



Science Virtual Learning

LEP Science

Reproduction

April 17, 2020



LEP Science
Lesson: April 17, 2020

Objective/Learning Target:

I can explain what reproduction is and the difference between asexual and sexual reproduction.

What do you already know about reproduction? Write the numbers of the statements you think apply to the picture.

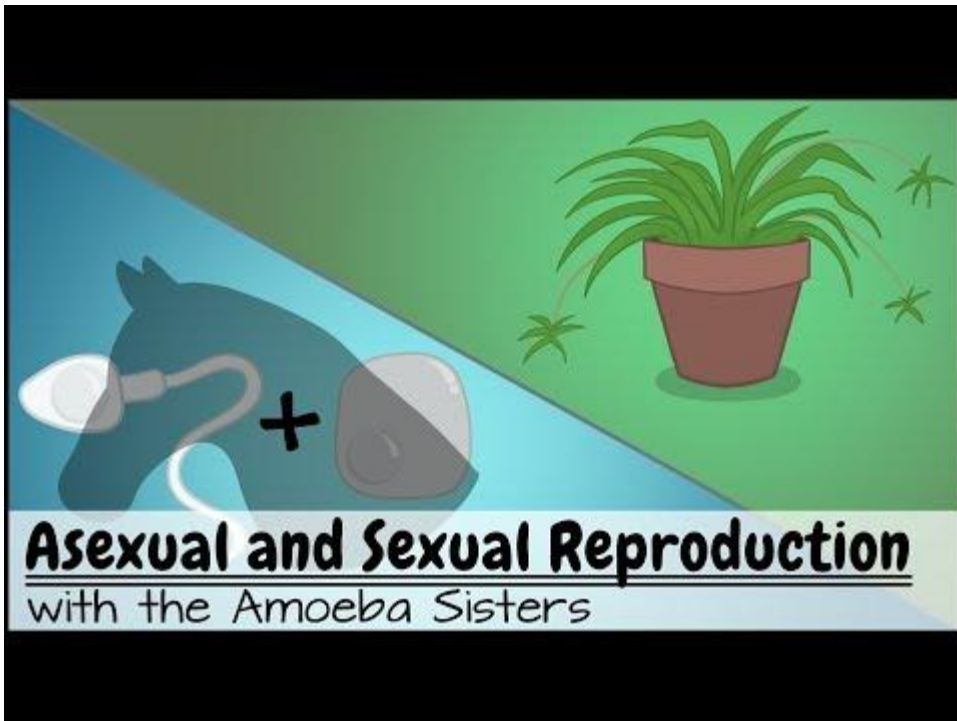
A Comparison of Reproduction Types

What could you infer about these spider plantlets based on the video and graphic shown below? Please place a checkmark next to any statements that would be correct for the graphic represented below.

- 1. All of the plantlets are identical to the parent plant.
- 2. All of the plantlets are identical to each other.
- 3. The plantlets have a different genetic code from the parent plant.
- 4. This represents asexual reproduction.
- 5. This specific process involves gametes.
- 6. The plantlets are the same size as the parent plant.
- 7. This specific process involves a male and female plant.
- 8. The plantlets are uniform.
- 9. There is genetic variation among the plantlets.
- 10. Each plantlet is a clone of the parent plant.
- 11. This represents sexual reproduction.
- 12. This type of reproduction also includes binary fission and budding.
- 13. This requires two organisms to produce offspring.
- 14. This requires only one organism to produce offspring.
- 15. The DNA would be the same in the parent plant and offspring.
- 16. Fertilization occurs in this type of reproduction.



Now we will watch a video. As you watch, think about the statements from the previous slide.



Let's look at those statements again.

Do any of your original answers change?

A Comparison of Reproduction Types

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How did you do?

The statements you should have chosen are numbers:

1, 2, 4, 8, 10, 12, 14, and 15

But, what does this all mean?

Copy the notes seen below:

Two Main Types of REPRODUCTION	
Asexual Reproduction	Sexual Reproduction



But, what does this all mean?

As you watch the video, complete your notes.

[Khan Academy Video](#)

Two Main Types of REPRODUCTION

Asexual Reproduction

Binary Fission - prokaryotes, genetically identical, "Clones"

Mitosis - eukaryotes

Budding

Fragmentation (example- starfish)

Parthenogenesis (from an unfertilized egg)

Sexual Reproduction

Gametes carry $\frac{1}{2}$ the genetic information
Egg + Sperm = offspring

More variation in offspring



Review the notes found on the first link

[Review of video with vocabulary and common misconceptions](#)

When you are done reviewing, test your learning on the next link.

[Test your learning](#)



Here is some additional practice with Reproduction

Watch the video and answer the questions below.

The Red Queen

1. What is the difference between the two species of minnows?
2. Which species tends to get the parasite more?
3. How are the sexually reproducing minnows able to evolve defenses to avoid the parasite?



Here is some additional practice with Reproduction

Watch the video and answer the questions below.

The Red Queen

1. What is the difference between the two species of minnows? **one is asexually reproducing while the second is sexually reproducing**
2. Which species tends to get the parasite more? **The asexually reproducing minnows get the parasite more.**
3. How are the sexually reproducing minnows able to evolve defenses to avoid the parasite? **The sexually reproducing minnows are all unique genetically due to the variation among the offspring. This variation challenges competitors, disease pathogens, etc.**



Here are some additional resources for learning.

[More notes](#)

[Fact sheet with questions](#)

[Fact sheet answers](#)