

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

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

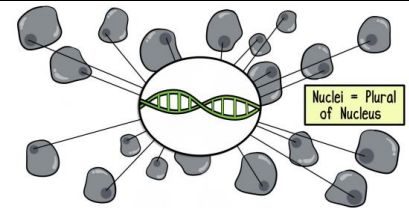
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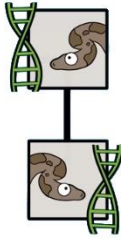
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2. One of these images represents sexual reproduction, and the other represents asexual reproduction. Label them and then briefly describe what each means in your own words.



Explain:

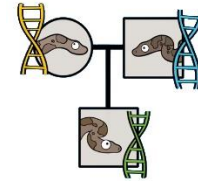
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Explain:

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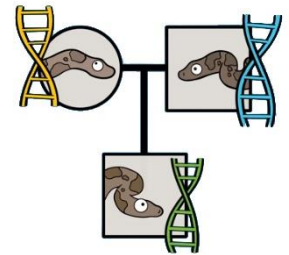


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3. Spike is not a clone of his father. He inherited DNA from both of his parents. Chromosomes are condensed units of DNA. If Spike has 36 chromosomes, you would expect that Spike would have inherited \_\_\_\_ chromosomes from his mother and \_\_\_\_ chromosomes from his father.



4. How did you determine the chromosome numbers?

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5. Label the diagram on the right using the following words:  
(A) Sugar, (B) Phosphate, (C) Nitrogenous Base

6. What is a nucleotide?

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How many nucleotides do you see in this diagram? \_\_\_\_

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

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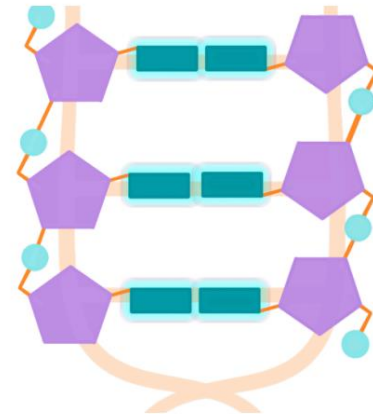
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8. In your own words, what is the relationship of DNA bases and traits such as hair colour, eye colour, etc?

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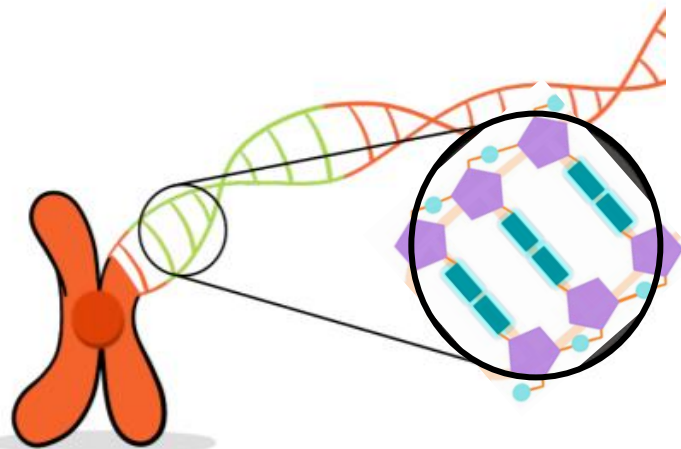


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9. Label the illustration with the following words:

- DNA
- Double Helix\*
- Nucleotide
- Phosphate
- Sugar
- Nitrogenous Base
- Chromosome
- Centromere\*



\* Not directly covered in video. Ask your teacher!