

# **ANDHRAKESARI COLLEGE OF EDUCATION**

(Approved by NCTE, Affiliated to ACHARYA NAGRJUNA UNIVERSITY , GUNTUR)

Cheruvukommu Palem Road , ONGOLE – 523 272 , PRAKASAM Dist ., (A.P)

## **B.Ed Course : SEMESTER – 3**



### **S 3 P – PEDAGOGY TEACHING PRACTICE CUM SCHOOL INTERSHIP RECORD**

#### **SUBJECT : BIOLOGICAL SCIENCE**

Name of the student Teacher -----

Roll No : ----- Reg.No : -----

PEDAGOGIES : 1) ----- 2) -----



LESSON PLAN -①

①

Name of the student teacher - Paromoshti Suneekha

Registered no - 91608886

Name of the school -

Class - VI

Subject - Science

Unit - 4

Unit name - What do animals eat

Medium

Date - English

Name of the supervisor - Isha Trivedi

Time duration - 40 minutes

Objectives	Specifications
<p>① <u>Cognitive domain:</u>–</p> <p>② <u>knowledge:</u>– Students will acquire the knowledge about matter &amp; what do animals eat it undergoes.</p> <p><u>Objective understanding:</u>– Pupil understands biological terms, facts, concepts about what do animal eat.</p> <p><u>Objective application:</u>– pupil applies the knowledge about what do Animal eat.</p>	<p>Recall!– Students will recall the various related to the what do animals eat it undergoes.</p> <p>Recognise!– Pupil recognize the biological terms concepts, facts about what do animal eat.</p> <p>Illustrates!– Pupil illustrates the what do animal eat.</p> <p>Explains!– Pupil explains the what do animal eat.</p> <p>Interprets!– Pupil interprets about what do animal eat.</p> <p>Analyze!– Pupil analyze the concept of what do animal eat.</p> <p>Predicts!– Pupil predicts the hypothesis that the what do animal eat is responsible</p>

Objective skill— pupil develops the skill of observation & drawing.

Objective Interest— pupil develops interest in the concept what do Animal eat.

Objective Attitude— pupil develops

Scientific attitude.

Objective appreciation—

pupil develops appreciation of classification of what do Animal eat.

Skill of Observation—  
pupil observes the concept of what do Animal eat.

Interest— pupil develops the Interest in the concept of what do Animal eat.

Attitude— the pupil develops

- curiosity to know the biological concept

- Honesty of expression  
- Appropriate Reasoning

Appreciation— pupil appreciates the knowledge about what do Animal eat.

for growth of plant

(3)

Suggests— pupil suggests the appropriate way for classifying the what do Animal eat.

(3)

Content Analysis / concepts / sub-concepts	activities indicating behaviour and coming to be done / Demonstration etc.	Aids / Experiments / How	Evaluation
By Teacher	By Pupils		(4)
<p>Motivation:- Students will get motivated to listen the lesson.</p>	<ul style="list-style-type: none"> <li>* How animals eat their food</li> <li>* What are the types of food that you Pet animals eat?</li> <li>* What are the types of food that your Pet animals eat?</li> </ul>	<ul style="list-style-type: none"> <li>* The dog is given milk &amp; first sniffs it and then licks it up quickly</li> <li>* Pet animals eat to milk, bread, biscuits etc.</li> </ul>	<p>How is tracking food</p>

### Announcement of the Topic:-

Today we will learn about what do animals eat?

### Presentation:-

We know that animals have their own ways of gathering and taking in food

\* From finding to eating it:-

- plants and animals are

- ① They track down collect, grab or hunt and then use various tools to finally take food.
- ② How is Tracking down food.

- ③ How is Tracking food.
- ④ To do this, they use a wide range of senses:- smell, sight, hearing,

The main sources of food in

our surroundings like us.

Animals also depend on these sources of food. They track down, collect, grab or hunt and then use various tools to finally take food.

Tracking down food:-

Most animals feed regularly but first they must locate food. They use outside range of senses - smell, sight, hearing, taste and touch. Some animals rely more on one sense than the other and it can therefore be highly developed in them.

Herbivores:- Animals that depend only on plants for food are called herbivores.

task and touch.

Animals

C eat to plants

C C t

C

C C N

C M D

C C O

C N S

C T A

C C N

C C O

C C N

C C O

C C N

C C O

C C N

C C O

What is  
Herbi-  
vores

③ What is the source of food in our surroundings.  
Main source of food in our surroundings.

④ How does the dog does to find its food. Which sense of the dog do you think, is more developed.

⑤ Nose to develop food. The dog to help find the food

What is  
herbivores

\* Which part of the body helps in eating one part for the using to eating.

Carnivores? — Animals that depend on other animals for food are called carnivores.

Orthivores? —

Animals that take food from plants and animals are called omnivores.

- ① What is Herbivore  
② Animals that depend only on plants for food is called herbivores.

- ③ Carnivores  
④

⑤	⑥	⑦	⑧
① What is Herbivore ② Animals that depend only on plants for food is called herbivores.	③ Carnivores ④	⑤	⑥
⑦	⑧	⑨	⑩
⑪	⑫	⑬	⑭
⑮	⑯	⑰	⑱

## Recapitulation:-

Fill in the Blanks:-

- ① Animal to eat only plants, that type of animals is called \_\_\_\_\_
- ② Some animals to eat both plants & animals is called \_\_\_\_\_
- ③ Which part to use eat the animals \_\_\_\_\_

Assignment:-

Answer the following questions:-

- ① Name some animals in your house which have the same kind of food habit.
- ② How does the cow eat grass?
- ③ Why do most carnivores live in forests? give reasons.

Lesson Plan @

Name of the student-teacher - Parsumathi sunelkha  
Registration No - YI6ED88036

Name of the school -  
Class - VI  
Subject - Science

Unit - 4  
Unit name - What do Animal eat  
Medium - English  
Date - 18/7/2016

Name of the supervisor -

### Objectives

Objective knowledge:— The pupil acquires the knowledge of Biological terms, concepts & facts about what do animal eat.

understanding:— pupils understand the biological terms concept facts about what do food items.

### Objective Application:

pupil applies the knowledge of what do animal eat in their real life situation.

### Specifications

Recall:— pupils recall the concept, facts and about what do animal eat.

Recognition:— pupil recognize the biological terms & fact about what do animal eat.

Illustrate:— pupils illustrate about what do animal eat

Identifies:— pupils identifies different food items to eat animals

Differentiates:— pupil differentiates the different eaten food items.

Interprets:— pupil interprets the food of animal and their eaten

Predicts:— pupil predicts the hypothesis that animal eaten food items.

Objective skill:— pupil develops the skill of observation

Objective Interest:— pupil develops interest in the study of plant animal eaten.

Objective Attitude:— pupil develops scientific attitude

Objective Appreciation:— pupil develops the appreciation of Animal eaten its importance in our body and in our daily activities.

Suggest:— pupils suggest possible way to identify function 10

Observation skill:— pupil observes the concept of what do Animal eat.

Instruct:— pupils develop interest to know about what do animals eat.

The pupil develops

The curiosity to know the biological concepts

- honesty of expression
- demonstrate searching

Pupil appreciate the knowledge of what do Animal eat

Content analysis concepts / sub concepts

Activities indicating behavioural learning outcomes

Model experiments to be done / Demonstration

Evaluation

Motivation:-  
Students will get motivated to listen the lesson.

- ① Animals prepared food can Yes or No.

- ② All birds have some food habits not have same.

- ③ fish use their food habits.

- ④ fish use their teeth to filter water for insects.

- ⑤ you may food chain

Presentation:-

- ① grass → grasshopper → chameleon

↓  
habak

- ② Grass → deer → lion

Mar

- ③ Water plants → small fish → big fish

Food chains:-

- ① What do you know about food chain

connection between

Animals and plants

on the basis of their

food habits

A P C T - O N M E T D

(ii)

(1) grass → grasshopper → frog → Snake  
 ↓  
 Peacock  
 ↓  
 Man.

Pondskaters:- A pond, observe the pond skaters there observe how quickly they move from one side of the pond to another to catch an insect that falls in water. Pond skaters are insects which feeds on other insects. They compose the staples on the opposite side of the pond, caused by the legs of the insect stirring to move out, calculate the distance and select to grab it.

(2) Make your own food chain

Grass → grasshopper → Peacock → Frog → Man.

(3) Explain how pond skaters move quickly from one side of the pond to another to catch an insect that falls in water.

