

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Core: \_\_\_\_\_

**Pre-Assessment: Heredity Unit**

**Directions** – Answer each question in the final answer column. When you are finished answering, place a checkmark (✓) in the box that represents your confidence level (did you know the answer or was it a guess).

**Multiple Choice** – Select the BEST answer from the choices given.

1. The basic unit of heredity that carries genetic information from one generation to the next is called the
  - a. gene
  - b. trait
  - c. DNA
  - d. chromosome
2. The characteristics of a living organism that is determined by genetics is called \_\_\_\_\_.
  - a. feature
  - b. trait
  - c. gene
  - d. allele
3. The genetic information from which parent determines if a child is male or female?
  - a. father
  - b. mother
  - c. both
  - d. cannot be answered; happens randomly
4. The type of reproduction that creates offspring with more variety and differences is \_\_\_\_\_.
  - a. sexual
  - b. fission
  - c. asexual
  - d. spontaneous
5. Random changes in the DNA of an organism are called \_\_\_\_\_.
  - a. events
  - b. mutations
  - c. switches
  - d. changes
6. The type of cell division that creates cells with exact copies of DNA is called \_\_\_\_\_.
  - a. twinning
  - b. meiosis
  - c. mitosis
  - d. copying
7. If a mother had a dominant gene for hair color and the father had a recessive gene for hair color, their child would have the hair color of the \_\_\_\_\_.
  - a. father
  - b. mother
  - c. both parents
  - d. cannot be answered; results would be random
8. Traits that are more powerful than others are called \_\_\_\_\_.
  - a. recessive
  - b. dictator
  - c. dominant
  - d. major

Final Answers:

Problem Number	Answer	I know the answer!	Guessed on it!
1			
2			
3			
4			
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16			

9. A genetic disorder that affects the blood where a person is not able to form blood clots when they are injured and they bleed more than normal is called \_\_\_\_\_.  
a. cancer  
b. Down syndrome  
c. hemophilia  
d. cystic fibrosis
10. Which of the following is true about identical twins?  
a. identical twins come from two different eggs  
b. identical twins do not have the same DNA  
c. identical twins are exact duplicates  
d. identical twins don't have to be the same sex
11. Organisms that have a gene for a trait but do not show the trait are called \_\_\_\_\_.  
a. hiders  
b. masks  
c. carriers  
d. covers
12. The shape of the DNA molecule is described as a  
a. spiral  
b. twisted ladder  
c. swirl  
d. double helix
13. What is true about sexual reproduction?  
a. the genes from two parents are combined  
b. the genes from one parent are copied  
c. buds are made from one parent to make an offspring  
d. the offspring is identical to its parents
14. The genetic information of an organism is found in the \_\_\_\_\_ of its cells.  
a. cytoplasm  
b. cell membrane  
c. vacuoles  
d. nucleus
15. All of the genes of an organism are tightly packed into a structure called \_\_\_\_\_.  
a. library  
b. DNA  
c. inventory  
d. RNA
16. What percent of your genes do you get from your father?  
a. 75%  
b. 50%  
c. 25%  
d. cannot be answered, results are random