

Unit 1: Benchmark 1B Study Guide

Cell Biology Standard 1e: *Students know* the role of the endoplasmic reticulum and Golgi apparatus in the secretion of proteins. 1j* *Students know* how eukaryotic cells are given shape and internal organization by a cytoskeleton or cell wall or both. (support for standards 1f, 1g, 1c)

1. How do the cytoskeleton and cytoplasm contribute to the cells shape?
2. You know that many organelles are involved in protein production. Briefly explain where proteins are made, modified, and packaged within a cell.
3. In the space provided letter of the description that best matches it.
__Eukaryote a. network of proteins that supports the cell
__Organelles b. structures that carry out specific activities.
__Nucleus c. houses the cells DNA
__Cytoskeleton d. cells contain nuclei
4. In the space provided letter of the description that best matches it.
__Endoplasmic reticulum a. packages and distributes proteins
__Golgi apparatus b. membrane bound sac
__Vesicle c. contain digestive membranes
__Lysosomes d. structure that manufacture proteins
__Rough ER e. does not have attached ribosomes
__Smooth ER f. has attached ribosomes
__Ribosomes g. internal membranes for moving materials
5. What function do mitochondria perform?
6. What structures are only found in plant cells? What do they do for the plant?

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