Distinguish, differentiate, compare and explain what is the difference between Plant and Animal Cytokinesis. Comparison and Differences.

Difference between Plant and Animal Cytokinesis

1. Plant cytokinesis usually occurs by cell plate method. Animal cytokinesis takes place by cleavage.
2. The spindle usually persists during Plant cytokinesis. The spindle begins to degenerate soon after anaphase in the animal.
3. In plant cytokinesis, a central part of spindle grows in size and forms an interdigitated complex called phragmoplast. A mid-body of dense fibrous and vesicular material is formed in the middle in animal cytokinesis.
4. In plant cytokinesis, vesicles derived from Golgi apparatus reach the equator of the phragmoplast and fuse to form cell plate and new cell membranes. The event is absent in animal cytokinesis.
5. Cell plate grows centrifugally in plant whereas Cleavage progresses centripetally in animal cytokinesis.
6. The new cell membrane is derived from beside of Golgi apparatus in plant cytokinesis. The new cell membrane is usually derived from the endoplasmic reticulum in animal cytokinesis.