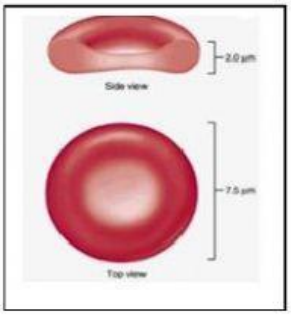
You R Bright

Good Luck on your exam!!

WORKSHEET - BIOLOGY - 2020

4th year Secondary School

1. Complete the cell's characteristics.



- Very _____ so that it can reach every _____ in the body.
- _____ shape to have a bigger _____ area.
- No _____ so there is more space for the haemoglobin.
- _____ to catch the oxygen during gas exchange.

2. Complete the chart.

Nutrient		Function
_____		• To have _____.
Protein		• To have _____.
_____		• To _____ energy. • To keep the body _____.
_____	C	• It helps to make _____.
	D	• It helps to absorb _____.
Inorganic ions	_____	• It helps to make _____ and _____ strong.
	_____	• It helps to make _____.
Water		• It's a good _____. • It's a means of _____. • It's used as a _____ in different metabolic reactions.

3. Match.

   a. Amino acids

   b. Fatty acids and glycerol

   c. Sugars

   d. Monosaccharides

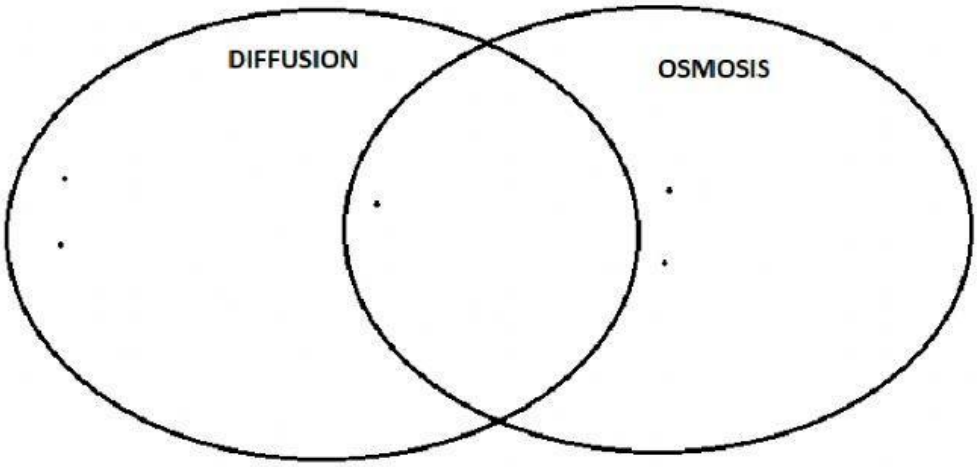
   e. Disaccharides

   f. Polysaccharides

   - The smallest version of fats.
   - They are sweet and soluble in water.
   - They are not sweet or soluble in water.
   - Complex sugars.
   - The smallest version of proteins.
   - Simple sugars.

4. Put the information in the correct place of the Venn's diagram to explain the differences and similarities between diffusion and osmosis.

   Molecules of gas - Membrane involved - No membrane - Molecules of water - Net movement of molecules



5. Say true or false.

   a. When the water potential in the solution outside the cell is lower than the water potential in the solution inside the cell the water molecules will tend to move out of the cell.

   b. We say that a cell gets plasmolysed when the cell wall is pulled away from the cell membrane.

   c. Enzymes are biological catalysts.

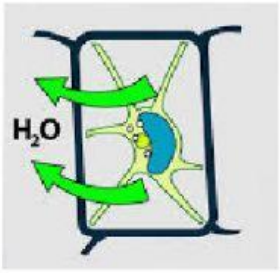
   d. Catalase is an enzyme in charge of catalyzing the hydrogen peroxide.

   e. We say enzyes work in a 'key and lock' model because the enzymes work as a key which has to fit perfectly in the substrate or lock.

   f. All enzymes have the same optimum temperature and optimum pH.

   g. We say an enzyme denatures when it loses its shape.

   h. Enzymes denature when the temperature is too low.



6. Label the drawing.

ACTIVE SITE - PRODUCT - ENZYME - SUBSTRATE