Science
Class 8
Topic: Food And Digestion
Reinforcement Worksheet

Name:_____________________Sec:_______________________Date:_____________________

Q1. MCQs.

A. Which juice is rich in iron?
   (a) Orange (b) Carrot
   (c) Apple (d) Mango

B. Vitamin E is found in
   (a) Egg yolk (b) carrots
   (c) Mangoes (d) Milk

C. Which of these is a rich source of Vitamin C?
   (a) A slice of cheese (b) A cup of orange juice
   (c) A medium baked potato (d) A piece of brown bread

D. A rich source of protein is:
   (a) Fish meat (b) Cereal
   (c) Palm oil (d) Vegetables

E. Fats simplify into:
   (a) Light oil (b) Fatty acids
   (c) simple sugars (d) Amino acids

F. Digested food is absorbed through:
   (a) artery (b) Villi
   (c) Blood (d) Veins
Q2. Fill in the blanks.

i) Main digestion of food takes place in the ________________.

ii) The involuntary wave like contraction by which food is moved through alimentary canal is called ________________.

iii) The function of large intestines is to absorb _______ and mineral salt.

iv) Fibre provides ________________ to keep intestines working properly.

v) Enzymes are ________________ which speed up chemical reactions.

Q3. Match Column A with Column B and write the correct alphabet in Column C.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin/Minerals</td>
<td>Deficiency Problems</td>
<td>Correct Alphabet</td>
</tr>
<tr>
<td>1. Vitamin A</td>
<td>a. Rickets</td>
<td></td>
</tr>
<tr>
<td>2. Vitamin B1</td>
<td>b. Nerve degeneration</td>
<td></td>
</tr>
<tr>
<td>3. Vitamin C</td>
<td>c. Anemia</td>
<td></td>
</tr>
<tr>
<td>4. Vitamin D</td>
<td>d. High B.P due to excess of minerals</td>
<td></td>
</tr>
<tr>
<td>5. Vitamin E</td>
<td>e. Night blindness</td>
<td></td>
</tr>
<tr>
<td>6. Vitamin K</td>
<td>f. Beri Beri</td>
<td></td>
</tr>
<tr>
<td>7. Iodine</td>
<td>g. Prolonged bleeding</td>
<td></td>
</tr>
<tr>
<td>8. Sodium</td>
<td>h. Disease of bones</td>
<td></td>
</tr>
<tr>
<td>9. Iron</td>
<td>i. Scurvy</td>
<td></td>
</tr>
<tr>
<td>10. Calcium</td>
<td>j. Goitre</td>
<td></td>
</tr>
</tbody>
</table>

Q4a. Distinguish between Physical and Chemical Digestion.

<table>
<thead>
<tr>
<th>PHYSICAL DIGESTION</th>
<th>CHEMICAL DIGESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b. If you eat a plain biscuit and chew it for longer period of time it tastes sweet. Explain why.
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

c. Fibre is not digested by human beings yet it is an essential part of a balanced diet. Justify.
___________________________________________________________________________
___________________________________________________________________________
Q5. Look at the model of intestines below and answer the questions.

Q6. A balanced diet includes carbohydrates, proteins and fats.
   (a) Name two natural (not processed) sources of dietary carbohydrate.
___________________________________________________________________________
(b) Give two uses of proteins in the body.
___________________________________________________________________________
(c) Explain how you would test for the presence of sugar in a food.
___________________________________________________________________________
Q7. This diagram shows the digestive system in the human body.

(a) Name parts A to F (not X or Y).

(b) X is a gland below the mouth. What substance does X secrete?

(c) Y is connected to the liver. What substance is stored in Y?

(d) D contains a strong acid. What is the purpose of this acid?

(e) What process takes place in B?

Q8. This diagram shows a section through the walls of the small intestines.

(a) What is the name of part A, and what is its purpose?

(b) B is a blood capillary. Why are there blood capillaries in the walls of small intestines?
Q9a. A food contains protein. Describe what happens to this protein after the food reaches the stomach.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

b. Why doesn't the food enter the trachea instead of going to the esophagus?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

c. Name the enzyme that catalyses the digestion of dietary fats.
________________________________________________________________________
d. What are the products of fat digestion?
________________________________________________________________________
e. Name the substance produced by the liver that helps in the digestion of dietary fats.
________________________________________________________________________
f. Explain how this substance helps in the digestion of dietary fats.
________________________________________________________________________

Q10. This table shows the percentage of starch converted into maltose by a synthetic enzyme, amylase Q, under different conditions.

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>pH 3</th>
<th>pH 4</th>
<th>pH 5</th>
<th>pH 6</th>
<th>pH 7</th>
<th>pH 8</th>
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<tbody>
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<td>85</td>
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<tr>
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<td>70</td>
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</tr>
<tr>
<td>80</td>
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<td>0</td>
<td>30</td>
<td>33</td>
<td>28</td>
<td>7</td>
</tr>
</tbody>
</table>

a) What are the optimum conditions for Amylase Q?
________________________________________________________________________

b) What is the effect of an increase in temperature on enzyme activity?
________________________________________________________________________
________________________________________________________________________
Q11. Complete the following.

1. Fish meat $\rightarrow$ __________ $\rightarrow$ Amino acid
2. __________ $\rightarrow$ amylase $\rightarrow$ __________
3. Fat $\rightarrow$ __________ $\rightarrow$ fatty acid or __________
4. __________ $\rightarrow$ mouth __________ $\rightarrow$ saliva
5. Stomach $\rightarrow$ __________ $\rightarrow$ digestion.
6. __________ $\rightarrow$ absorption $\rightarrow$ villi

Q12a. Suggest why fat is considered as a useful constituent of our daily diet?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

b. Mineral salts are required by our body in very small amount yet they are essential. Explain.

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

b. What is the role of villi in the small intestines and how does its structure help it to perform its function.

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________