(4) Explain how pond skaters catch the insects from one side of the pond to another to catch another insect that falls in water.

(5) Explain how pond skaters catch the insects in water.

(6) Explain food chain

Food chain

Prey → Predator

(7) Explain pond skaters

Pond skaters are insects which feeds on other insects.

(8) Explain pond skaters

Pond skaters are insects which feeds on other insects.

Nocturnal? — Some animals

Search for their food only

at night.

Cockroaches, desert

Lizards, moths, bats,

Moths, crickets etc. get their

food only at nights. During

day-time they hide in dark

places. These type of animals

are called nocturnal.

Birds sachinatory? —

All the birds will not have same food habits. ~~part~~ which have hooked beak, eats fruits and cracked nuts.

Sparrows eat grains and worms observing the food habits birds I can feed them separately.

Q. Which type of animal called as "Nocturnal"

A. Some examples of "Nocturnal" animals.

Q. Search for their food only at night explain

A. Nocturnal

Q. Define bird

A. Sachinatory

Q. 13

Define nocturnal

A. N

E

T

D

M

N

O

P

Q

R

Recapitulation:-

Fill in the blanks:-

- ① One example of nocturnal animal —————  
② Food chain form a ————— when animal depends on more than one source of food

Assignment:-

Answer the following Questions:-

- ① Make your own food chain and display it in your classroom.
- ② Which creatures are called as "nocturnal"? Explain why?
- ③ Write what do you know about food chain.

Lesson plan (3)

(15)

Name of the student - teacher - Paromita Sonelka

Registerd no - 1608806

Name of the school -

Class - VI

Unit

- 6

Unit name

- HABITAT

Medium

- English

Date

- 19/7/2016

Name of the supervisor -

Time Duration

- 40 minutes

Content Analysis	Concepts / Sub-Activities	Measuring Outcomes	Adult Experiments	Me Evaluation
Concepts	By teacher By pupils	to be demonstrated to be demonstrated etc.	16	16
Motivation?	<p>The student will get motivated to listen the lesson.</p> <p>Announcement of the topic:- Today we will learn about "habitat".</p> <p>Presentation:- We have seen that seen that different organisms live in different places but many of them live in the same place. Living organisms have different needs. They usually stay in the places</p> <p>① What is a habitat? Habitat is a dwelling place for plants and animals that gives them optimum conditions of life.</p>	<p>L e C T C R e C</p>	<p>—terrestrial M habitat</p> <p>D C M O n</p>	<p>Define Habitat</p>

where most of their needs

are met, shelter and other

conditions necessary for life.

Plants and animals that live in

different places on the land like

those living on trees in our houses

fields, forests etc. All habitats

on land are collectively known

as terrestrial habitats

Pond as a habitat:-

There are several organisms

in a pond. The different regions

of some organisms are present

in the pond. where communities

of some organisms are present

the different

This is due to some conditions

like availability of different

amount of food, air etc.

We find organisms like dragon

at different stages

\* Some exam

etc. are said to

belong to terres-

trial habitat.

Trees - Crows, Birds

Fields - Rats, goats

Houses + Dogs, cats

Aquatic - Fish, lotus

\* Exam places

Some habitat

\* can different

Places in the

Pond is called

\* what one

Places in the

Pond is called

\* different

\* The stages present

in the pond

\* pond surface

\* above the pond surface

\* mid-water

Pond habitat

\* bottom of the pond

Different

Stages in

Pond.

D

O

N

M

C

T

S

17

Recapitulation? — fill in the blanks

- ① habitat shows the \_\_\_\_\_ of nature
- ② our intestine is a place for \_\_\_\_\_
- ③ some examples form a habitat \_\_\_\_\_

Assignment? — Answer the following questions

- ① What is habitat
- ② Why pond become habitat for many living organisms as example give your explanation taking different organisms as example

Lesson plan-(I)

Name of the student teacher - Parumashri Smrekha

Registered No - 716ED88036

Name of the school -

Class - VI

Subject

- Biology

Unit

- 6

Unit name

- HABITAT

Medium

- English

Date

- 2014/2015

Name of the Supervisor -

Time Duration -

- 40 minutes

Content analysis / concepts / sub concepts	Activities indicating behaviour all learning out comes	Aids / experimental aids to be done / Demonstration	Evaluation
<u>Motivation?</u> The student will get motivated to listen the lesson.	By Teacher <ul style="list-style-type: none"> <li>* What are the common food items usually eaten by you?</li> </ul>	<ul style="list-style-type: none"> <li>* Take different materials in our daily life. e.g.: Rice, Vegetables, fruits, dried from preservation and later use.</li> <li>* What is dry fruits? Dry fruits</li> </ul>	What is dry fruits Dry fruits Lecture for demon stration method. ex: Kismis, almonds & food items are prepared using Rice.
<u>Announcement of the Topic?</u> People living in one region usually share common food habits you might have seen paddy fields near your village. In our state geographical and climatic conditions are more suitable for growing rice so we produce more			

rice. Even though farmers grow various types of food crops we generally use paddy & variety of food items are prepared using rice.

Plants are producers of food on earth. Man and other animals depend directly or indirectly on plants for their food for example, a "Deer" depends on grass as food. In the food chain it is eaten by lion. Hence even man. As man is omnivore, he depends on plants and animals also for his food needs.

Common food items:-

Rice, Idly, Vegetables, Milk, Bread, Fruits, eggs, Meat, Biryani, Roti, Ice cream etc.

\* What type of food depends on the man.

\* Man and other animals depend directly or indirectly on plants

What is food chain

\* A Deer depends on grass as food in the food chain.

A Deer depends on grass as food teaching in the food chain Method.

\* It is eaten by lion it goes even man.

What is omnivore?

\* A man is omnivore he

depends on plants and animals also for his food needs.

(2) What is food chain

D. What is

"Omnivores"

C.

B.

A.

T.

M.

N.

O.

P.

E.

(22) (9.32)

## E X P L A N A T I O N

\* What are the common food items types of food usually eaten by you?

Vegetable salad: Let us take Carrot, beet root, tomatoes, lemon, pudina leaves, keema, coriander leaves. Chop all the vegetables into slices. Mix all the slices in a vessel and add salt to it. Take a lemon and squeeze the juice into the salad garnish the salad with pudina leaves and coriander leaves & healthy and delicious vegetable salad is ready to eat.

How is Prepared vegetable salad?

\* Let us take carrots, beet root, tomatoes, lemon, pudina leaves, keema, coriander, slices mix. Take a lemon and squeeze the juice into the salad prepared.

How to prepare vegetable salad.

Recapitulation:-

Fill in the blanks:-

- ① Eating food is as to all of us.

- ② Storage of food items for future use by certain procedures is called

Answer the following questions:-

- ① How to prepared vegetable salad?

- ② What is omnivores?

Lesson plan 5

(24)

Name of the student teacher - Passonkha Somelka

Registered No - YI6ED88036

Name of the school

Class

Subject

Unit

Unit name

Medium

Topic

Date

Name of the supervisor

Time duration

- VI

- Biology

- 9

- plants - parts and functions

- English

- parts of plants

- 8/17/2016

-

40 minutes

Content Analysis / concepts / sub concepts	Activities indicating behavioural learning outcomes	By Teacher	By Pupils	Teacher demonstration	Evaluation
Motivation?	The student will get motivated to listen the lesson.	* Have all plants similar?	* NO	* Yes	2.5
Arrangement of the topic? -	Today we will learn about- Parts of plants:- Parts of plant? - Plants also have different parts. See there are variations in the size and shape of plants but generally all plants, have roots, stems and leaves.	* * An notch in a tree will remain the same distance from the ground as the tree grows Yes or no	* * All plants are similar yes or no.	We discuss about plant parts. All plant parts are one.	Explaining parts of plant
Today we will learn about- Parts of plants:- Parts of plant? - Plants also have different parts. See there are variations in the size and shape of plants but generally all plants, have roots, stems and leaves.	* * All plants are similar yes or no.	* * Different sizes and shapes in shapes of leaves.			

### Tuberous roots:-

Some plants store food in roots and stems. Some plants like radish, cannot bear root stored materials in their roots. These roots bulge out and called tuberous roots. Can you give some more examples. Carrot, sweet potato are eaten even when raw.

\* What is tuberous root

\* Some plants store food in roots and stems. Some plants like radish, cannot bear root stored materials in their roots. These roots bulge out and called tuberous roots. Can you

give some more examples. Carrot, sweet potato are eaten even when raw.

