

DNA Test

1. How many genes do humans have?
 - a. 2,500
 - b. 25,000
 - c. 20,000

2. How long would the DNA in one human cell be?
 - a. 3 meters long
 - b. 3 centimeters' long
 - c. 2 millimeters' wide

3. What is DNA
 - a. Deoxyribo Nucleic Acid
 - b. A chemical in your blood
 - c. Does Not Need Analysis

4. Each strand contains a sequence of bases (also called nucleotides). What are the four bases?
 - a. adenine, guanine, cytosine and geranium
 - b. adenine, thyme, cytosine and clove
 - c. adenine, guanine, cytosine and thymine

5. How is DNA packaged to fit into the small space of a cell nucleus?
 - a. They are packed into compact units called a gene
 - b. They are packed into compact units called chromosomes
 - c. They are squeezed into a trait

6. What does VNTR stand for?
 - a. Variable Number That Reuptake.

- b. Variable Number Tandem Repeaters.
 - c. Variable Nucleotides That Repeat.
7. How many chromosomes are in a human cell?
- a. 46
 - b. 64
 - c. 23
8. What is an exon?
- a. An oil company
 - b. A segment of a DNA or RNA molecule containing information coding for a protein or peptide sequence.
 - c. The end sequence of a neuron
9. What is a Locus?
- a. A location a chromosome within a DNA sequence
 - b. A insect that can help determine cause of death
 - c. The specific location of a gene or DNA sequence or position on a chromosome.
10. Where do the "pairs" of chromosomes come from?
- a. One from each parent make up a pair.
 - b. Two sets of jeans coming together.
 - c. One each from your genes and DNA.
11. Where do a person's VNTRs come from?
- a. A specific location in a person's DNA.
 - b. The genetic information donated by his or her parents.
 - c. A genetic abnormality.
12. What is "junk DNA"?
- a. Cells that contain quite a bit of DNA that doesn't encode anything.

- b. DNA that has no use.
 - c. Abnormalities within the DNA that interferes with chromosomes.
13. What is a trait?
- a. It is not a person's hair color, eye color or the color of skin
 - b. It is a characteristic that two friends share.
 - c. It is a notable feature or quality in a person.
14. The complete set of instructions for making a human being is found where?
- a. DNA
 - b. Gene
 - c. Trait
15. From what parts of the human body is DNA acquired?
- a. It is not found on or in a person's body.
 - b. Fingerprints and dental impressions.
 - c. Skin, semen, saliva, hair, and every other part of the anatomy
16. Does every cell in the body contain DNA?
- a. No, cells that has abnormalities do not contain DNA.
 - b. Yes, without DNA a cell could not exist.
 - c. No, Mature red blood cells and cornified cells in the skin, hair, and nails contain no nucleus.
17. What is the function of the protein hemoglobin?
- a. Capture and carry oxygen.
 - b. Carry and release oxygen.
 - c. Capture and process oxygen.
18. What do genes tell the cell to make?
- a. Traits

- b. Proteins
- c. Calcium

19. Are humans the only source of DNA?

- a. Only primates have DNA.
- b. Everything that lives has DNA.
- c. Reptiles are the only living creature that do not have DNA.

20. Where do we get our traits?

- a. From our peers.
- b. From our parents.
- c. From our children.

21. Describe the sex chromosomes.

22. Explain how each child born to the same parents will have a different combination of chromosomes.

23. List three practical applications of DNA fingerprinting.

24. Describe structural proteins.

25. What is the role of proteins in transmitting pain messages?
