**Worksheet CLIL – Little Girl Lost IIIa**

**1. With the help of this picture try to fill in the gaps in the text below:**



**Features of Plant and Animal Cells:**

All living organisms are made of one or more cells, which contain ………………... These ………….. are defined as a specialized subunit within a cell that has a specific function. The

information below describes the various ………. found in cells along with their functions.

Cells have a ………... It controls the cell’s activities. Also contained within the ………….. is

the nucleolus. The **nucleolus** is used in the production of ribosomes. The nucleus also contains the **chromatin**. Chromatin is uncondensed DNA and serves as the blueprint for controlling the cell’s functions and for building more cells.

Outside the nucleus is the **cytoplasm**. This aqueous material contains numerous other organelles.

**Ribosomes** are found floating in the cytoplasm or attached to the **endoplasmic reticulum (ER)**. They synthesize proteins. The ER is a series of interconnecting flattened tubular channels. The ER takes two forms: ……….. **ER** and ……….. **ER**. The …………ER plays a role in lipid synthesis.

The ………….. ER has ribosomes attached and plays a role in protein synthesis, protein, and protein folding. Small ………………containing newly synthesized protein separate from the ends of the rough ER. The ……………… are used to ship them to other parts of the cell or to the outside of the cell. They can also be shipped to the …………………..for further protein modification, sorting, and packaging. The …………………… is a stack of membranous flattened sacs and is directly associated with the endoplasmic reticulum

Additional organelles include small vacuoles, lysosomes, peroxisomes, and ……………. Small vacuoles are involved in storage. …………………. contain hydrolytic enzymes that are necessary for intercellular digestion of macromolecules. They also degrade worn out organelles. Products of their degradation can be reused. Peroxisomes are responsible for protecting the cell as they rid the body of toxic substances such as hydrogen peroxide. Peroxisomes also break down fat. ………………….. are the sites of aerobic respiration, and generally are the major energy production center in cells. They produce ATP, the universal energy carrier of cells from organic molecules such as carbohydrates, proteins, and lipids.

Cells have cytoskeletal components such as………………………, actin, and ……………………filaments. These components play numerous roles in the cell such as ………………………, ………………………………. and ……………………… ..

Microtubules are found in cilia (minute hair‐like organelles involved in movement of mucus out of the lungs and the egg in the fallopian tube), and ……………….. (similar to cilia but longer and typically found on sperm).

Lastly, cells have a cell membrane. The thin membrane is essential in controlling exchange between the cell and its environment. It acts as a very efficient barrier, but also allows a controlled traffic of materials across it in both directions. The membrane is therefore considered as partially semi‐permeable. It allows some materials to pass but not others.