\* give one example for root, for tuberous root, beet root, sweet potato

Tuberous roots  
radish, carrot  
store food materials in their roots.

the tuberous roots

explain

L E C T O R E G U C M D E M O N S T R

(2)

## Different types of roots:-

In some plants, the main root becomes thick and has thin rootlets.

This main root is known as tap root. In some

plants we find small hair like roots arising from

the base of the stem. This

type of root system is known as fibrous root. All roots are similar and there is no main root.

\* What is Main

root

\* The Main root is also known as "tap root".

\* The Main

root is

also called as

\* The Main root

is

also known

as

"tap root".



A

Explain

(27)

T

Different types of

roots

C

Explain

Main

O

Root

N

Rootlet

H

Main root

M

Rootlets

O

Root

P

Root

R

Root

S

Root

T

Root

U

Root

V

Root

W

Root

X

Root

Y

Root

Z

Root

Recapitulation:

Fill in the blanks: -

- ① tall plant parts are similar \_\_\_\_\_
- ② one example from tuberous root \_\_\_\_\_

Answer the following questions:

- ① What is rootlets and lateral roots
- ② What is tuberous root
- ③ Write about the two different types of roots.

Lesson plan

(29)

Name of the student teacher - Paromita Sarker

Name of the supervisor -

Registrard No - YMED88036

Name of the School -

Subject

- Biology

Class

- VI

Unit

- Plant Tissue

Topic

- Parts of the plants & their function

Time Duration

- 40 minutes

Date

- 22/7/2016

II Aim: To develop scientific interest & scientific attitude in students

(38)

(39)

III Teaching - Learning components:-

Subject: - parts of the plants & their functions.

① Parts of the plant: - plant is the food source for the world. plant has 8 parts  
Root system & shoot system. shoot system consist of stem, branches, leaves,  
flowers & fruit.

② function of plant part: - each plant part has own function

- i) Root - Absorption of water & minerals
- ii) stem - Transduction of water & food
- iii) leaves - photosynthesis, transpiration
- iv) flower - Reproduction
- v) fruits - Seeds dispersal.

III Teaching Method:— Lecture and Demonstration

IV Teaching Aids:— chart showing parts of a plant

V Reference Books:— 6<sup>th</sup> class English medium Text book in Andhra Pradesh Board.

OBJECTIVES	SPECIFICATIONS
① Objective knowledge:— The pupil acquire the knowledge of biological terms, concepts & facts about parts & their function.	② Recall: pupils recall the concept, facts and about plant parts & their function.
Biological terms:— Root, shoot, photosynthesis	③ Recognition:— pupil recognize the biological terms & facts about plant parts & their function.
Concepts:— plant has different parts & different functions	④ Illustrate:— pupils illustrate about plant parts & function.
fact:— each part of plant has its own function	i) Interpret:— pupil interprets the parts of plant parts & their function.
⑤ Understanding:— pupils understand the biological terms concept — facts about parts	ii) Explain:— pupil explain the concept of plant parts & their function.

Their function.

④ objective application—pupils apply the knowledge of tissues in their real life situation.

⑤ objective skill—pupil develop skill of observation.

⑤ objective appreciation

pupil develops the appreciation of tissue & its importance in our body and in our daily activities.

① Analyze—pupil Analyze the concept of plant parts & their function.

② Predicts—pupil predicts the hypothesis that plants have different plant parts.  
③ Suggests—pupils suggest possible way to identify function.

④ Observation skills—pupil observes the concept of plant parts & its function.

⑤ Interest—pupils develop interest to know about plant parts & its function.

The pupil develops pupil appreciate the knowledge of plant parts & its function.

## Content Analysis

Content Analysis		Activities Indicating behavioural lesson coming out	Help/Experiment Me to done / Done or not	Evaluation
<u>Previous knowledge:</u> —	By Teacher	<ul style="list-style-type: none"> <li>* Why we eat food?</li> <li>* From where do we get food?</li> <li>* What else we get from plants?</li> <li>* Where do we live?</li> <li>* House</li> </ul>	<ul style="list-style-type: none"> <li>* To get energy</li> <li>* From plants</li> <li>* Food, wood clothes</li> </ul>	(33)
<u>Announcement of the Topic:</u> — Today we will learn about parts of plants & their functions.	By pupils	<ul style="list-style-type: none"> <li>* What is this? * Plant</li> <li>* Shoot &amp; shoot</li> <li>* Explains plant parts</li> <li>* Root, shoot</li> <li>* Stem, branches, stem, leaves, flowers</li> </ul>	<ul style="list-style-type: none"> <li>X P C T I N M E</li> </ul>	
Presentation plants has two different parts Root, shoot		<ul style="list-style-type: none"> <li>* Pupil now draw the diagram of plant in your notebook</li> </ul>		

stem consists of flower leaves, branches & different parts of plant system.

Root— Root is the part which absorbs water & minerals from soil & transmits it upwards

Now identify pupil do so

leaves, branches & different parts of plant

\* what is this point

\* Why plant need root?

stem— stem is from supplying food after from shoot to shoot & from shoot to root

\* what is the point

\* Why plant's need these point?

Leaves:-  
Leaves is for photosynthesis & transpiration.

\* What are the functions of leaf to roots of plant

Leaves  
Transpiration  
Exchange of gases  
Photosynthesis  
Synthesis.

Stem is for  
stability  
conduction  
from soil & trans  
duce them to upper  
parts of plant &  
& stem.  
\* Why plant need  
water & minerals  
from soil & trans  
duce them to upper  
parts of plant &  
of water & food from  
leaves to root.

Leaves  
Transpiration  
Exchange of gases  
Photosynthesis  
Synthesis.

Culminating activity:—

Generalization:— Plant has different parts & each part has its own function.

oral Recapitulation:

- ① What is a plant?
- ② What are functions of stem, leaves, flowers?
- ③ Which part is responsible for flowers?

written Recapitulation

Match the following:

- |          |    |                         |
|----------|----|-------------------------|
| ① Root   | —> | ④ Respiration           |
| ② leaves | —> | ⑤ Absorption of water   |
| ③ flower | —> | ⑥ Supplying food, water |
| ④ stem   | —> | ⑦ Reproduction          |

Assignment:

Draw a neat labelled diagram of plant.

Lesson plan-⑦

Beliminothy Information

Name of the student Teacher - Pasumorthi Suseela

Name of the school

Name of the supervisor

Registration No

Class

Subject

Unit

Topic

Date

Time duration

- VII
- Biology
- plants - parts and functions
- growth of root
- 23/7/2016
- 40 minutes

(38)

(36)

General Aims:— To develop specific interest and scientific attitude in students.

Teaching Learning Components:-

Subject— Cells in root tip & growing roots.

(34)

Activity—I Cells in root tip

Put the onion root tip & balls in a transparent bottle filled with water for a few days till the roots grow nearly to 1 inch

Take the onion root tip & place it on the slide  
Spread the material by tapping the cover slip with needle or brush.

Activity-II : Growing Roots

Marker cut end of the roots with amonkes and put it in the same set up as used

in the previous activity.

Leave the setup aside for atleast 4-5 days & observe the growth of roots.

### Objectives

① Objective knowledge:— pupil acquires the knowledge of biological terms, facts about the cells, cell terms about cells present in root tip & growing roots.

Biological terms: Microscope, onion root tip, slide fact :

The growth is inhibited when tip is removed.

concept

The arrangement of cells in root tip is different from that of leaf.

Objective understanding:— pupil understand the biological terms concept, fact about cells in root tip & growing root.

Objective appreciation:— pupil develops appreciation of observation of cells under microscope.

### specifications

(38)

Recall & pupil recalls the concept of facts, biology of root tip & growing roots.

recognition:— pupil recognize the biological terms, concepts fact about the root tips & growing roots

Illustrate:— pupil illustrates about onion root tips, cells arrangement

Demonstrate:— pupil demonstrate the activity of cells in root tip

Explains:— pupil analyze the concept of growth in roots.

Content Analysis

Activities Indicating Behavioural lesson, How expressive, the communication, innovation,

By Teacher

By Pupils

OD

(39)

Previous knowledge:-

- \* Good Morning students
- \* Can you name the part of the plant responsible for absorption of water & minerals
- \* Are the cells similar to leaf very good, Did you see the tissue in root?
- \* Yes Teacher.

Today, we will see the tissues present in a root e.g roots of root.

