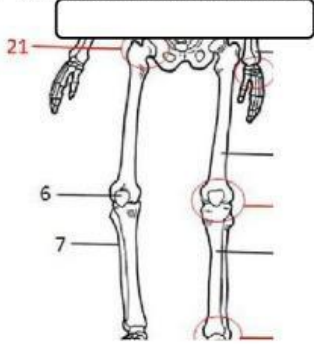


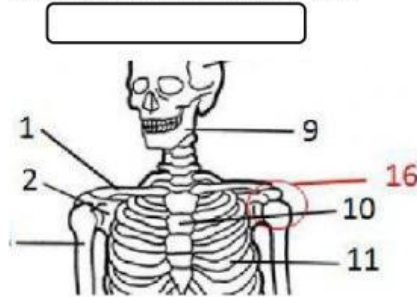
# 8<sup>th</sup> Grade Science Exit Test – Part 1

## 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

8. What is moving a body part around an axis called?

- Extension
- Rotation
- Flexing

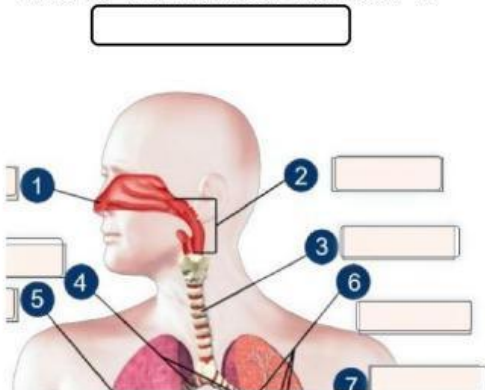
9. What is the double-walled protective sac covering the heart?

- Pericardium
- Capillary
- Ventricle

10. What is responsible for the clotting of blood to help minimize blood loss during an injury?

- Veins
- Platelets
- White blood cells

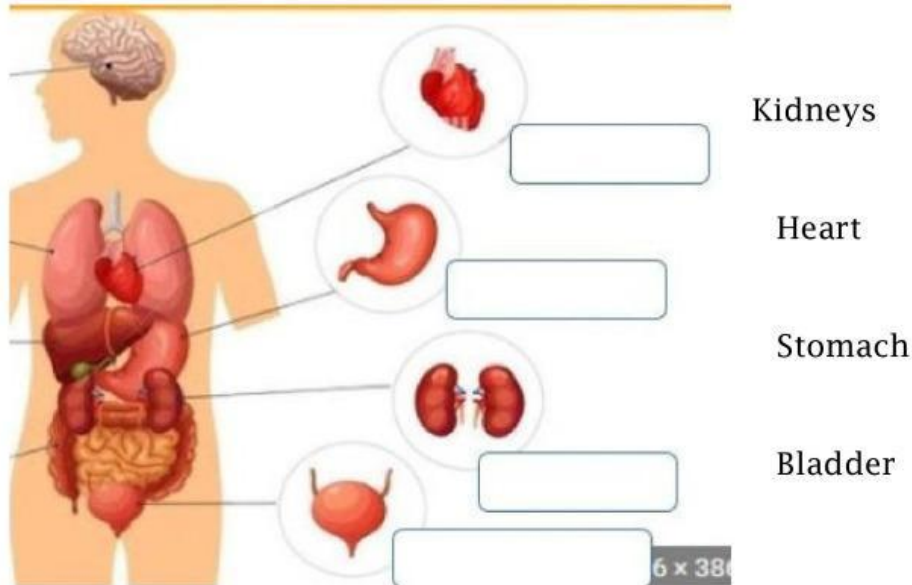
11. What is the name of Number 3?



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:

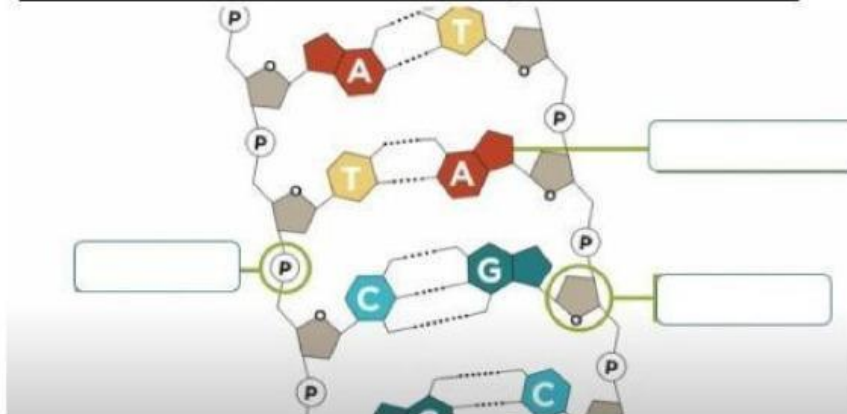


16. What organs remove waste from the body?  
 Lungs  
 Intestines  
 Heart
17. What does blood provide for the body?  
 Oxygen and Nutrients  
 Carbon dioxide  
 White blood cells
18. What internal organ is the center of our body and controls everything?  
 Heart  
 Brain  
 Lungs
19. What is another name for the Cardiovascular System?  
 Circulatory System  
 Respiratory System  
 Digestive System
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
21. What is the specialized cell that transmits electrical signals (nerve impulses) throughout the body?  
 Atom  
 Neuron  
 Blood cells
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

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