**Learning Activity 3D: ORGANELLE STRUCTURE AND FUNCTION**

| **ORGANELLE** | **STRUCTURE** | **FUNCTION** |
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| **CYTOSKELETON**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_15_ul.jpg** | **MICROFILAMENTS** |  |
| **INTERMEDIATE FILAMENTS** |  |
| **MICROTUBULES** |  |
| **RIBOSOMES**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_18_ul.jpg** |  |  |
| **ENDOPLASMIC RETICULUM (ER)**  Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_19a_ul.jpg | **ROUGH ER (RER)**   * a network of folded membranes that form flat sacs arranged in parallel and connected by tubules * studded with ribosomes * continuous with the nuclear membrane | * processes (e.g. folds, combines) and sorts proteins synthesized by ribosomes * proteins are destined to leave the cell via the Golgi apparatus or are incorporated into the plasma membrane |
| **SMOOTH ER (SER)**   * lack ribosomes * usually an extension of the rough ER | * function depends on cell type * synthesis of steroid hormones (cells of the adrenal gland synthesize cortisol and androgens) * inactivation and degradation of drugs (liver & kidney cells) * calcium storage (skeletal & cardiac muscle) |
| **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_20a_ul.jpgGOLGI APPARATUS** |  |  |
| **LYSOSOMES**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_22a_ul.jpg** |  |  |
| **PEROXISOME** |  |  |
| **PROTEASOME** |  |  |
| **MITOCHONDRIA**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_23a_ul.jpg** |  |  |
| **NUCLEUS**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_24ab_ul.jpg** |  |  |
| **CENTROSOME**  **Macintosh HD:Users:cheryl:Documents:BCIT courses:6 credit A&P:Tortora Resources:ch03 cytology:unlabelled jpeg:pap14_fig_03_16ab_ul.jpg** |  |  |