Question: - Roots are the plant parts for absorption of water

- \* What is this?
- \* What are these
- \* Now observe some roots

Onion bulb

Activity cells in Root tip: —

Put onion bulb in a transparent bottle filled with water for a few days till they grow to one inch. Leave for few days.

Take a onion root tip place it on a slide spread it by pressing the material by pressing its cover slip.

Now observe the arrangement & draw the diagram.

Put onion bulb in a transparent bottle filled with water for a few days till they grow to one inch. Leave for few days.

Pupil do so

\* Take an onion root tip place it on a slide spread it by pressing it then put a drop of water and a drop of water on it.

Cover slip

Pupil do so

L	e	c	T	O	R	C	M	N	S	T	R
Bottle, onion root tip, blade slide water glycerine coverslip filter Paper Needle Brush, Micro scope Activity cells in root tip.											



\* Top the coverslip gently with blunt end needle or brush to spread the material.

\* Observe the structure.

The root tip has different types of tissues.

and arrangement of  
the cells

Activity 2: Now mark the

cut end of the roots with

Marker leave it for 4-5  
days. Roots should be

submerged Roots grow

Now students tell  
me what you had  
observed.

Now mark the cut end

of onion root.

Place it in the same

Set up as previous

leaves.

\*leave for 4-5 days

\*observe the growth

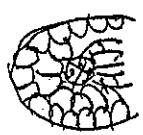
\*Did all the roots grow  
in a similar manner

\*What happened to  
the cut end growth

is not the cut end.

Root tip has  
different types of  
tissues

Root tip arrangement  
is not similar  
to that of leaf.



Root tip  
different  
types of  
tissue

Arrangement  
is different

Arrangement  
is different

Pupil do so

Pupil do so

No, Teacher

It didn't grow

Why cut  
end does  
not grow?

What is the  
arrangement  
in root tip?

Q. Why cut  
end does  
not grow?

A. T - O - N - M - E - T

Q. Why cut  
end does  
not grow?

A. T - O - N - M - E - T

Recapitulation:- Fill in the Blanks.

- (42)
- ① Tap the \_\_\_\_\_ with needle on brush
  - ② Mark the \_\_\_\_\_ of root with墨 pen
  - ③ The growth of the root is \_\_\_\_\_

Assignment:-

- (43)
- ① Explain why the cut end of root did not grow
  - ② What happened to roots which had been cut off

## Lesson plan -

### Preliminary Information:-

Name of the student teacher -

Ramya Sankar

Name of the supervisor -

Name of the school

Class - VI

Subject

Unit

Topic

Date

Time duration

Medium

Biology

- Plant tissue

- Types of Plant tissue

- 25-26/04/2016

- 40 minutes

- English

General Aim:— To develop scientific interest & scientific attitude in students.

Teaching - Learning components:-

Types of plant tissues:— When we cut the tip, branches will grow from the side. If we water the stump it will soon bear leaves. There are 4 types of tissue in the plants. They are.

- ① Meristematic tissue:— Tissue that bring about overall growth & repair is called Meristematic tissue.
- ② Dermal tissue:— Tissue that form outer covering is called dermal tissue.
- ③ Ground tissue:— Tissue that form bulk of the plant body, helping in holding other tissue is called as ground tissue.
- ④ Vascular tissue:— Tissue that help in transport of materials is called as Vascular tissue.

### Objectives

① Objective knowledge:— pupil acquires the

knowledge of biological terms facts about the type of plant tissue.

Biological terms:— Meristematic, Dermal ground

Vascular tissue facts:— plant consists of different types of tissue.

Objective Attitude:— pupil develops scientific attitude.

Objective appreciation:—

pupil develops appreciation of classification of plant tissues.

### Specifications

Recall:— pupil recall the "concept , fact , biological

terms about types of plant tissues.

(H5)

Recognition:— pupil recognize the biological terms, concept , fact about plant tissue & types.

Explain:— pupil explain the concept of plant

issue.

Attitude:— The pupil develops

curiosity to know the biological concept

honesty of expression

critical thinking

Appropriate reasoning

Appreciation:—

pupil appreciates the knowledge about the types of plant tissue.

Content Analysis Concept / Sub Concept Analysing	Activities Indicating behaviour of plant tissue experiment ring out comes	By Teacher nstration	By Pupils 46	Me to be done / Demo / T4 CD	Evolution
<u>Previous knowledge:-</u> Content Analysis Concept / Sub Concept Analysing	* What is this? * If its tip has been cut off how it will grow?	* Branches will grow. * Branches will grow if you cut the root tip, what happens to root?	* Growth is inhibited. * If you cut the root tip, what happens to root?	types of plant tissue	how many types of tissues are present?

### Announcement of the topic

Today we will learn

about a new lesson

Type of plant tissue.

Type of tissue

there in plant?

What are they?

① Vascular tissue.

② Non vascular tissue.

\* What is a tissue?

\* Tissue is a group of cells having similar function.

\* Types of tissue

① Meristematic tissue

② Dermal tissue

③ Ground tissue

④ Vascular tissue.

Types of Meristematic tissue

Dermal ground tissue

Vascular tissue

① Mesistematic tissue:-

Bring overall growth & repair in plants.

Present at tip side in

between layers.

② Dermal tissue: outer

Covering of plant

③ ground tissue: helps in packing other tissues

Vascular tissue: help in trans port of materials.

What is a mesiste

What is a mesiste  
overall growth &  
matic tissue?

What is meant by  
Dermal tissue?  
ground tissue  
forms bulk of the

Very good.

\* Where does it  
present?

\* What is meant by  
Dermal tissue?

\* Tissue that form

outer covering is

called Dermal tissue

plant body

what are the func

on of vascular

tissue.

which tissue is

outer covering

which tissue helps

in trans port of material

Menistematic  
tissue present

What is  
Menistematic  
tissue present

E  
X  
P  
L  
A  
N  
M  
E  
T  
D  
H  
What is  
Dermal tissue.

Menistematic  
tissue present

What is  
Menistematic  
tissue present

E  
X  
P  
L  
A  
N  
M  
E  
T  
D  
H  
What is  
Dermal tissue.

Menistematic  
tissue present

What is  
Menistematic  
tissue present

### Recapitulation :-

- ① How many types of plant tissue are there?
- ② Why vascular tissue is needed in plants?
- ③ Why ground tissue are present in bulk?  
fill in the blanks. Re-capitulation
  - ① The \_\_\_\_\_ tissue responsible for growth
  - ② The \_\_\_\_\_ present in outer covering is called \_\_\_\_\_
  - ③ The \_\_\_\_\_ tissue present in bulk.

Preliminary Information:-

Lesson plan :-

Name of the student teacher -

Paramarthi Somakha

(49)

Name of the supervisor -

Name of the school -

Registered No

- Y16ED88036

Class

- VI

Subject

- Biology

Topic

- Meristematic tissue

Unit

- Plant tissue

Medium

- English

Date

- 26/7/2016

Time duration

- 40 minutes

General Aim:—To develop scientific interest & attitude in students.

Teaching - leaving component:

- ① Mesostematic tissue:—Tissues that bring about overall growth and repair in plant body one called Mesostematic tissue. They are present on the tips side & in between layers of other tissues.
- ② Types of Mesostematic tissues:—
  - ③ Apical mesostem:—Mesostematic tissues at the growing tip that bring about growth in length is called Apical Mesostematic tissue.
  - ④ Lateral mesostem:—Tissues present around the edges in a lateral manner and giving rise to growth in the parts of the stem.
  - ⑤ Intercalary mesostem:—Areas from which branching takes place on a flower stalk grows the tissue present there is called Intercalary Mesostematic tissue.

### Objectives

#### Specifications:

Objective knowledge— pupil acquire the know ledge of biological terms, facts about the types of mesistematic tissue.

Biological terms— Apical, lateral, Interfoliar Meristematic tissue.

facts— Tissue that bring about overall growth in plants. Mesistematic tissue in types

Objective Attitude— pupil develops Scientific attitude.

Recall:— pupil recall the concept, facts, biological terms about Meristematic tissue.

Recognition:— pupil recognize the biological terms, concepts, facts about M. tissue.

Illustrates:— pupil illustrates the mesistematic tissue.

Explains:— pupil explain the concept of Mesistematic tissue. Interprets:— pupil interprets about Meristem multic tissue.

Classifies:— pupil classifies the Mesistematic tissue into 3 types.

Attitude— The pupil develops

- Curiosity to know the biological concept
- Honesty of expression.
- Appropriate Reasoning.

