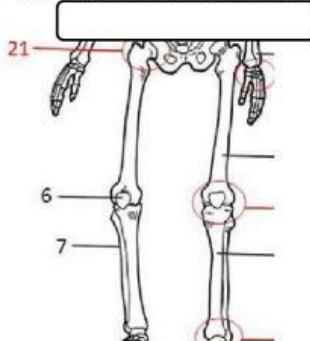


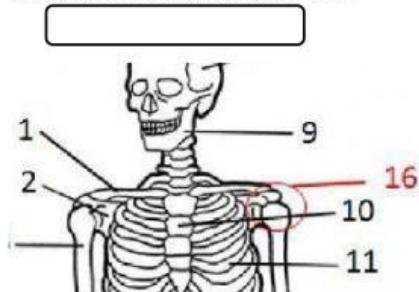
# 8<sup>th</sup> Grade Science Exit Test - Part 1

## THE HUMAN BODY

1. What bone is Number 6?



2. What bone is Number 10?



3. What is another name for the thigh bone?

- Femur
- Patella
- Ulna

4. What connects muscle to bone?

- Arteries
- Tendons
- Cartilage

5. What is another name for the breast bone?

- Skull
- Femur
- Sternum

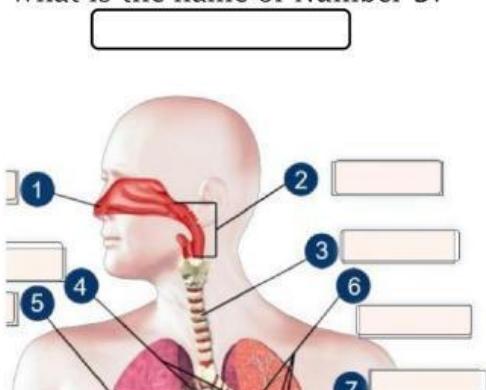
6. Is the Cardiac Muscle voluntary or involuntary?

- Involuntary
- Voluntary
- Both

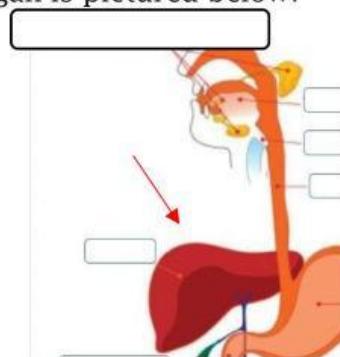
7. What is the primary purpose of the Muscular System?

- To provide stability
- To provide digestion
- To provide movement

11. What is the name of Number 3?



12. What organ is pictured below?



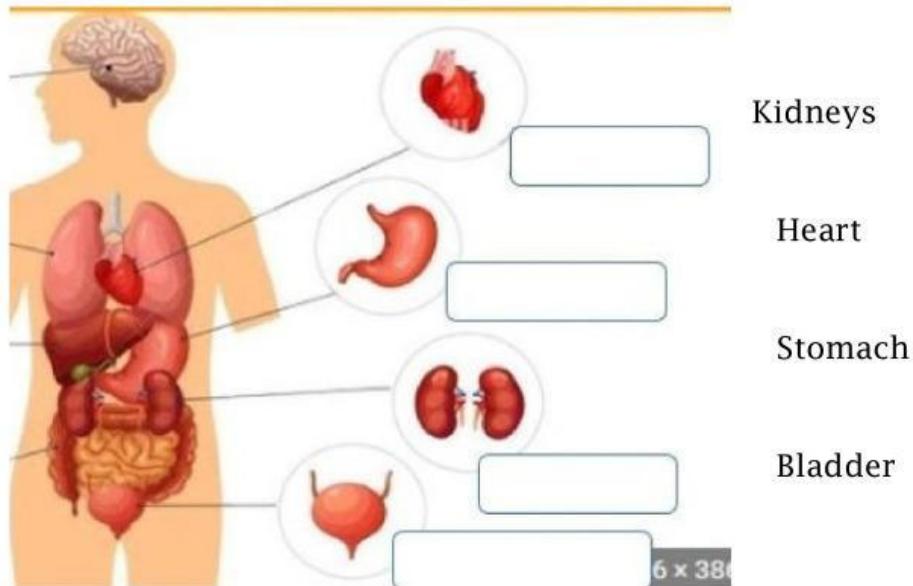
13. What is the slippery liquid that makes food easy to swallow & helps to break food down?

