



Amoeba Sisters | Video Recap

NAME: _____

Amoeba Sisters Video Recap- DNA, Chromosomes, Genes, and Traits: An Intro to Heredity

The vocab below builds a foundation for understanding heredity! Complete the table using your own words and creativity.

| Name | Illustrate It | Explain it in Your Own Words | What's its significance? (Why does it matter?) | Real Life Example |
|------------|---------------|------------------------------|---|---|
| DNA | 1. | 2. | 3. | DNA found in the body cell of a snake |
| Chromosome | 4. | 5. | Chromosomes allow the large amount of DNA to be compacted. One reason this is significant is in cell division as it makes it much easier for the cells to put these units into the new cells. | 6. |
| Gene | 7. | 8. | 9. | One of many genes that can code for a protein involved in eye pigment |
| Trait | 10. | 11. | 12. | 13. |

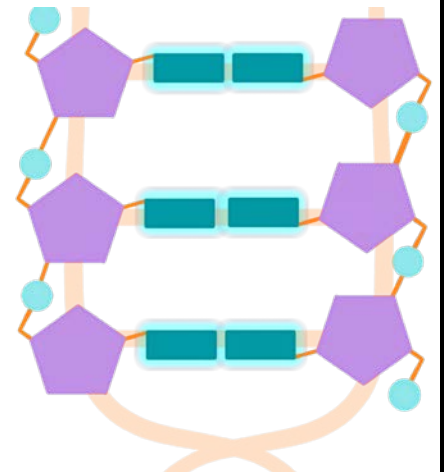
14. For the diagram at right, please label the following words on the diagram.

(A) Deoxyribose (sugar), (B) Phosphate, and (C) Nitrogenous Base.

15. Based on the definition, how many **nucleotides** do you see in this diagram? _____

16. What are the **four different types of bases** in DNA and how do they pair?

17. When studying **heredity**, what is the relationship of DNA **bases** and **traits**?





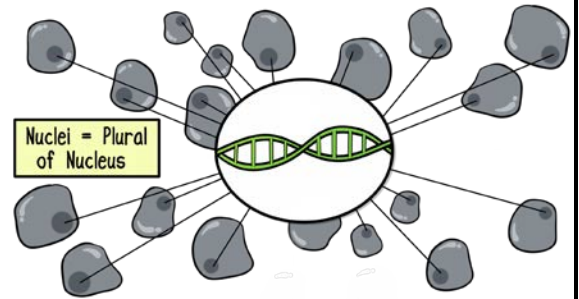
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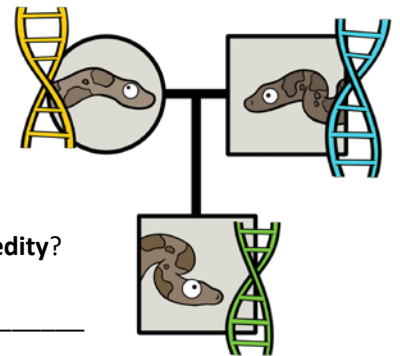
A Picture Says It!

18. Explain what this image represents regarding where your entire DNA code can be found.



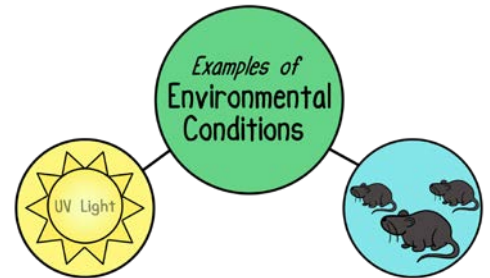
19. Apply Your Understanding

Spike is not a clone of his father (which would mean his DNA would be identical to his father's). He inherited DNA from both of his parents. **Chromosomes** are condensed units of DNA. If Spike has 36 chromosomes, you would expect that Spike would have inherited _____ chromosomes from his mother and _____ chromosomes from his father.



20. How did you determine the chromosome numbers and how does that relate to **heredity**?

21. As mentioned in the video, the environment can also affect an organism's traits. The example of nourishment was used in the case for Spike, as this could affect his growth and size. This can also occur in humans. UV light was not mentioned in the video. How could UV light potentially affect an organism's trait? Provide one example.



22. Recap the Vocab

Identify some of the vocabulary you worked with by labeling them on this illustration:

- DNA
- Gene
- Chromosome
- Nucleotide
- Phosphate
- Deoxyribose (sugar)
- Nitrogenous Base