Appreciation— pupil appreciates the knowledge about Mesistematic tissue.

Objective Appreciation pupil develops appreciation of classification of meristem tissue.

Content-Analytical concept	Action/Her Indicating Behavioural Learning Outcomes	Aid/Experiment to be conducted	ME OD	TH EVALUATION
Sub Concept Analysis	By Teaching	By pupils		
Motivation:- Students will get can you name the tissue responsible for plant growth.	→ Motistematic-tissue.	Motistematic tissue.	L E C TURE	What is motistematic tissue.
Announcement of the topic → students where does plants grow? How does a plant length & breadth grow.	→ At tip, at sides plant grows in layers of other tissues.	Motistematic tissue being over all growth is present on tips, sides & in between layers of other tissues.	N M D E	When does it present
Presentation:- M. tissue:- The tissue that bring overall growth & repair in plants what is a Motistematic tissue?	good,	→ Tissues that bring overall growth & repair called Motistematic tissue.	O R S T	

3 types @ apical @ lateral

⑥ In tercalary.

⑦ Apical:- Responsible for growth in length present at tip shoot tip.

⑧ Lateral:-

Present around the edge in a lateral manner responsible for growth in girth of stem.

⑨ Intercalary:-

Areas of branching stem, flowers & leaf.

Where does it present.

→ Meristematic tissue is of

→ Apical, lateral, Intercalary meristematic tissue.

→ what is a apical meristem?

→ on the tip, sides in between layers of other tissue. → Apical, lateral, Intercalary meristematic tissue at the all the tip that bring about growth is called apical tissue.

→ lateral growth in girth of plant growth around the edges in length.

→ Intercalary is present in the areas of branching, on leaf on flower grow.

3 types

① Apical M. tissue

② Lateral M. tissue

③ Intercalary M. tissue

What is apical M. tissue.

What is lateral M. tissue.

What is intercalary M. tissue.

How many types are there.

(53)

Ques

Ans

Ans

Ans

What is

In tercalary

Branching,

⑩ In tercalary one present in areas of branching on leaf flowers grow top.

### Recapitulation - fill in the blanks

- ① \_\_\_\_\_ mesistem responsible for growth in galls of plant
- ② Lateral mesistem is present at \_\_\_\_\_
- ③ The growth of plant in length is due to the presence of \_\_\_\_\_

oral re-captulation:

Answer the following questions:-

- ① What is a meristematic tissue
- ② How many types of meristematic tissue are there? what are they?
- ③ Where does meristematic tissue?

Assignment:-

Write about different types of meristematic tissue in brief.

Lesson plan @

Preliminary Information-

Name of the student teacher - Paromita Sarker

Name of the supervisor -

Registration no - 1161088036

Name of the school -

Class - VI

Subject Unit - Biology

Topic - Plant

- Direct stem & root tissue

Time Duration - 40 minutes

Medium - English

Date - 29/7/2016

General Aim: To develop scientific interest & attitude in students

Teaching - learning compounds:—

Dicot stem tissue & Root tip tissue:—

When we take T.S. of dicot stem, root tip, they consist of following tissue.

- ① Mesophloematic tissue:— Tissues that bring about overall growth and repair is called tissue.
  - ② Dermal tissue:— Tissues that form the bulk of the plant body, helping in protection.
- Other tissue.
- ③ ground tissue:— Tissues that form outer covering is called Dermal tissue.
  - ④ Vascular tissue:— Tissue that help in transport of materials, is called as vascular tissue.

Both root & stem have these tissues. They may differ in arrangement.

### Objectives

Objective knowledge:— pupil acquires the knowledge of biological terms, facts, concept facts about tissue dicot stem & root.

Biological terms:— M.tissue, dermal tissue, ground tissue, Vascular.

fact:— The tissues present in dicot stem & root are similar.

Concept:— Dicot stem & root has four types of tissues.

Objective Appreciation:— pupil develops appreciation of classification of tissues in dicot stem & dicot root.

### Specifications

Recall:— pupil recalls the biological terms, concepts, facts about tissues present in stem & root. (5)

Recognize:— pupil recognizes the biological terms, concepts, facts, about tissue present in dicot stem & root.

Illustrates:— pupil illustrates the tissues in stem & root.

\* Explains:— pupil explains the conc. of tissues in stem & root.

\* Compares:— pupil compares the tissue present in stem & root.

Appreciation:— pupil appreciate the transverse section of stem & root.

Content-Analytical Concept/ sub concept	Activities & Indicating Behavioural Learning outcomes	Add Experiment/me to become demon stration method	EVALUATION
<p>Motivation:- students will get motivated to listen the lesson.</p> <p>Announcement of the topic:- Presentation:- tissue is a group of cells to absence the tissues in stem &amp; root we have take T&amp; when are observe the T&amp; of stem &amp; root, we that some type of tissue are present in root &amp; stem. But the</p>	<p>By Teacher</p> <p>→ How many types of plants are there passed on no of City lessons.</p> <p>→ How many types of tissues are there in plant body?</p> <p>→ Does the dicot stem &amp; root have similar types of tissue?</p> <p>→ What is a tissue</p> <p>→ How many types of tissue are you observe in stem &amp; root</p>	<p>By pupils</p> <p>→ 2 types. Monocots, dicots.</p> <p>→ 4 types</p> <p>→ 4 types</p> <p>→ Yes.</p> <p>→ Tissue in a group of cells having similar function by taking of stem, root</p> <p>→ 4 types.</p>	<p>Q U e S T I O N</p> <p>Tissue in dicot stem &amp; root</p> <p>A</p>
<p>Announcement of the topic:- Presentation:- tissue is a group of cells to absence the tissues in stem &amp; root we have take T&amp; when are observe the T&amp; of stem &amp; root, we that some type of tissue are present in root &amp; stem. But the</p>	<p>How many types of tissue do you observe in stem &amp; root</p>	<p>→ 4 types.</p>	<p>How you Anse. T.S.P.</p> <p>→ 4 types</p>

Arrangement differs.

Tissue present:-

① Meristematic over all

growth

② Dermal covering.

③ Ground

④ Vascular conduction

of materials

→ What about root?  
→ What are the tissues  
present in both.

⑤ Dermal

⑥ Ground

⑦ Vascular tissue

Dermal tissue forming

ground covering in

bulk plant?

What is its function

which tissue form

bulk plant?

so the tissues are

similar in both

Meristematic

Mesophyll

Ground

Vascular

Dermal

Ground

Vascular

Dermal

Ground

Vascular

Dermal

Meristematic

Mesophyll

Ground

Vascular

Dermal

Ground

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(60)

Recapitulation:- Fill in the Blanks:-

- ① Every plant is made up of \_\_\_\_\_ tissues
- ② Dicot stem & root tip have \_\_\_\_\_ types of tissues
- ③ Ground tissue is present in \_\_\_\_\_

oral Recapitulation:- Answer the following questions:-

- ① How many types of tissue are present in Dicot stem?
- ② Is there any difference between stem & root?
- ③ What is meristematic tissue?

Assignment:-

Compare the tissues of dicot stem & dicot stem root tip.

Lesson plan

Preliminary Information:-

- Name of the student teacher - pasumasthi sunelka  
Name of the supervisor -  
Name of the school -  
Registration No - Y16ED88036  
Class - VI  
Subject -  
Unit -  
Topic -  
Date -  
Medium -  
Actual Time of Duration - 40 minutes

(6)

<p><u>Content Analysis / concept</u></p> <p>Sub concept</p> <p>Motivation:- students will get motivated to listen the lesson.</p>	<p>Activity &amp; Indicating Behavioural outcomes</p> <p>By Teacher</p>	<p>Aids / experiments to be conducted</p> <p>Microdissection Method</p>	<p>ME</p> <p>TH</p> <p>OD</p>	<p>EVALUATION</p> <p>Q1 Q2</p>
<p>Announcement of the topic:-</p> <p>Today we will learn about a tissue that forms outer covering of plant body.</p> <p>Dermal tissue:-</p> <p>It forms outer covering single layer thick walled cells have 3 types.</p>	<p>What is a derma - it is a tissue which forms outer covering in plant body.</p> <p>→ How will be the cells of dermal cells → Thick called</p>	<p>What is a derma - it is a tissue which forms outer covering of plant body.</p> <p>→ Thick called</p>	<p>What is a derma - it is a tissue which forms outer covering of plant body.</p> <p>→ Thick called</p>	<p>What is a derma - it is a tissue which forms outer covering of plant body.</p> <p>→ Thick called</p>
<p>Question:-</p> <p>How many sense organ → 5</p> <p>→ skin acts as outer covering very good.</p> <p>→ How many tissues → 4 types</p> <p>does plants have</p> <p>→ Dermal tissue</p> <p>→ Epidermis outer thick coat.</p> <p>→ 3 layers.</p>	<p>E X P L A N A T I O N</p> <p>L A F N A</p> <p>N</p>	<p>E X P L A N A T I O N</p> <p>L A F N A</p> <p>N</p>	<p>E X P L A N A T I O N</p> <p>L A F N A</p> <p>N</p>	<p>E X P L A N A T I O N</p> <p>L A F N A</p> <p>N</p>

- ④ epidermis ⑤ mesodermis  
⑥ Endodermis.