Enzymes  
Saliva  
Nutrients

14. What is the process of breaking down food for use as energy and building materials for the body?

Excretion  
Ventilation  
Digestion

15. Label the organs in the diagram below:



16. What organs remove waste from the body?

Lungs  
Intestines  
Heart

20. What is the body's electrical wiring that controls and coordinates all of our body's functions?

Muscular System  
Skeletal System  
The Nervous System

17. What does blood provide for the body?

Oxygen and Nutrients  
Carbon dioxide  
White blood cells

21. What is the specialized cell that transmits electrical signals (nerve impulses) throughout the body?

Atom  
Neuron  
Blood cells

18. What internal organ is the center of our body and controls everything?

Heart  
Brain  
Lungs

22. What is located in the back of the head below the cerebrum and is responsible for muscle coordination, balance, posture, and muscle tone

Skull  
Cerebellum  
Spinal Cord

19. What is another name for the Cardiovascular System?

Circulatory System  
Respiratory System  
Digestive System

## GENETICS

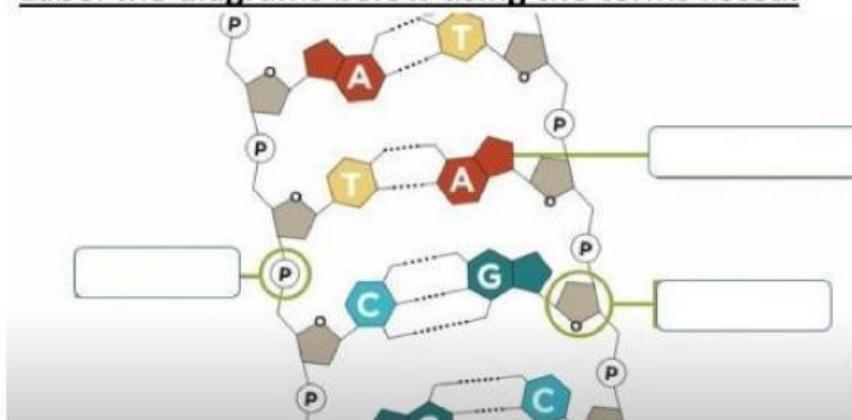
1. What does DNA stand for?

- Dehydrated Neuron Acid
- Deoxyribonucleic Acid
- Double Nomadic Amateur

2. What term is used to describe the structure of a double-stranded DNA?

- Dual Neurons
- Duplicate Halos
- Double Helix

3. Label the diagrams below using the terms listed.



Phosphate

Deoxyribose

Nitrogen bases

4. **Genetics: Genes to Traits**

**Matching:**

Genotype

Alleles

Heredity

Genes

Mendelian Traits

Multifactorial Trait

1. \_\_\_\_\_ – copies of each gene that parents pass on to their children

2. \_\_\_\_\_ – simple traits that are governed by a single gene

3. \_\_\_\_\_ – the process by which parents pass on their genetic information to their offspring

4. \_\_\_\_\_ – a trait that is controlled by many different forms of many different genes plus environmental influences

5. \_\_\_\_\_ – combination of genes and alleles

6. \_\_\_\_\_ – discrete units of information that make proteins; organized into chromosomes

5. How many copies of a gene does a child get from their parents?

- 2, one from each parent
- 4, two from each parent
- 4, 3 from father and 1 from mother

6. Why is it important to study heredity?

- We will be tested on it
- It allows us to understand basic core parts of biology
- It helps us to understand character flow

7. What percentage of your genes do you get from only 1 parent?

20%  
80%  
50%

8. What are the two types of genes?

Big and Small  
Thick and Thin  
Dominant and Recessive

9. Dominant Genes are \_\_\_\_\_ and can overwrite the recessive gene.

10. Recessive Genes are \_\_\_\_\_ and will not show effect if paired with dominant gene.

11. What is the recessive gene expressed as?  
Upper case letter  
Lower case letter  
Cursive letter

12. What does every living organism have at least two of?

Chromosomes  
Cells  
Alleles

### 13. Inherited Traits or Acquired Traits

e. Colour blindness of a person	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>
f. Scars on a person's face	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>
g. Eye colour	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>
h. Ability of a piano player	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>
i. Widow's peak on a person's forehead	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>
j. Science knowledge	Inherited <input type="checkbox"/>	Acquired <input type="checkbox"/>

14.

## Animal Behaviors

### Matching:

Instinct behavior	Fixed Action Patterns	Imprinting
Trial and Error Learning	Animal Behavior	Habits

- \_\_\_\_\_ - repeated actions that are done without much thought
- \_\_\_\_\_ - a type of learning that occurs during a critical period in an animal's early life, when it's exposed to an object and forms a preference for it
- \_\_\_\_\_ - the study of animal actions and reactions
- \_\_\_\_\_ - automatic responses; the result of natural programming in the brain
- \_\_\_\_\_ - an adaptive mode of learning involving eliminating mistakes until a correct answer is discovered through experience; described as a method of problem-solving
- \_\_\_\_\_ - a series of actions from start to finish

15. What type of research involves watching an animal in its natural environment?

- Trial and Error
- Observational
- Experimental

16. Who came up with the theory of Natural Selection?

- Charles Darwin
- James Dean
- Albert Einstein

17. What are the traits that help individuals survive and reproduce that are passed on to their offspring called?

- Instinctive Traits
- Acquired Traits
- Inherited Traits

18. What is the accumulation of advantageous changes over many generations called?

- Evolution
- Adaptation
- Inheritance