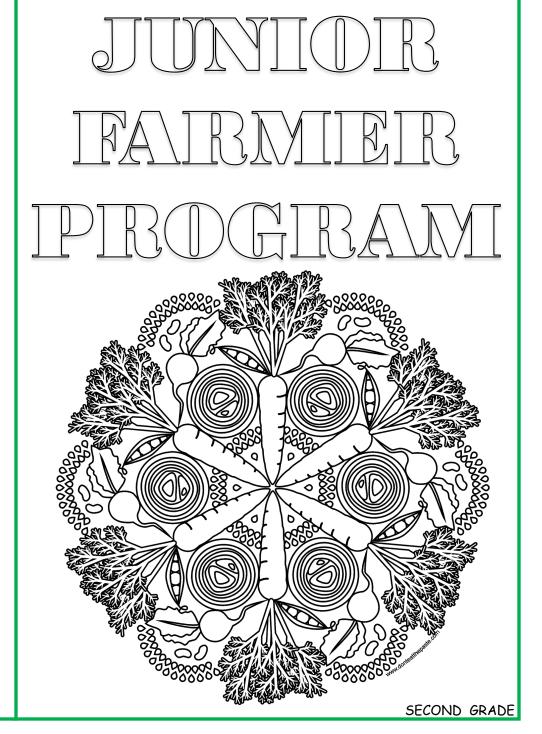


Please return this to the Allen County Soil and Water Conservation District to receive a Junior Farmer patch and certificate.

Indiana State Science Standards covered: SEPS.2, SEPS.4, SEPS.5 SEPS.8, 2.PS.1, 2.LS.1, 2.LS.2, 2.LS.3, K-2.E.1, K-2.E.2, K-2.E.3



- 1. Which are pictures of plants? Color them green.
- 2. Which are pictures of animals? Color them orange.
- 3. Which are pictures things that plants need to live? Color them blue.
- 4. Which are pictures of things that animals need to live? Color them red.
- 5. Are any of the items more than one color? If so, which one(s)?



What makes a plant a plant?

What makes an animal an animal?

What is the same for both?

Compare plants and animals to humans. What is the same and what is different?

Below are the stages of a pig's life cycle, match the term with the right life stage. Then answer the following questions.

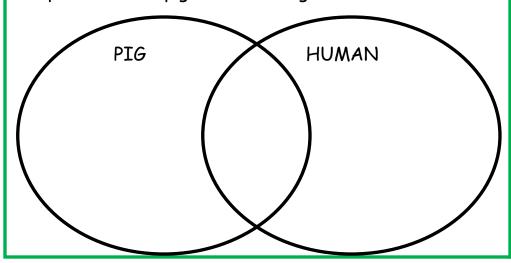


Juvenile Adult Baby

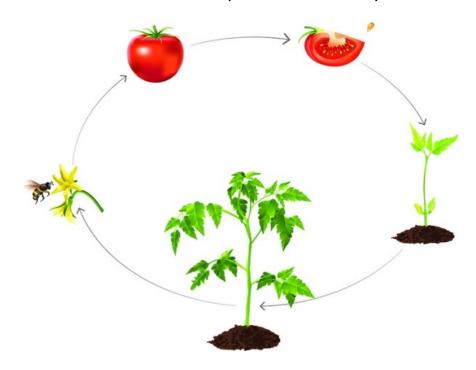
What is an adaptation?

What are some adaptations that pigs have?

Compare and contrast your adaptations and the adaptations of a pig. Use the diagram below:



Below is the life cycle of a tomato plant.



How is the life cycle of a tomato plant the same as a life cycle of a pig? How is it different?

What parts of the tomato plant help it to survive? How do those parts help the plant?

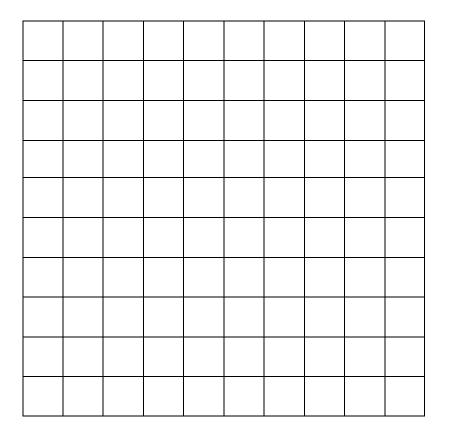
Does the tomato plant have any special adaptations? If so, what are they?

Please help John decide what to plant. John has a garden that is 10 feet long and 10 feet wide. He would like to plant tomatoes, beans, and corn. How many rows of tomatoes, beans and corn can he plant?

## Here is some information to help:

Tomato plants need to be two feet apart. Bean plants need to be two feet apart. Corn plants need to be three feet apart.

Below is a diagram of John's garden. Each square is one foot on each side.



How many rows of tomatoes, beans, and corn could John plant?

What could he use to make sure he plants the vegetables far enough apart?

Use the following information to estimate John's harvest.

One tomato plant can produce 200 tomatoes. One bean plant can produce 120 beans. One corn plant can produce two ears of corn.

John plants 10 tomato plants, 5 bean plants, and 5 corn plants.

Use the space below to estimate how many tomatoes, beans, and ears of corn John will harvest in the fall.

Tomatoes:

Beans:

Corn:

Cover crops are used to slow erosion, improve soil health, enhance water availability, and limit weeds and pests.

The Cover Crop Heroes below use their talents to help plants grow more effectively.



Captain Rye
Absorbs nitrogen
from the soil.
Excellent weed
fighter!



Red Clover
Tough on erosion!
She generously gives
nitrogen to needy soils.



Crimson Clover
Sprinkles nitrogen
wherever she goes!
Fights erosion daily!



Rye Hawk
Powered by excess
nitrogen. Weeds are
terrified of her!

## Solve the following problems with the help of the Cover Crop Heroes.

David's tomato farm is wilting from a lack of nitrogen. He is also struggling with lots of weeds. Which heroes would be best for this job?

Pavarti's crop of carrots is struggling with too much nitrogen. Which heroes can help her?

Maria and Alejandro are starting a new garden patch, but it is full of weeds, which heroes could help fight the weeds?

Massive wind storms have blown much of the needed top soil and nutrients away from Maneet's farm. Her farm is now struggling with erosion, who could help her with her erosion issues?