The other dermal tissue are → How many layers → single layer.

stomata: gaseous exchange does it have?

guard cells: helps in opening of stomata

Root hair: absorption of water.

Book: The epidermal cells secrete gelatinous gum like substance in some plants.

→ How we can observe Rheo leaf experiment

Rheo leaf experiment

→ What are the types of dermal tissue.

③

T

of dermal

tissue.

C

epidermis

Mesodermis

Endodermis

D

other dermal

tissue

E

stomata

guard cells

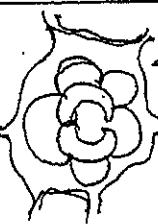
F

gum

secreted

G

book



③ Root hair



④ GUM



⑤ Book

what gene is secreted in some plant.

Ques. - What are the following terms :-  
① What is a dermal tissue?

- ② What are the types of dermal tissues?

- ③ What are the functions of dermal tissues?

Ectoderm - All in the body

① Dermal tissue are of \_\_\_\_\_ types

② Dermal tissue forms \_\_\_\_\_ of plant body

③ Stomata is specialised for \_\_\_\_\_

Assignment:-

Dermal tissue are responsible for protection & supporting

## Lesson Plan (B)

### Preliminary Information:-

Name of the student teacher - Pasomathi Sunelkar  
 Name of the supervisor -  
 Name of the school -  
 Class - VI  
 Subject - Biology  
 Unit - Plant tissue  
 Topic - Ground tissue  
 Medium - English  
 Date - 29/7/2016  
 Time Duration - 40 minutes  
 Registered No - YK6ED88838

Content Analysis Concept	Activities Indicating Behavioural Learning Outcomes	Method of Experiments	Evaluation Method
SubConcepts	By Teacher:	By pupils	(6)
Motivation:- students will get → Good Morning students → good Morning Motivated to Listen the lesson → why our body is stable → due to bones	* how many types of tissue of one present? in a plant.	Ground tissue.	Q
	which tissue gives & supports in	Packing supporting	U
	* ground tissue.	3 types of	C
	Packing outer tissue.	What are the types of	T
		parenchyma	N
		collenchyma	A
		sclerenchyma	C
<u>Announcement of the topic:-</u>		functions	
	Today we will learn about a type of supporting tissue in which tissue forms layer of ground tissue.	Packing of often tissues of ground has the bulk of plant tissue.	
<u>Presentation</u>	ground tissue & one these.	3 types of	
	is present in bulk amount in plant.	parenchyma	
	They give support to plant.	collenchyma	
		sclerenchyma	

types of ground tissue is of

3 types of parenchyma thin walled loosely packed.

chlorophyll - chlorenchyma in cavities storage tissues

collenchyma thick walled cells are longer

collenchyma thick walled compactly arranged no gaps in between cells.

parenchyma cells having thin walled & loosey packed

parenchyma cells having thin walled & loosey packed

parenchyma cells responsible for storage

parenchymal cells do have any air spaces

storage food person providing physical support thin walled

loosely packed

(a) collenchyma

(b) Aerenchyma

(c) Chlorophyll

(d) Storage

(e) time

(f) time

(g) time

(h) time

(i) time

(j) time

(k) time

(l) time

(m) time

(n) time

(o) time

(p) time

(q) time

(r) time

(s) time

(t) time

(u) time

(v) time

(w) time

(x) time

(y) time

(z) time

(aa) time

(bb) time

(cc) time

(dd) time

(ee) time

(ff) time

(gg) time

(hh) time

(ii) time

(jj) time

(kk) time

(ll) time

Types of  
parenchyma

(67)

What are

sclerenchyma

cells

storage

time

thin walled

collenchyma

storage

time

thick walled

parenchyma

storage

time

thin walled

parenchyma

storage

time

Final Evaluation: — Answer the questions

- ① Which type of tissue has chlorophyll
- ② Which type of tissue are responsible for storage.
- ③ Which type of tissue have air spaces.

Recapitulation: — Fill in the blanks

- ① ground tissue form \_\_\_\_\_ of the plant tissue
- ② ground tissue help in \_\_\_\_\_ of other tissue
- ③ ground tissue is of \_\_\_\_\_ types.

Assignment: —

- Latex briefly about ground tissue.

Lesson plan :-

Preliminary Information:-

(69)

Name of student teacher - Paromita Guptekha  
Name of supervisor -  
Name of the school -  
School Register No - YKED88036  
Subject - Biology  
Class - VI  
Topic -  
Medium -  
Unit -  
Date - 30/7/2016  
Time Duration - 40 minutes

Content Analysis/concept Analysis Subconcept Analysis		Activities & Indicating Behavioral Learning Coming Out	Achievement to be achieved by the end of the lesson Method	EVALUATION
Motivation:- Students will get motivated to listen the lesson.	By Teacher	Good morning students What will you do if you feel thirsty? from where do we get food?	Good Morning Teacher we drink water we can't sustain from plants	L C T O R C
Announcement of the topic:- Today we will learn about vascular tissue.		Then can you tell which tissue is responsible for trans port.	Vascular tissue	C H M N
Presentation:- Tissue is a group of cells having similar function.		What is a tissue?	Tissue is a group of cells having similar function.	D C M N
Muscular tissue helps in transport of water from one place to other.		Muscular tissue	The tissue which one involved in transport	N O P Q

Vascular tissue are

2 types.

Xylem & phloem phloem

phloem transport food

Materials from one part  
to other.

Vascular tissue gives  
mechanical strength

Vascular tissue can be  
observed in T.S. of  
stem.

Vascular tissues are

two types

xylem transports

water & minerals from  
root of other parts

phloem transports

materials from one part  
to other.

phloem transports

materials from one part to other

xylem & phloem to

by taking T.S. of

xylem & phloem to  
gather from vascular

What are the functions  
of vascular tissues?

How can you observe  
vascular tissue in

plants.

food materials from  
vascular tissues

one place to other

are 2 types

xylem & phloem

Vascular bundle

phloem transports

food material

xylem & phloem

forms vascular

bundle.

function trans-

portation mechani-

cal strength

part of stem

shows vascular

tissue clearly

What are  
the types  
of vascular

types  
of tissue

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What are  
the functions  
of vascular

tissues.

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C

### Culminating Activities:-

Oral Evaluation:- Answer the following questions

- ① How do you observe avascular tissue?
- ② What are the functions of Vascular tissue?
- ③ How many types of Vascular tissues are present?

Evaluation:- Fill in the blanks

- ① Xylem & phloem together form \_\_\_\_\_ types
- ② Vascular tissues are of \_\_\_\_\_
- ③ Xylem transports \_\_\_\_\_

Assignment:-

Write a brief note on Vascular tissue.

