



Province of the
EASTERN CAPE
EDUCATION

**DIRECTORATE SENIOR CURRICULUM MANAGEMENT (SEN-
FET)**

HOME SCHOOLING SELF-STUDY WORKSHEET ANSWER SHEET

SUBJECT	LIFE SCIENCES	GRADE	10	DATE	09/04/2020
TOPIC	PLANT TISSUES	TERM 1 REVISION	✓	TERM 2 CONTENT	

WORKSHEET ACTIVITY 1- PLANT TISSUES

Activity 1.1

- 1.1.1 Cell ✓
- 1.1.2 Tissue ✓
- 1.1.3 Meristematic ✓
- 1.1.4 Permanent tissue ✓ (1 X 4) (4)

Activity 2:

- 2.1 a) ✓ ✓
- 2.2 a) ✓ ✓
- 2.3 b) ✓ ✓
- 2.4 c) ✓ ✓
- 2.5 c) ✓ ✓ (2 X 5) (10)

Activity 3

- 3.1 A Colenchyma ✓
- B parenchyma ✓ (2)

3.2

Tissue A- collenchyma	Tissue B- parenchyma
Wall thick at corners✓	Thin walled✓
Few intercellular air spaces✓	Many Intercellular airspaces✓

Tabulation ✓ (5)

(7)

Activity 4

- A- Xylem tissue✓ - water transport✓
- B- Phloem tissue✓ – food transport✓
- C- Chlorennchyma✓ - photosynthetic✓
- D- Scherenchyma✓ - support✓

(4 X 2) (8)

Activity 5

5.1

- Specialised cells that perform a specific task group together to form tissues✓. Thus different tissues perform different functions✓.
- In plants, vascular tissues conduct water from one part of the plant to the other phloem transports food from leaves to other parts of the plant.✓(3)

Any example of two plant tissues performing different functions.

5.2.

- Plants need the hard, dead cells provide mechanical strength✓ allowing a plant to remain upright ✓
- A cell must support itself or receive direct support from tissues around it✓, in order for the plant to remain upright✓.
- Animals are supported by hard (often bony) skeletons ✓and do not need dead cells to support them✓. Any TWO (2)

5.3.

- They are actively dividing cells and divide throughout their life✓
- have prominent nuclei.✓
- cells are compactly arranged with no intercellular spaces;/ lack vacuoles; /cells have dense cytoplasm and thin cell walls✓ (3)

5.4

- Cell walls are irregularly thickened at corners ✓ due to deposition of cellulose or pectin ✓;
 - few intercellular spaces. ✓
- Any TWO (2)

5.5.

- Vacuoles are responsible for storing food and certain types of waste product ✓.
- Meristematic cells being young and actively dividing do not participate in food manufacture / waste generation and in storage functions ✓ do not require vacuoles.

(2)

(12)

[41]