

TISSUES

SUBJECT- BIOLOGY

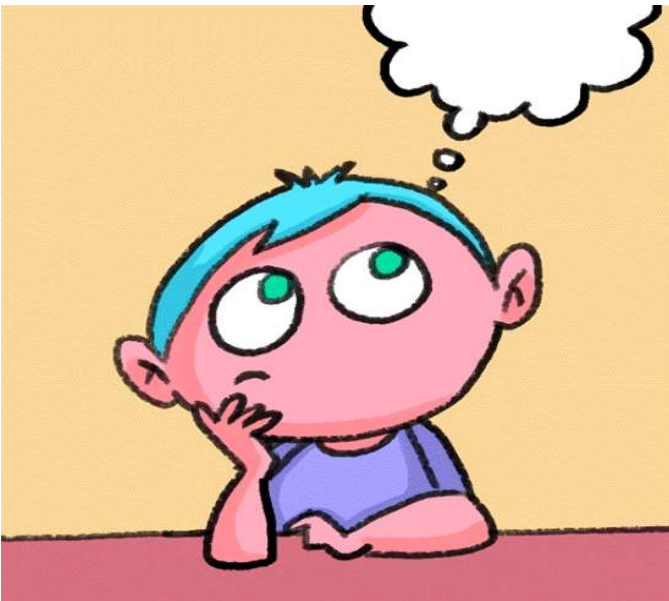
CHAPTER NO- 6

Plant Tissues-Classification , Meristematic Tissues
PERIOD-3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- Student will be familiarized with the classification of plant tissues
- Student will understand the structure, function and types of meristematic tissue
- Student will be able to locate the different types of meristematic tissues in plants