## Lesson plan - ⑥

### Preliminary Information:-

(73)

Name of the student teacher	- Paromathy Sarker
Name of the supervisor	-
Name of the school	-
Subject	- Biology
Class	- VI
Unit	- Plant Tissue
Topic	-
Medium	- English
Date	- 18/10/2016
Time Duration	- 40 Minutes
Register No	- 916ED88036

Content Analysis (concept) Subconcept Analysis	Activities Indicating Behavioural Learning comes ac. By Teaching	Aids/Experiments/me tobe com Demon stration Method	EVALUATION
<u>Motivation</u> :- Students will get motivated to listen Hr. lesson.	What will you feel if you don't drink water for few days?	If we do not drink water for few days what happens? very good.	X
	Announcement of the topic of the day	Today we will learn about xylem as conducting tissue of root!	C
	Presentation:- Root hair absorbs water & minerals from soil.	Along with water root also absorbs water from root hair where xylem.	F
	Announcement of the topic of the day	Today we will learn about xylem as conducting tissue of root!	N
	Presentation:- Root hair absorbs water & minerals from soil.	Along with water root also absorbs water from root hair where xylem.	T
	Announcement of the topic of the day	Today we will learn about xylem as conducting tissue of root!	I
	Presentation:- Root hair absorbs water & minerals from soil.	Xylem is a vascular tissue which conducts water from root to	O

often parts of a plant

They form vascular bundle

along with phloem

It contains tracheids & vessels

fibres, parenchyma

tracheids are more

primitive than vessels

which one is more primitive

xylem fibre & xylem

parenchyma are for support xylem & transport

water to great heights

what is the function of fibre and paren-

chyma cells?

xylem & transport water to great heights

give examples

system & phloem together forms

tracheids

vessel

parenchyma

tracheid vessels

tracheid vessels

parenchyma

tracheid vessels

vascular bundle

( $\frac{1}{2}$ ) phloem

Y

Z

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### Culminating Activities:-

Evaluation:- Answer the following Questions

- ① What is xylem?
- ② How plants transport water?
- ③ Which one is primitive

Evaluation:- Fill in the blanks

① Xylem & phloem forms Vascular bundle

② The \_\_\_\_\_ are more primitive than Vessels

③ Xylem transports \_\_\_\_\_ and minerals from \_\_\_\_\_ to other parts

Assignment:-

Write a brief note on xylem.

## Lesson plan

### Preliminary Information:-

77

- Name of the student teacher - Pasomathi sumelka  
Name of the supervisor -  
Name of the school -  
Class - VI  
Subject -  
Topic -  
Unit -  
Medium -  
Date -  
Time duration -  
Register No - YMED888036

Content Analysis of Concept  
Sub concept - Analysis

Activities Indicating Behavioural Outcomes

Objectives Measured Through  
Observation Method

EVALUATION

(#8)

Motivation:- Students will get motivated to listen the lesson.

Good morning, students good morning why we take food? teacher for energy How this food reach through blood to our cells?

In the same way does plant & need food?

How it transport food materials very good.

Phloem

Pupil how plants prepare food materials

Phloem is a kind of vascular tissue. xylem & phloem together forming vascular bundle

phloem conduct food materials

Food Materials from photo

(#9)

Blood

Q U C S T I O N S

What is vascular bundle?

Phloem

X P

Vascular Bundle

O N

Phloem & xylem

Photo synthesis

Vascular tissue

A function of phloem

Food materials

To all parts

(#10)

Synthesis points to all over the plant it mainly

conducts starch & glucose

phloem contains sieve cells

sieve tube companion

cells & fibers paranchymal

sieve cells are more advanced than sieve tubes.

They conduct materials from great height.

Ex Eucalyptus 200 ft  
Red wood 350 ft

What is phloem

phloem conducts starch and sucrose

Materials from great heights

Some examples

phloem is a conductive tissue

Port the prepared food?

phloem exylem to gether from phloem

conducts food mate

rials to which parts

longer sieve cells

sieve tubes

companion cells

paranchyma

fibra paranchyma

sieve-tubes

Eucalyptus - 200 ft

Red Wood - 350 ft

Red wood 350 ft

Red wood knee 350 ft

Phloem

Vascular bundle

① ② ③ ④ ⑤

to remaining

parts of plant

longer sieve cells

companion

cells

paranchyma

sieve cells

are evolved

eucalyptus

Red wood

Red wood knee

Red wood knee

of phloem

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give example

for the

height

from which

phloem

What are

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W

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give example

for the

height

from which

phloem

the different

types of

cells present

in phloem

### Culminating Activities:-

Final Evaluation:- Answer the following questions

- ① What is  $\alpha$  phloem
- ② What are the different types of cells present in phloem?
- ③ Give examples of instance that phloem conducts.

Evaluation:- Fill in the blanks

- ① \_\_\_\_\_ & xylem forms vascular bundle
- ② \_\_\_\_\_ are more advanced than sieve tubes
- ③ Phloem transport \_\_\_\_\_ e. sucrose

### Assignment:-

Write a brief note on phloem.

Lesson plan - ⑯

Preliminary Information:-

Name of the student teacher - Paromita Sarker

Name of the supervisor -

Name of the school -

class

- VI

subject

- Biology

unit

- Water in our life

topic

- Water and its uses and its sources of water

Medium

- English

Date

- 4/8/2016

Time duration

- 40 minutes

Registration No

- 11668008

Content Analysis / Concept / SubConcept - Analyzing	Activities & Indicating Behavioural Learning Aids / Experiments / Demo / Demonstration Method	By Pupils	By Teacher	Good afternoon Teacher	Good afternoon Students	How can you say water is necessary for us?	We need water to perform several day to day activi- ties like cooking food, drinking water, washing clothes, cleaning utensils etc.	water uses drinking, washing, clothes, cleaning, utensils etc.	water uses drinking, washing, clothes, cleaning utensils etc.	What purposes do we need water in our life	So many purposes uses in water	What purposes do we need water in our life	to daily life
Motivation:- Students will get motivated to listen the lesson.													

Classify the above uses of water in three groups, uses in a house or family, for agricultural purposes and others.

We use water for different purposes. To estimate in litres, the amount of water used, take any little bottle and find out how many bottles of water are needed to fill a bucket, a glass, a mug etc. We get water from different water sources in our surroundings. In most villages wells, canals, tanks, ponds, rivers etc. are the main water sources.

\* How many type of uses of water.

\* Classify the uses of water in 3 groups. Uses in a house or family, for agricultural purposes and others.

\* How much water do we use daily.

\* We use water for different purposes, so many litres.

\* We get water from water sources in our surroundings.

\* We get water from wells, canals, tanks,

\* We get water from tanks, ponds, rivers etc.

\* How many types of uses of water.

(83)

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\* How much water do we use daily.

\* Where do we get water from

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Recapitulation.— Fill in the blanks.

- ① Our body contains \_\_\_\_\_ % of water
- ② Food items containing water \_\_\_\_\_
- ③ Where do we get water from \_\_\_\_\_

Assignment

Answer the following questions

- ① How can you say water is necessary for us?
- ② Why do people need protected drinking water scheme?
- ③ Where do we get water from?

Lesson plan (85)

Preliminary Information:-

- Name of the student teacher - Paromita Sarker  
Name of the supervisor -  
Name of the School -  
Class - VI  
Unit - Water in our life  
Subject - Biology  
Topic - Measuring the volume of water  
Medium - English  
Date - 8/8/2016  
Time Duration - 40 minutes  
Register No - Y16ED88036

Content Analysis / concept / Sub Concept - Analysis	Activities indicating Behavioural learning Comes Out	Field Experiments / ME to do consider on T4 Situation Method	EVALUATION
Motivation :- Students will get Motivated to Listen the Lesson.	By Teacher By pupils	<ul style="list-style-type: none"> <li>* water measures</li> <li>* water measurements</li> <li>* leaves, and other leaves as well,</li> <li>* measured in liters and milliliters.</li> <li>* very good.</li> </ul>	<p>Q U C S T I O N S</p> <ul style="list-style-type: none"> <li>* water and leaves</li> <li>* water, Liavides</li> <li>* Measured</li> <li>* water and in liters and milliliters</li> <li>* you wants to know the measuring other Liavide as units of water what will you tell him?</li> </ul>
Announcement of the topic:-	Today, we will Learn about Measurement of water.	Presentation:- Water, and other leaves as well, is measured in liters and milliliters.	<p>A N D Q U E S T I O N S</p> <ul style="list-style-type: none"> <li>* water tanks in some towns and cities</li> <li>* What is water Measure ment</li> </ul>

have the capacity to store gallons of water. gallon is also a measure of volume of liquids.

Water level in the reservoir is measured in feet. Water released from dams and projects during floods is measured in cusecs. Cubic centimeters / sec. Water on the earth: - there are different sources of water on the earth. We know that nearly 3/4th of the surface of the earth is occupied by water.

\* why is  
water  
measured  
in  
feet?

village and most towns and cities have the capacity to store gallons of water. gallon is also measure of volume of liquid

(87)

\* what  
is meant  
by  
measure  
ments.

\* water level in  
the reservoir is  
measured in feet.  
Water released from  
dams and projects  
during floods is  
Measured in cusecs

\* water  
levels  
are in  
metres  
and in  
feet

\* water level in  
the reservoir is  
measured in feet.

