



DOON PUBLIC SCHOOL

(C.B.S.E. Affiliation No. 1030502)

Session 2021-22
Summer Assignment
Class IX
Subject - Biology (Science)



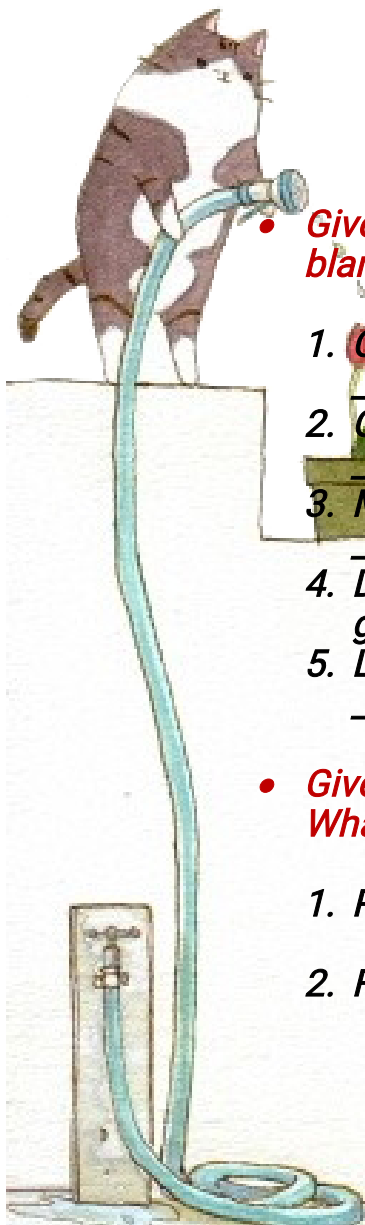
QUESTIONS

- *Given below are questions based on analogy. Fill in the blanks with appropriate answer.*

1. *Colourless plastids : Leucoplasts :: Green plastids : _____*
2. *Golgi apparatus : Dictyosomes :: Palade particles : _____*
3. *Mitochondria : Power House of the cell :: ATP : _____*
4. *Diploid human cell : 46 chromosomes :: Haploid human gamete cell : _____*
5. *Lysosomes : Cellular housekeepers :: Chloroplasts : _____*

- *Given below are some queries. Give briefly possible reasons. What will happen?*

1. *Raisins are kept in water.*
2. *Fresh grapes are kept in concentrated sugar solution.*



3. *Plant leaves are boiled and then a drop of concentrated sugar solution is added on the boiled leaves.*

• *A person takes concentrated solution of salt ,after sometime, he starts vomiting . What is the phenomenon responsible for such situation? Explain.*

• *Draw well labelled diagrams of Prokaryotic cells and Eukaryotic cells.*

• *Which of Plastids are more common in*

1. *Roots of the plant*
2. *Leaves of the plant*
3. *Flowers and Fruits*

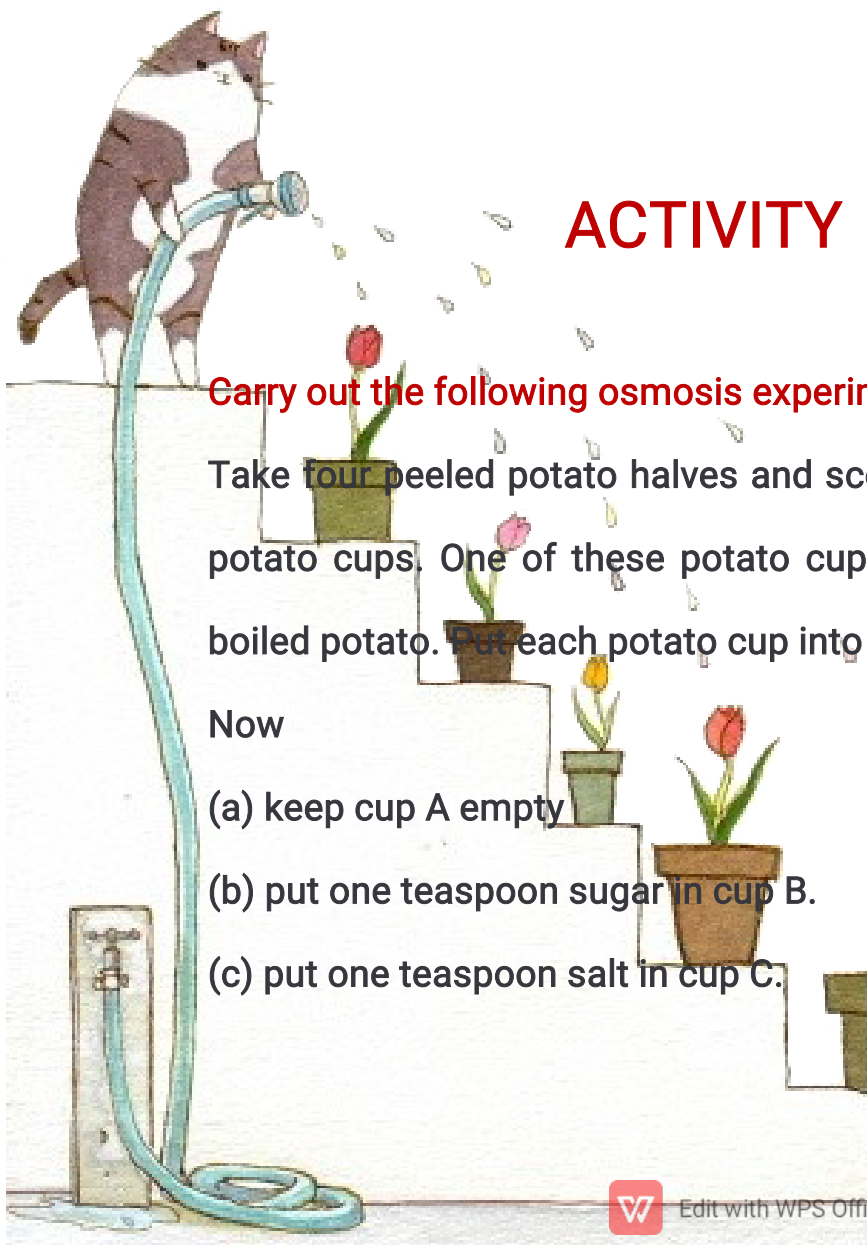
ACTIVITY

Carry out the following osmosis experiment:

Take four peeled potato halves and scoops each one out to make potato cups. One of these potato cups should be made from a boiled potato. Put each potato cup into a trough containing water.

Now

- (a) keep cup A empty
- (b) put one teaspoon sugar in cup B.
- (c) put one teaspoon salt in cup C.



(d) put one teaspoon sugar in the boiled potato cup D.

Keep these four 2 hours . Then observe them and answer the following:

(I) Explain why water gathers on the hollowed portion of B & C.

(II) Why is potato A necessary for this experiment?

(III) Explain why water does not gather in the hollowed out portions of A & D ?

PROJECT

- Prepare a PPT (power point presentation) on different cell organelles of an *Animal cell*
- Find out about "size and shapes of different cells" through internet . Prepare a report on it .
- Make lapbook of Plant cell , Animal cell and Fluid Mosaic Model of Plasma membrane.

