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