

P.7 INTERGRATED SCIENCE

Name: _____ Stream: _____

A) THE HUMAN BODY

1. a) Apart from the incisors, state two other types of teeth found in the mouth.

(i) _____ (ii) _____

b) State any one characteristic of the incisor teeth which make them suitable for their function.

c) In which way are the teeth important in the mouth?

(d) How are premolar teeth different from incisors?

e) Give any one way in which a person can care for his teeth

f) State the use of tooth paste when brushing our teeth.

2. a) Give the meaning of the term breathing.

(b) Name the two respiratory gases in humans.

(i) _____ (ii) _____

(c) Mention any two parts of the breathing system in man.

(i) _____ (ii) _____

(d) State what happens to inhaled air in the nose.

(e) Name the structures which help to keep the trachea open all the time.

(f) Which organs in plant have a similar function as the lungs in animals?

(g) State the functions of air sacs in the human body.

(h) State the behavior of the diaphragm when one;

(i) breathes in -----

(ii) breathes out-----

(l)State what happens to each of the following during breathing in: (i)

the ribcage-----

(ii) the volume of the thoracic cavity-----

(iii) the lungs -----

3. (a)Write down any two ways in which digestion of food is important. (i)-

----- (ii) -----

(b) How is each of the following useful during digestion?

(i) Saliva -----

(ii) Tongue -----

(c) How does food bolus move from the mouth to the stomach?

(d) Name two important liquid substances which are produced in the stomach during digestion.

(i) ----- (ii) -----

(e) Mention any two substances that are absorbed into the body through the stomach.

(i) ----- (ii) -----

(f) Give a reason why emulsification is important during digestion.

(g) In which way is the ileum adapted to its functions?

(h) Which class of food is absorbed in the colon?

(i) Give a reason why the liver and pancreas are not part of the alimentary canal instead are part of the digestive system.

4. a) Write down any two components of the circulatory system.

(i) ----- (ii) -----

b) State the function of the heart in the human body.

c) Which auricle of the heart handles de-oxygenated blood?

d) Why is the left ventricle thicker than the right ventricle?

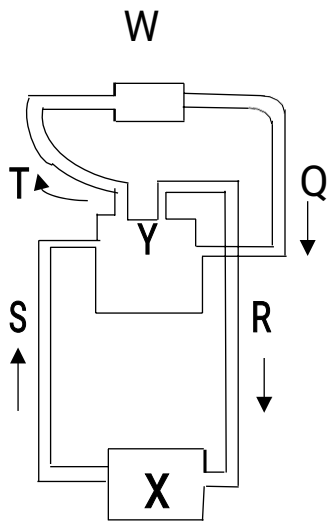
e) Give any two useful substances transported in blood.

(i) ----- (ii) -----

(f) How are red blood cells able to transport oxygen around the body?

(g) Name the vitamin which helps in clotting of blood.

Study the diagram below and use it to answer the questions that follow.



(i) Name the body organ marked W.

.....

(ii) Why does blood leave organ Y and goes to organ W?

.....

(iii) How does blood through R differ from blood through S?

.....

(iv) Which type of blood moves through blood vessel Q?

.....

5. (a) State the positive result of fertilization?

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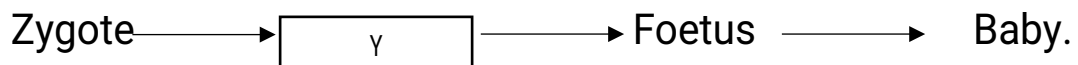
(b) How are human beings similar to reptiles in terms of fertilization?

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(c) State where conception takes place in human beings?

.....

(d) Name the type of change which is illustrated below.



.....

(e) Identify the organism represented by letter Y.

(f) In which two ways is the amniotic fluid useful during pregnancy?

(i) -----

(ii) -----

(g) Why is the umbilical cord tied before being cut at birth?

(h) State any two functions of the placenta during pregnancy.

(i) -----

(ii) -----

6. (a) Give the meaning of the term excretion.

(b) Name any two excretory organs in humans.

(i) ----- (ii) -----

(c) Mention any two waste products.

(i) ----- (ii) -----

(d) How is excretion an important process in the body?

(e) What is the inner most layer of the skin?

(f) State any two functions of the human skin.

(i) ----- (ii) -----

(g) How is the skin similar to the kidney?

(h) Study the table below and use it to answer the questions that follow

Gas	breathed in	breathed out
oxygen	21%	16%
Carbon dioxide	0.03%	4%

(i) Why does the air we breathe out contain less oxygen than the air we breathe in?

(ii) Give a reason why exhaled air contains more carbon dioxide than inhaled air?

(iii) State one difference between inhaled air and exhaled air.

(iii) State one component of sweat.

END