LS 11 **Cell Cycle Worksheet** (Chapter 8)

Use your notes, textbook p166-170) and the diagram below to complete the chart and answer the questions.



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| --- | --- | --- |
| Area | Phase | What’s happening |
| A | Interphase | Growth and replication of DNA |
| B | G1 | Growth (G1 checkpoint – cell size, growth, environment indicates that cell is ready to start replicating its DNA |
| C |  |  |
| D |  |  |
| E |  |  |
| F |  |  |
| G |  |  |
| I |  |  |

Questions

1. Label each phase and place them in order beginning with interphae:



1. What structure forms in prophase along which the chromosomes move?
2. What are three reasons cells divide?
3. Why are cells so small?
4. What is the difference between chromatin and chromosomes?
5. What’s the difference between a centromere and a centriole?
6. Distinguish between cell division in an animal vs a plant cell.
7. A student counted 180 cells under a microscope. 165 of them were in interphase. If the whole cell cycle is 24 hours, how long do mitosis and cytokinesis take?