

### Similarities

- Both growths can increase the size of the plants permanently.
- Both growths occur in woody plants.
- Both growths involve cell division by mitosis

### Differences

Primary growth	Aspect	Secondary growth
Apical meristem	<b>Meristem tissue involved</b>	Lateral meristem (vascular cambium and cork cambium)
Occurs on stems and roots in younger regions of the plant	<b>Parts of the plant that undergo growth</b>	Occurs when primary growth has ceased on matured stems and roots
Growth occurs longitudinally	<b>Direction of growth</b>	Growth occurs radially
Increases the length of stems and roots of plant	<b>Growth effects</b>	Increases the thickness or circumference of stems and roots of plant
Epidermis, cortex and primary vascular tissues (primary xylem and primary phloem)	<b>Tissues and structures formed</b>	Bark, periderm (cork cambium and cork tissues), lenticels and secondary vascular tissues (secondary xylem and secondary phloem)
Do not have woody tissues	<b>Presence of woody tissues</b>	Have woody tissues
Thin	<b>Thickness of bark</b>	Thick
Absence of annual growth rings	<b>Presence of annual growth rings</b>	Presence of annual growth rings at the plant stem