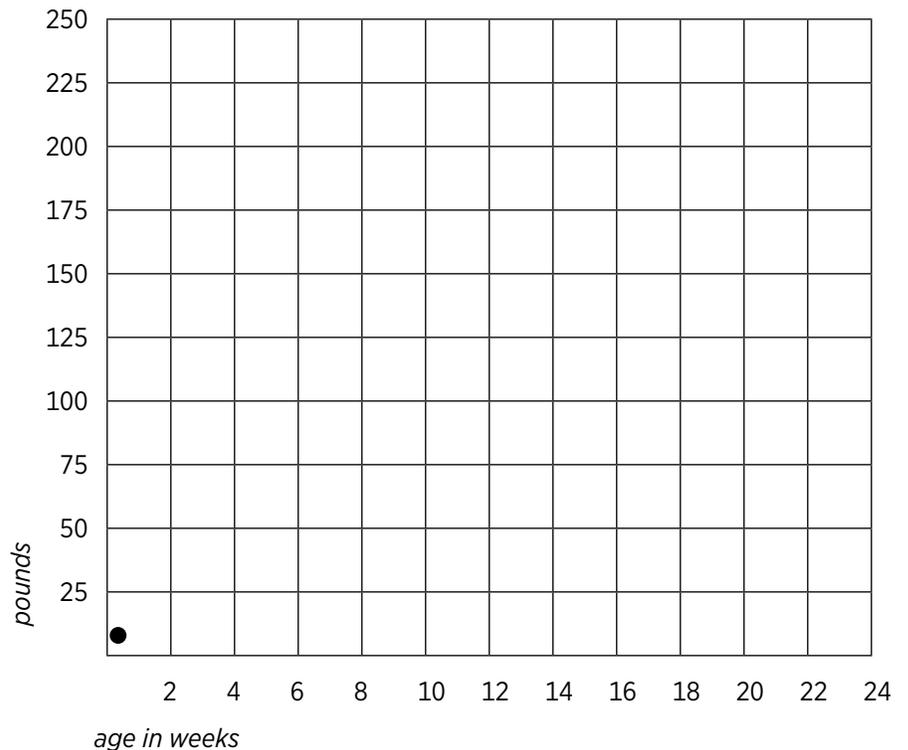
- 0 weeks, 3 pounds

### Weanling to maturity

- 3 weeks, 15 pounds
- 8 weeks, 50 pounds
- 12 weeks, 90 pounds
- 16 weeks, 145 pounds
- 20 weeks, 210 pounds

### Market

- 22 weeks, 250 pounds



### What does the graph tell us?

1. In 6 weeks, how much should a pig weigh?
2. How old should a pig be when it weighs 125 pounds?
3. How fast does a pig grow? Write down your answer, then ask your neighbor a question about how a pig grows.
4. What is the life cycle of a pig? Can you explain a pig's growth from its birth to the time it is harvested?

### Activity 3: Let's make pig feed!

What should go into a feed recipe to make sure that pigs are receiving the correct nutrients? Pigs require protein, carbohydrates (energy), and vitamins & minerals to be healthy. Soybean meal is a great source of protein! We are going to blend together soybean meal for protein, corn flour for energy, and a vitamin & mineral pack to complete our healthy feed mix.

For every one part of soybean meal in the mix, farmers will add 5 parts corn flour. Fill in the chart to the right to determine the amounts needed.

| Parts of soybean meal | Parts of corn flour |
|-----------------------|---------------------|
| 1                     | 5                   |
| 2                     |                     |
|                       | 20                  |
| 7                     |                     |
|                       | 45                  |

You can create your own "feed mix" with corn flour (Corn Chex), soybean meal (Cheerios), and raisins. The raisins represent the vitamins and minerals farmers add to the pig feed to keep the pigs healthy and strong. Remember that each piece of cereal is one part of your feed mix! Mix it up and enjoy!

1. Where do soybeans and corn get their energy to feed the pigs?  
Can you draw a model demonstrating how the sun, air, and water help to create this energy in plants?

Here's one possible recipe for pig feed: 3 parts soybean meal + 15 parts corn flour.

2. If each part was a total of 5 pounds, how many pounds of soybean meal do you need for this recipe?

3. How many pounds total will the recipe be?

Learn more about what happens on a pig farm! [Sign up for a virtual field trip now!](https://ohiopork.org/fieldtrip) ([ohiopork.org/fieldtrip](https://ohiopork.org/fieldtrip))