

Image Analysis: Notice & Wonder

Directions: Look at the image and write down 3 things you **notice** (key details, main ideas, or themes) and then write down 3 things you **wonder** (questions you have because of the image or things you are curious about when you look at the image).

What
do you
notice?



What
do you
notice?

Read & Take Notes



Directions: Read the passage below. Take notes in the space provided.

Gregor Mendel was a monk who lived in Austria. He was born in 1822 and died in 1884. Mendel loved to study plants. He grew pea plants in the garden of his monastery. He wanted to learn how plants passed traits from one generation to the next.

Mendel studied seven different traits in pea plants. He looked at things like the color of the peas, the shape of the peas, and the length of the stems. He noticed that some traits were dominant and some were recessive. For example, if a pea plant with yellow peas was crossed with a pea plant with green peas, all of the offspring would have yellow peas. This is because yellow is a dominant trait.

Mendel's work was very important. He was the first person to understand how traits are passed down from parents to their children. His work helped scientists understand genetics, which is the study of how traits are passed down. Mendel is known as the "father of modern genetics."

Take Notes Here

Key Vocabulary

Directions: For each term, use the word in a sentence that shows you understand its definition. Then create an image to represent the term. Be ready to explain the image.

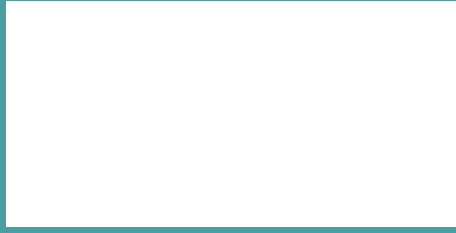
Vocabulary Term

traits

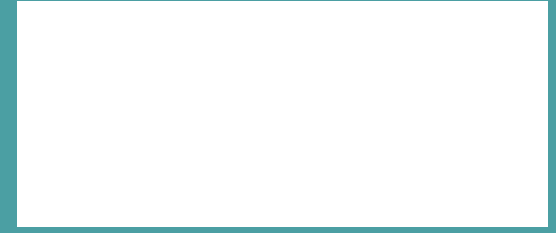
noun

A special quality or characteristic that someone or something has.

Use It In A Sentence:



An Image to Represent It:



Vocabulary Term

dominant

adjective

Stronger or more important than other things.

Use It In A Sentence:



An Image to Represent It:



Vocabulary Term

recessive


adjective

Weaker or less important than other things.

Use It In A Sentence:



An Image to Represent It:



Vocabulary Term

offspring

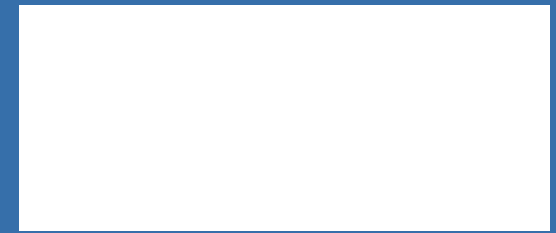
noun

The children or young animals of a parent.

Use It In A Sentence:



An Image to Represent It:



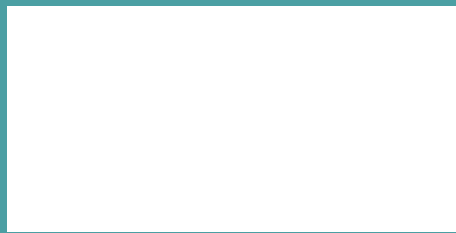
Vocabulary Term

genetics

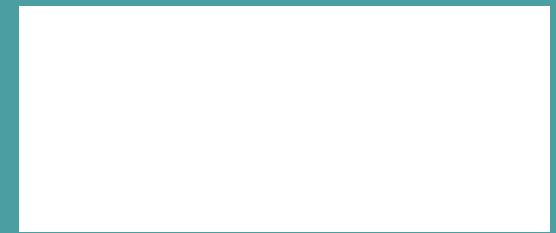
noun

The study of how traits are passed down from parents to their children.

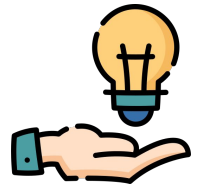
Use It In A Sentence:



An Image to Represent It:



3-2-1 Learning Reflection



Directions: Fill in the boxes below to reflect on your learning. Write down **three** new things you learned, **two** connections you made to what you already know, and **one** thing you want to learn more about.

3 THINGS I LEARNED

2 CONNECTIONS I MADE

1 THING I WANT TO LEARN MORE ABOUT

Answer and Explain

Directions: For each question, answer the question and then explain why you picked the answer you did using specific evidence from the text.

Question:

1. What did Gregor Mendel study?

Pick the Answer

- A) He studied how plants pass traits to their offspring.
- B) He studied how birds fly.
- C) He studied how fish swim.
- D) He studied how animals sleep.

Explain: Why did you pick that answer?

Question:

2. What did Mendel notice about some traits in pea plants?

Pick the Answer

- A) Some traits were bigger than others.
- B) Some traits were stronger than others.
- C) Some traits were dominant and some were recessive.
- D) Some traits were faster than others.

Explain: Why did you pick that answer?

Question:

3. Why is Gregor Mendel called the "father of modern genetics"?

Pick the Answer

- A) He was the first person to understand how traits are passed down.
- B) He was the first person to grow pea plants.
- C) He was the first person to study plants.
- D) He was the first person to discover new plants.

Explain: Why did you pick that answer?

Short Answer Questions

Directions: Answer each question in complete sentences. Use specific evidence from the text in each response.

Question

1. Where did Gregor Mendel grow his pea plants?

Question

2. What are two examples of traits that Mendel studied in pea plants?

Question

3. What did Mendel discover about yellow peas and green peas?

Reflect and Discuss

Directions: Respond to the following question using the reading and your own knowledge and experiences. Be as thorough as possible.

1. What are some traits that you have inherited from your parents? How are you like them?

Write Your Response Here. Be sure to use what you learned in the reading and your own knowledge and experiences to answer the question thoroughly.

Directions: When instructed, you will share your responses with your group. Take notes on their responses in the boxes below. Be sure to write their names at the top of each box.

Student #1: _____

Student #2: _____

Student #3: _____

Student #4: _____

Reflect and Discuss

Directions: Respond to the following question using the reading and your own knowledge and experiences. Be as thorough as possible.

2. What do you think it means to be a scientist? What qualities do you think are important for a scientist to have?

Write Your Response Here. Be sure to use what you learned in the reading and your own knowledge and experiences to answer the question thoroughly.

Directions: When instructed, you will share your responses with your group. Take notes on their responses in the boxes below. Be sure to write their names at the top of each box.

Student #1: _____

Student #2: _____

Student #3: _____

Student #4: _____

Reflect and Discuss

Directions: Respond to the following question using the reading and your own knowledge and experiences. Be as thorough as possible.

3. Why do you think Mendel chose to study pea plants? What are some advantages of using pea plants for scientific research?

Write Your Response Here. Be sure to use what you learned in the reading and your own knowledge and experiences to answer the question thoroughly.

Directions: When instructed, you will share your responses with your group. Take notes on their responses in the boxes below. Be sure to write their names at the top of each box.

Student #1: _____

Student #2: _____

Student #3: _____

Student #4: _____

Vocabulary Flashcards

Print, cut, and fold to use as flashcards.

traits

A special quality or characteristic that someone or something has.

dominant

Stronger or more important than other things.

recessive

Weaker or less important than other things.

offspring

The children or young animals of a parent.

genetics

The study of how traits are passed down from parents to their children.