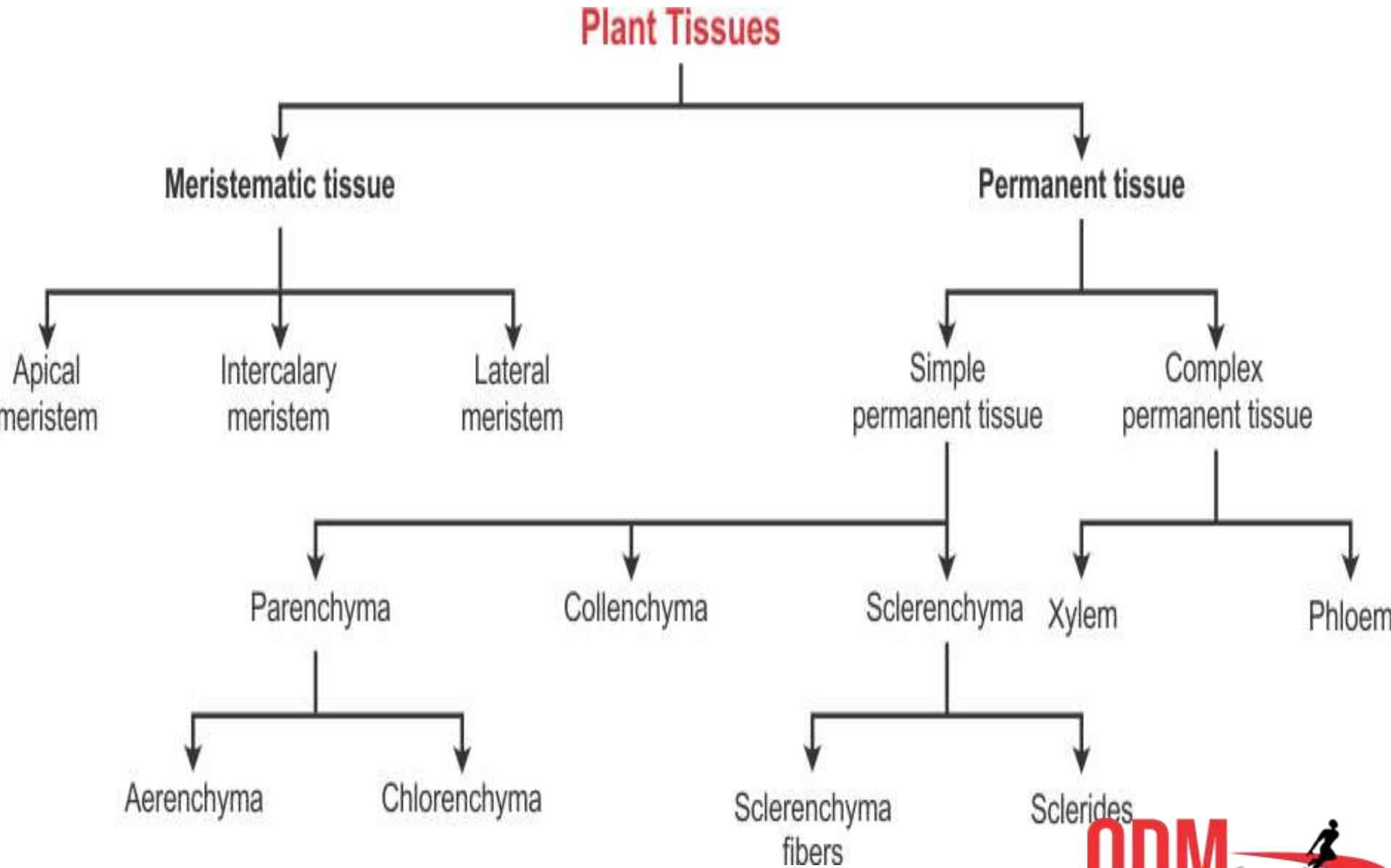


WARM UP QUESTIONS

Recapitulation of the following before initiating the topic

- Describe the cellular organization in a living organism.
- Differentiate between plant and animal tissue

