



# Meristems Reading Comprehension Questions

1. What is meant by the term differentiation?

Tick **one** box.

A cell that carries out different functions depending on where it moves to in the organism.

Cells becoming specialised to carry out specific functions.

A term to describe all the different types of cells.

2. What are undifferentiated plant cells called?

Tick **one** box.

specialised cells

meristem cells

root cells

3. Name **one** type of cell meristems can differentiate to form.

---

4. State why plants require meristem tissue.

---

5. Describe where meristem tissue is located within a plant.

---

---

6. Describe how meristem tissue can be used to clone a plant.

---

---

7. Describe **one** reason why it might be useful to clone a plant.

---

---

---



# Meristems Reading Comprehension **Answers**

1. What is meant by the term differentiation?

Tick **one** box.

A cell that carries out different functions depending on where it moves to in the organism.

**Cells becoming specialised to carry out specific functions.**

A term to describe all the different types of cells.

2. What are undifferentiated plant cells called?

Tick **one** box.

specialised cells

**meristem cells**

root cells

3. Name **one** type of cell meristems can differentiate to form.

**Choose any one from:**

- **phloem cells**
- **root hair cells**
- **xylem cells**

4. State why plants require meristem tissue.

**To produce copies of cells for growth and repair.**

5. Describe where meristem tissue is located within a plant.

**It is found in the tips of the shoots and roots, where growth occurs.**

6. Describe how meristem tissue can be used to clone a plant.

**Shoot tips can be cut from a plant and planted in soil for a new plant to grow.**

7. Describe **one** reason why it might be useful to clone a plant.

**Any one from:**

- **To grow more plants with desirable characteristics, such as colourful petals, large fruit, or disease/pest resistance.**
- **To clone endangered species.**
- **To increase crop yield.**
- **To improve food security.**