\* water  
levels  
are in  
metres  
and in  
feet  
Water released from  
dams and projects  
during floods is  
Measured in cusecs

\* how is  
water  
on the earth

\* water is water  
on the earth  
Measured in cusecs

(cubic centimeters / sec.)

\* water nearly 3/4th  
of the surface of the  
earth is occupied

earth is occupied

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Recapitulation :- Fill  
fill in the blanks

- ① \_\_\_\_\_ is a measure of volume of liquid
- ② \_\_\_\_\_ is a measure of reservoir water.
- ③ How is water on the earth \_\_\_\_\_

Assignment

Answer the following questions

- ① You know the measuring units of water, what will you tell him?
- ② How is water on the earth \_\_\_\_\_

Pre-Milestone Information Lesson Plan-16

(89)

Name of the student teacher - Paramashri Sonalkar  
Name of the supervisor -  
Name of the school -  
Class - VI  
Subject - Biology  
Unit - Movements in Animals  
Topic - Muscles  
Medium - English  
Date - 01/8/2016  
Time Duration - 40 minutes  
Register No. - YMED88036

Content Analysis concept  
Sub concepts Analysis

Activities Indicating Behavioural Learning  
Come & Out  
By Teacher

### Motivation:-

Students will get motivated  
to listen the lesson.

- \* How is work  
on muscles
- \* Muscles work  
in single or pair.  
resting good.

### Announcement of the topic:-

Today we learn about  
muscle work.

### Presentation:-

If you observe a cow, bull  
or horse, walking or running,  
you can see some flexing

Aids Experimentation Documentation Instruction	Evaluation
<p>90</p> <ul style="list-style-type: none"> <li>* Bones and muscles help us to perform different moments and activities</li> <li>* Muscles work in single or pair. resting good.</li> </ul>	<p>E X P L A N A T I O N</p> <p>L A N G U A G E</p> <p>N H A R D</p> <p>A H A R D</p> <p>T H E M</p> <p>O N E</p> <p>M U S C L E S</p> <p>T E N D O N S</p> <p>B O N E S</p> <p>M U S C L E S</p> <p>H E A R T</p> <p>M O M E N T S</p> <p>C O N N E C T I O N S</p> <p>M U S C L E S</p> <p>T E N D O N S</p> <p>B O N E S</p>

structure moving beneath their skin, usually around the shoulders and hips. These tender fleshy structures are called muscles.

We shall perform a few experiments to find out how these muscles help the various parts of the body to move. We shall also see some of the activities that these muscles perform in the body. When contracted, muscle becomes shorter, stiffer and thicker. Muscles work - when one of them contracts, the bone is pulled in that direction other muscle

we shall perform a few experiments to find out how these muscles help the various parts of the body to move. We shall also see some of the activities that these muscles perform in the body. When

\* How do working muscles work?

These fibrous structures are called tendons. These tender fleshy structures are called muscles.

\* Muscles work in pairs. When one of them contracts, the bone is pulled in that direction and the other muscle pairs. To move the bone in the opposite direction, the relaxed muscle contracts and the one first one above it yes

tendons

e

\* How do working muscles work?

\* Some muscles are connected directly to bones

D

O

\* Some muscles are connected indirectly to bones

yes or no

No

### Recapitulation:-

Fill in the blanks.

- ① \_\_\_\_\_ of muscles makes the bone move.
- ② The parts of our body which we cannot see but they help in body movements.
- ③ Tendons are in the \_\_\_\_\_ shape.

### Assignment:-

Answer the following questions

- ① What are the uses of muscles?
- ② How does muscles work with what they are constituted of?

## Lesson plan - 9

### Preliminary Information

(93)

Name of the student - teacher - Paromathy Sonalkar  
Name of the Supervisor -  
Name of the School -  
class -  
subject - VI  
Unit - Biology  
Topic - Movements in Animals  
Medium - Bones  
- English  
DATE - 10/12/2016  
Time Duration - 40 Minutes  
Registration No - Y16ED88036

Content-Analytical concept / Subconcept-Analyzing	Achievites / Indicating Behavioural learning	Teacher Preparation	Evaluation
Motivation:-	<ul style="list-style-type: none"> <li>* Students will get Motivated to Listen the lesson.</li> </ul>	<ul style="list-style-type: none"> <li>* When two bones meet is called joint.</li> </ul>	<ul style="list-style-type: none"> <li>* The place where two bones meet is called a joint.</li> </ul>
Announcement of the topic	<p>Today we learn about</p> <p>Bones.</p> <p>Presentation:-</p>	<p>Yesterday good.</p>	<ul style="list-style-type: none"> <li>* What is skeleton to form a single structure.</li> </ul>
Sub-concept Analysis	<p>By Teacher</p> <p>By pupil</p>	<p>Q</p> <p>Q</p> <p>Q</p> <p>Q</p>	<p>* What is skeleton</p> <p>1</p> <p>1</p> <p>1</p>

This structure is called skeleton.

Ligaments?—In the same way two bones are joined together in a special way by fibres.

These fibres are called ligaments.

Jaw bone?—This is the mouth and move his lower jaw up and down as well as side ways. This is the place where the lower jaw bone is joined to the skull. Press your finger on both sides of your face and spot where you have these joints. These are fixed joints.

\* What is ligaments.

\* Two bones.

This structure is called the skeleton.

What is ligaments.

Two bones are joined to each other in a special way called the skeleton.

What is ligaments.

\* Jaw bones are the fixed joints yes (Q) No

\* Jaw bones are the fixed joints yes.

\* Two bones are joined to each other in a special way called the skeleton.

\* Where placed jaw bone.

\* Jaw where placed jaw placed where the lower jaw bone is joined to the skull.

\* This is the place where the lower jaw bone is joined to the skull.

\* Two bones are joined to each other in a special way called the skeleton.

\* Where placed jaw bone.

Q

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### Recapitulation :-

Fill in the blanks

① Joints of the bone help in the \_\_\_\_\_

② The parts of our body which we cannot see but they help in body movements.

③ \_\_\_\_\_ join the bones together in special way

### Assignment:-

### Answer the following questions

- ① Appreciate the part of joints in making our activities more easy
- ② What are ligaments.

Lesson plan - 80

Preliminary Information

Name of the student teacher - Paromita Sarker  
Name of the supervisor -  
Name of the school -  
class - VI  
Subject - Biology  
Unit - Movements in Animals  
Topic - Locomotion in Fish  
Medium - English  
Date - 18/12/16  
Time duration - 40 minutes  
Registered No - 116EDSS036

Content Analysis   Concept Subconcept - Analysis	Activities Indicating Behavioural Learning  comes out By Teacher	Field Experimentation to demonstrate the concept	Evaluation of student
<u>Motivation?</u>  Students will get Motivated to Listen the lesson.	<ul style="list-style-type: none"> <li>* Movement or Locomotion is an Important function in every living organisms</li> </ul>	<ul style="list-style-type: none"> <li>* Yes every living organisms</li> <li>Important function</li> </ul>	<ul style="list-style-type: none"> <li>* locomotion</li> <li>* is an important function</li> <li>* The shape is such that it allows ongoing</li> <li>* locomotion</li> <li>* The body of fish is stream lined.</li> <li>* The shape is such that it allows the fish to move</li> <li>* write about the locomotion in fish.</li> </ul>
	<u>Announcement of the topic:</u> Today we learn about locomotion in fish. <u>Presentation:</u> fish swim in water do they swim the same way as humans.		

The body of the fish is streamlined. The shape

is such that it allows the

fish to move in easier

easily. The skeleton of

the fish is covered with

strong muscles.

\* While swimming,

Muscles make the front

part of the body swing

towards one side while

the tail swings its body

towards the opposite side.

This creates a jerk and

pushes the body forward

A series of such jerks help

fish swim forward.

\* The skeleton

of the fish is covered

with strong muscle

muscles.

\* How is swimming

done?

Muscles make the

front part of

the body swing

towards one side

such that it is

while the tail

allows the fish

to move in easier towards the opposite

side. This creates

jerk and pushes

body forward.

\* The skeleton

of the fish is covered

with strong muscle

muscles.

body shape

to swimming

in water

is

easily.

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\* How is

swimming

done?

No.

\* The shape

is such that

swimming to

fish yes or

No.

Recapitulation:-

fill in the blanks:-

① The skeleton of the fish is covered with Muscles.

② Locomotion is the Important Movements and function of Assignment?

Answer the following questions

① write about the locomotion in fish

② How is swimming?

③ write briefly locomotion of fish.