CLASSIFICATION OF PLANT TISSUES



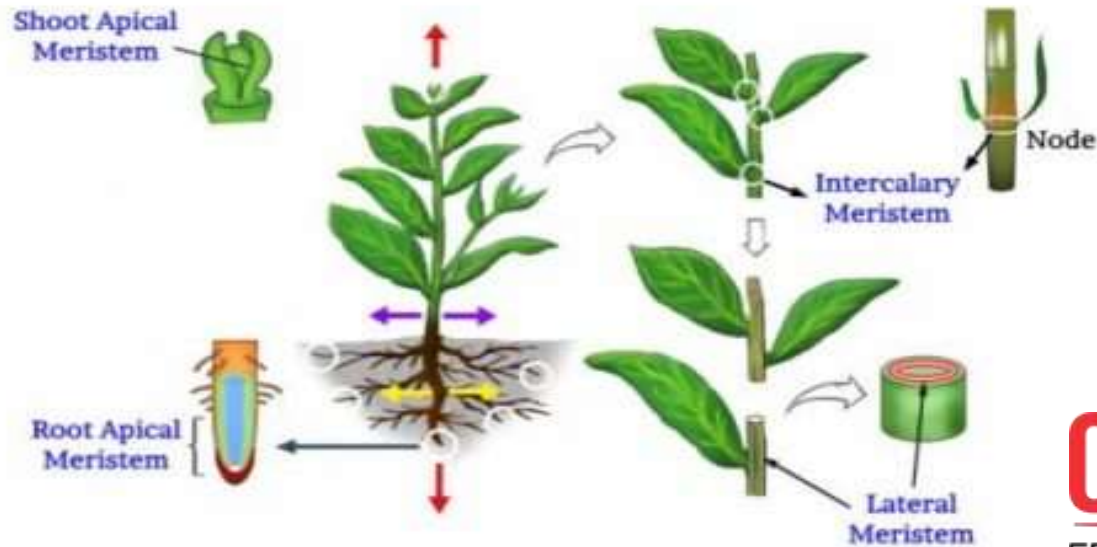
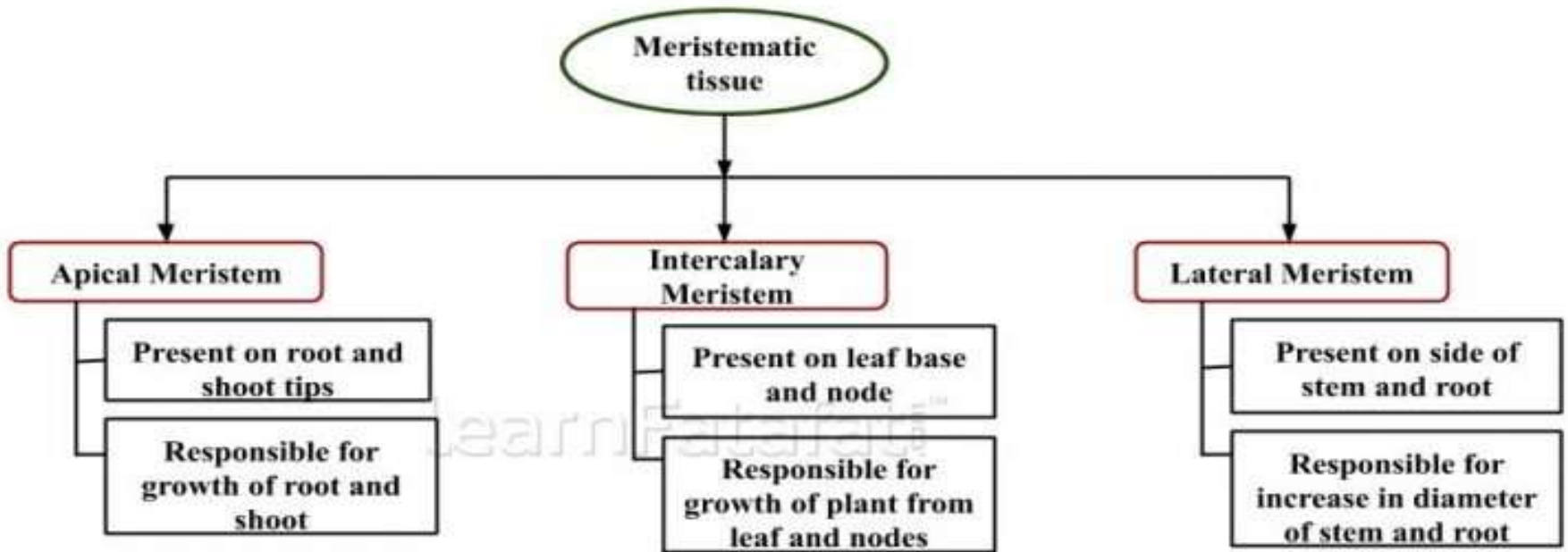
ACTIVITY

- Activity to show growth in onion root tip apical meristem
- <https://www.youtube.com/watch?v=wAGJGCFTuvM>

WHAT ARE MERISTEMATIC TISSUES?

- The cells of these tissues are commonly called meristems.
- The meristematic tissue has the quality of self-renewal. Every time the cell divides, one cell remains identical to the parent cell, and the others form specialized structures.
- They have very small and few vacuoles.
- The meristematic tissue is living and thin-walled.
- The protoplasm of the cells is very dense.
- The meristematic tissues heal the wounds of an injured plant.
- The cells of the meristematic tissue are young and immature.
- They do not store food.
- They exhibit a very high metabolic activity.
- They possess a single, large and prominent nucleus.

