

ACTIVITY NO.-9: DO DESERT PLANTS EXCRETE WATER ?

Subject	Science
Class	VI
Chapter/Unit	The living organisms : Characteristics and Habitats
Topic	Desert plants
Time	40 mins
Nature of Activity	Individual

What will I learn ?(Learning Outcome) :

To verify that very less water is given out by the leaves in the form of water vapour through the stomata by the process of transpiration in desert plants as compared to any other leafy plant.

Skills :Applying,Analyzing

What I have to do ?

To show that very little water is given off during transpiration in desert plants.

What do I require ?

A potted cactus plant, a healthy leafy plant, two polythene bags

What do I need to know ?

Leaves are known as the food factories of the plant.

Teacher's Activity: Teacher will

- (1) explain the concept of transpiration.
- (2) take a healthy potted plant and a cactus plant and water it to show that desert plants excrete less water.
- (3) take a polythene bag ,label it with letter (A)and tie it around the leaf.
- (4) cover another polythene bag ,tie it around cactus plant and label it.
- (5) keep both the potted plants in sunlight for few hours.

How will I proceed ?

Student's Activity:Students will note down the observations.

What have I observed :

S.No.		Polythene bag (A) tied around leaf of a healthy leafy plant	Polythene bag (B) tied around the cactus plant
1.	Appearance of droplets on the polythene bags		

What have I learnt ?

Water is given out by the leaves in the form of water vapour through the stomata by the process of _____. The amount of water released by cactus plant is _____ whereas amount of water is released by a leafy plant is _____. Hence, desert plants loses _____ water.

What am I curious to learn?

Let us discover why desert plants do not release more water during transpiration.

Let me evaluate myself

Q1.Name some desert plants other than cactus.

Q2.What do you understand by transpiration?

Q3.Why are the roots of cactus plants deep seated ?

Q4.Why is the stem of cactus plant swollen ?

Q5.Can you think of some other plants which release less water (other than cactus)? Explain your answer.
