Cell Structure & Function

The table below lists the general functions preformed by an *animal cell*. List the cellular structures associated with each of these functions

Functions	Associated Organelles & Structures
Cell division	Nucleus, chromosomes, centrioloes, microtubules (spindle), microfilaments (actin-myosin aggregates pinch apart cell)
Information storage & transfer	Nucleus, chromosomes, DNA→mRNA→ribosomes→enzymes & other proteins
Energy Conversions	mitochondria
Manufacture of membranes & products	Ribosomes, rough & smooth ER, Golgi apparatus, vesicles
Lipid synthesis, drug detoxification	Smooth ER (peroxisomes also detoxify substances)
Digestion, recycling	Lysosomes, food vacuoles
Conversion of H_2O_2 to water	peroxisomes
Structural integrity	Cytoskeleton: microtubules, microfilaments, intermediate filaments, extracellular matrix
Movement	Cilia & flagella (microtubules), microfilaments (actin) in muscles & pseudopodia
Exchange with environment	Plasma membrane, vesicles
Cell to cell connections	Desmosomes, tight & gap junctions, ECM

Cell Structure & Function

This table lists structures that are unique to plant cells. Fill in the functions of these structures

Plant Cell Structures	Functions
Cell wall	Structural support, middle lamella glues cells together
Central Vacuole	Storage, waste disposal, protection, growth
Chloroplast	Photosynthesis, production of carbohydrates
Amyloplast	Starch storage
Plasmodesmata	Cytoplasmic connections between cells