TYPES OF MERISTEMATIC TISSUES- LOCATION AND FUNCTIONS



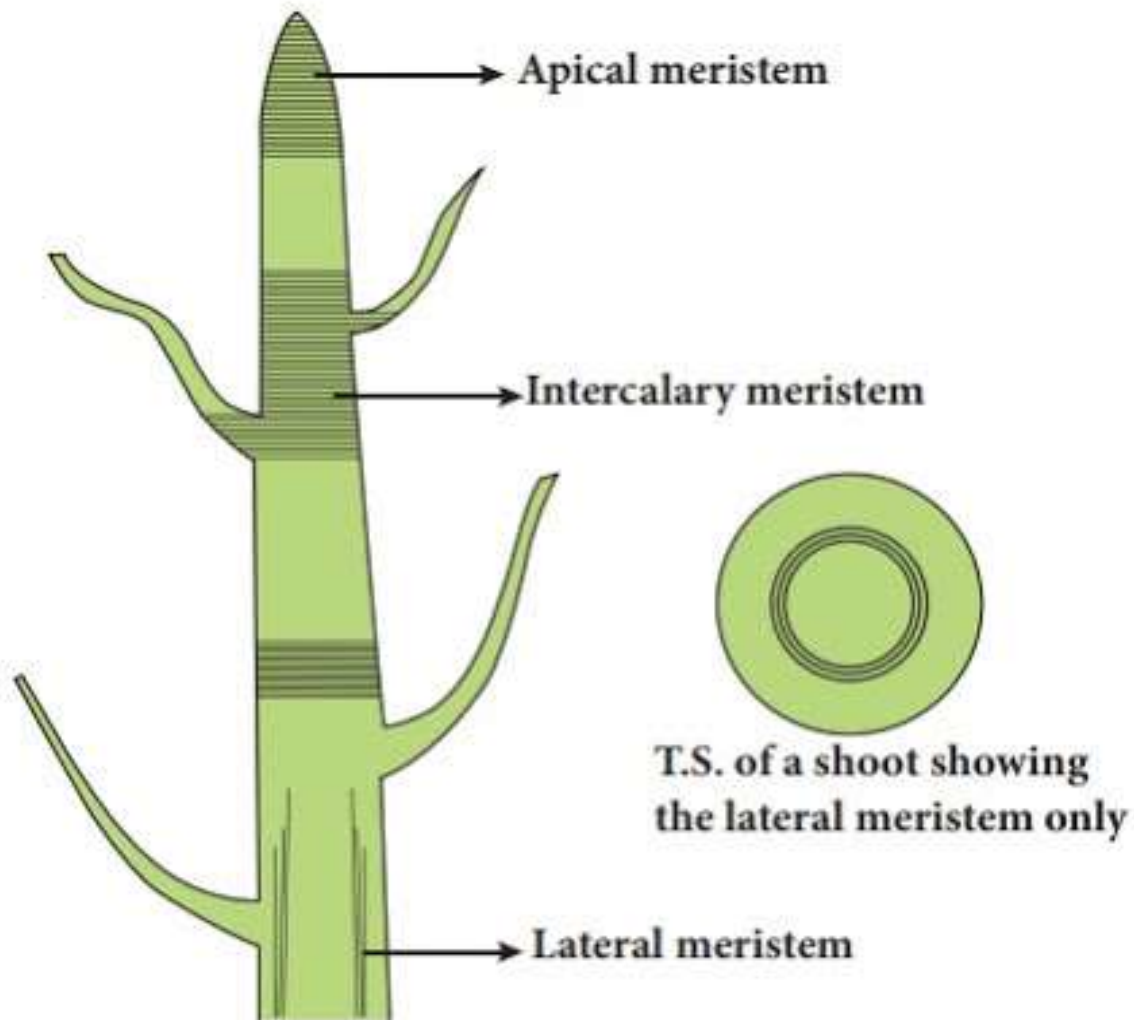


Figure 7.1 Longitudinal section of shoot apex showing location of meristems and young leaves.

HOME ASSIGNMENT

Q. Classify plant tissue.

Q. Explain the structure and location of all types of meristematic tissues in plants

Q. Which type of meristematic tissue helps in increasing the girth of the plant?

THANKING YOU
ODM EDUCATIONAL GROUP