Review of Cell Worksheet

This type of cell does not have organelles that are separated by the rest of the cytoplasm. It does not have a defined nucleus, instead the genetic material is found in a defined area called the nucleoid. It is an example of a prokaryote.

Acting as a barrier to the environment, this structure regulates the movement of substances into and out of the cell, and acts as internal protection for the organisms. It is common to all cells.

These projections on the respiratory tract help bring mucus out of the lungs when you cough during congestion. They are made out of microtubules, and appear as tiny hairs under a microscope.

This component is composed of networks of protein filaments (microtubules/microfilaments) that help maintain the shape of a cell.

This organelle is known as the cellular garbage disposal. They are bounded by a single membrane and lack any visible significant internal structure. Inside are many enzymes working in a very acidic environment.

This structure consists of a network of canals that connects the plasma membrane to the nuclear membrane and transports materials. With ribosomes attached, it is the site of protein synthesis for proteins destined to be secreted out of the cell.

This structure consists of a complex of closely stacked flattened sacs. It puts the finishing touches on proteins that have been synthesized by having sugar or fat molecules attached. The finished proteins are then pinched off in vesicles.

It is the organelle that is found in greatest abundance in muscle cells. It is where glucose is broken down and ends up in the form ATP. They have a double membrane and appear sausage shaped. The inner membrane is infolded to form cristae.

It is the control mechanism for the manufacture of enzymes and proteins. It is found in all eukaryotic cells. It contains the blueprints for all work to be done. The blue print is called DNA.

The name of nuclear material when the cell is in the growth cycle. It is looks like a spool of thread unwound and put into a ball.

These structures are found within the nucleoplasm. Seen as dark spherical masses, they are thought to be the place where ribosomes are assembled. It is also thought to make RNA.

This structure is involved in the production of chemicals such as steroids and phospholipids. The sarcoplasm in muscle cell is considered to be a type of this.

These are small, roughly spherical organelles that are found throughout the cell. Some are attached to membranes of other organelles and others float free. They consist of large and small parts. Sometimes called protein factories.

These structures are found only in plants. They are the site of photosynthesis. They have a double membrane with the inner membrane forming stacks of flattened membrane sacs called grana. This is where chlorophyll is stored.

This structure is found in plant cells and almost all prokaryotic cells. They consist of many microfibrils (cellulose), and act as an effective barrier to the outer environment. They prevent cells from bursting due to osmotic pressure.

These are short rod-like structures and are arranged at right angles to each other. They consist of an array of nine microtubule triads. It helps to organize the spindle during nuclear division.

These structures are used in locomotion in some cells. They are normally few in number. They have an internal structure of a central pair of microtubules surrounded by a ring of nine microtubule doublets. They are used to move the entire cell or move materials past it.