|  |  |  |
| --- | --- | --- |
| Plasma or cell membrane | Regulates what enters and leaves cell  Gives cell its shape  Separates cell from environment  Outermost layer in animal cell |  |
| Nucleus | Brain of cell  Controls the cell’s activities  Coordinates cell division  Present in all eukaryotic cells | http://www.doereport.com/imagescooked/14565W.jpg |
| Nuclear membrane or nuclear envelope | Allows certain things to pass into or out of the nucleus  Contains pores | http://t1.gstatic.com/images?q=tbn:ANd9GcSmpkY2snok8zIrDqT97JssLgEMSdCQ5QDRvb2GSDzzdrHol0G4eTUmNOlN |
| Nucleolus | Plays a role in protein synthesis  Present in all eukaryotic cells | http://www.greetin.gs/phoebecell/photogallery/nucleolus.jpg |
| Chromatin or chromosomes | Carries the genetic information for the cell  All prokaryotic and eukaryotic cells have this | http://www.unhinderedliving.com/nucleus.png |
| Cytoplasm | All the cell material outside the nucleus  Organelles are suspended in this  All prokaryotic and eukaryotic cells have this | http://nursingcrib.com/wp-content/uploads/cytoplasm.jpg?9d7bd4 |
| Endoplasmic reticulum | Serves as a passageway for material to transport into and out of cell  All prokaryotic and eukaryotic cells have this | http://www.sciencephoto.com/image/214880/350wm/G4600096-Rough_endoplasmic_reticulum-SPL.jpg |
| Ribosomes | Protein synthesis occurs here  All prokaryotic and eukaryotic cells have this | http://www.cartage.org.lb/en/themes/sciences/zoology/animalphysiology/anatomy/animalcellstructure/EndoplasmicReticulum/endoplasmic.jpg |
| Mitochondria | Power house of the cell  Site of cellular respiration in eukaryotic cells  Energy of glucose is converted to ATP | http://shs.westport.k12.ct.us/asr/Bio%202/webquests/cell%20city/organelle%20links/mitochondria.gif |
| Lysosomes | Contains enzymes that break down proteins and other organic molecules  Digestion center | http://t2.gstatic.com/images?q=tbn:ANd9GcQuM8TOHGDWei3dusqxnkH9-xnSlSso8ms_4l_RThMn_OhHFJZOEh8D5C1NLQ |
| Golgi apparatus  Golgi body  Golgi complex | Packages and distributed proteins for export to cell surface  All eukaryotic cells have this | http://shs.westport.k12.ct.us/asr/Bio%202/webquests/cell%20city/organelle%20links/golgi2.gif |
| Microtubules | Part of cytoskeleton that gives support to cell  Associated with movement | http://www.scienceclarified.com/images/uesc_03_img0120.jpg |
| Cilia | Numerous hair like structures that are short and aid in cellular movement | http://faculty.clintoncc.suny.edu/faculty/michael.gregory/files/bio%20101/bio%20101%20lectures/cells/paramecium_stained.jpg |
| Flagella | One or two long hair like structures that are associated with cellular movement | http://bio1151.nicerweb.com/Locked/media/ch06/06_23Flagella.jpg |
| Microfilaments | Part of cytoskeleton that produces movement  Causes cyclosis  Creates muscle contractions |  |
| Centrioles | Located near the nucleus  Assist in animal cell reproduction  Occur in pairs | http://www.westfield.ma.edu/personalpages/draker/edcom/final/webprojects/sp10/cell/centrioles.jpg |
| Central vacuole | Plant cells only  Large fluid filled cavity |  |
| Contractile vacuole | Helps one celled water dwelling organism get rid of excess water | http://www.linkpublishing.com/parame_contract.gif |
| Vesicle | Storage area for water and waste products  Animal cells only | http://www.physicalgeography.net/fundamentals/images/animal_cell.gif |
| Cell wall | Protection and support for prokaryotic bacteria and eukaryotic plant and fungi cells  Outer most layer in above organisms’ cells |  |
| Chloroplasts | Contains pigment chlorophyll  where most photosynthesis occurs |  |