

Heredity Web Quest

DNA from the Beginning - Mendelian Genetics

Go to <http://www.dnaffb.org/dnaffb/1/concept/index.html>

Children resemble their parents

Read the text and answer the following questions

1. How have useful traits been accumulated in plants and animals over the centuries?

2. Was there a scientific way to predict the outcome of a cross between two parents? _____
3. Who determined that individual traits are determined by discrete "factors"? In what year?

4. These "factors" are now known as _____.
5. Summarize what Mendel did? _____

Click on *Animation* at the ^{top} ~~bottom~~ of the page. Move through the animation and answer the following questions.

1. Why did Mendel work with pea plants? _____

The next question deals with how pea plants self-fertilize

4. A) In the flower the male sex part is the _____.
- B) What does it drop inside the immature flower? _____
- C) Name the female sex part? _____
- D) What are the sex cells that develop there? _____
- E) What fertilizes the eggs? _____
- F) Why do you think this is called self-fertilization? _____

The next question deals with how pea plants cross-fertilize

5. Summarize how cross-fertilization is accomplished?

- Why is it different from self-fertilization?

Self-fertilization

Cross-fertilization

