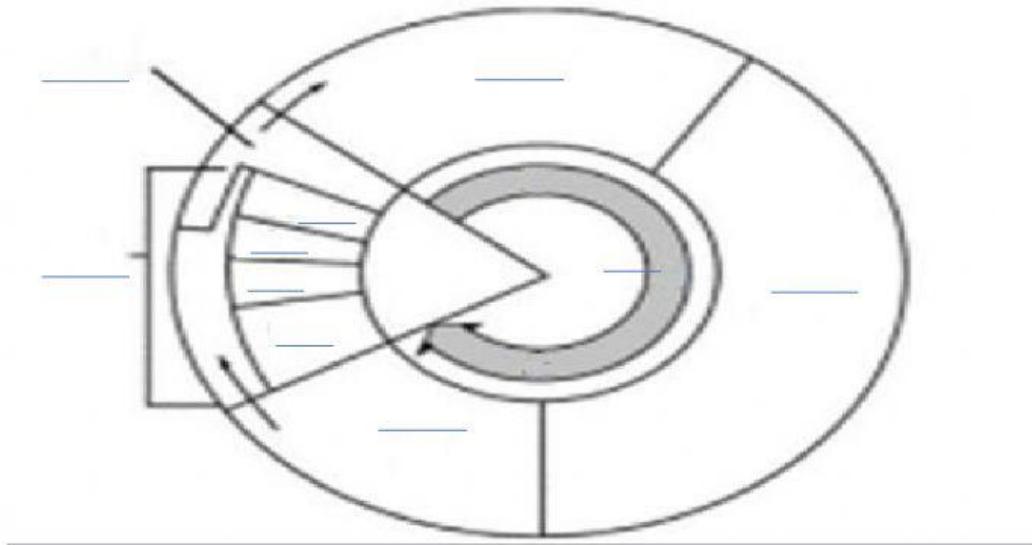


NATURAL SCIENCE

LESSON

Label the parts of the cell cycle diagram



A	Interphase – growth and replication of DNA
B	G1 – growth (G1 checkpoint- cell size, growth, environment shows cell is ready to start replicating DNA)
C	S – DNA is replicated (synthesis)
D	G2 cell gets ready to divide. G2 checkpoint. If DNA replication is complete and correct, MFP allows cells to pass G ₂ and go to M phase
E	Prophase – chromatin winds up and becomes chromosomes, nuclear membrane breaks down, centrioles migrate to opposite poles of the cell. Nucleolus disappears. Aster forms.
F	Metaphase – sister chromatids line up along the equator. Spindles are attached. (M checkpoint - Check spindle fiber (microtubule) attachment to chromosomes at kinetochores (anchor sites))
G	Anaphase – sister chromatids separate and move to opposite sides of the cell.
H	Telophase, cell wall (or cell plate in plants) begins to form. Two cells are beginning to divide, two nuclear membranes are reforming, two nucleoli are reforming.
I	Mitosis – division of a cell's nucleus
J	Cytokinesis – division of the cytoplasm