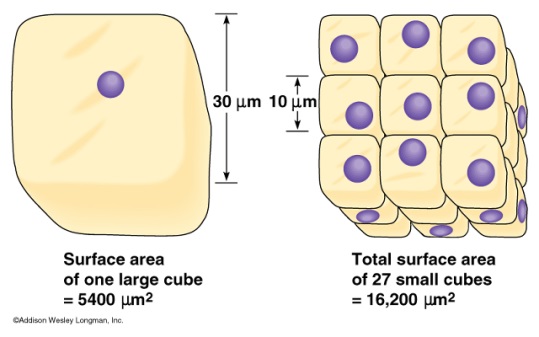
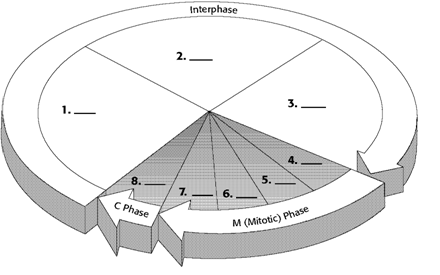
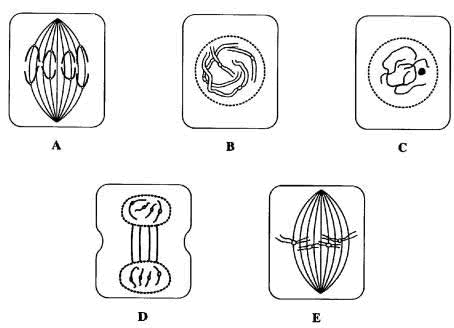
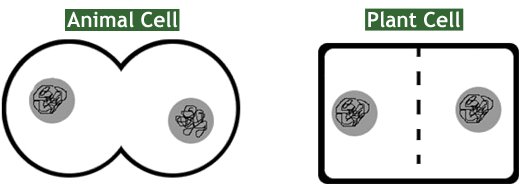
1. Why is diffusion over large distances slow and inefficient?
2. [](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=GlFWjD-e6SubaM&tbnid=3tgPNsHR9wzmMM:&ved=&url=http://bioserv.fiu.edu/~walterm/B/cell_components/cell_talk.htm&ei=w20XU4ODPKbD2AXg_YCQBA&bvm=bv.62286460,d.b2I&psig=AFQjCNECLx90Ye8AbTtvgycptxRHEMaKXg&ust=1394130669704288) What limits cell size? (Think about the 3 activities that involved math!)
3. [](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=Ggny7yDxJ0HuVM&tbnid=VT-qAtkrPSAaNM:&ved=&url=http://staff.fcps.net/dmink/spring_final_exam_review.htm&ei=HW4XU9_6CdSJ2AX714GQCg&psig=AFQjCNEhgJrNxJWU0PqFt4_skZJms1DERQ&ust=1394130807221137)What are the 3 main phases of the cell cycle? Describe them and label them in the picture.
4. What are the 3 sub-phases of interphase? Describe them and label them above.

[](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=8sER8gYJoMJE-M&tbnid=-Aui0jprqunLWM:&ved=&url=http://www.biologycorner.com/worksheets/dragonfly/10_review.html&ei=5W4XU-vyE4eW2QWn7IDIBA&psig=AFQjCNGMfeX_pWtAmprMav8VmDBW5x9zNA&ust=1394130993664796)

1. What are the 4 phases of mitosis? Label and describe them.
2. What is the purpose of mitosis? What are the products of mitosis?
3. What is the function of spindle fibers? What would happen without them?
4. Describe cytokinesis in animal cells and in plant cells. Identify which is which and label differences.
5. Tell the difference between chromatin, chromosome, and chromatid. Draw if needed.
6. Where are the cell cycle checkpoints? Describe the purpose of each. Label those on the diagram above.
7. What is apoptosis? Give examples.
8. What are the two types of stem cells?
9. What is the stem cell controversy? What are pros and cons?
10. What must be damaged for cancer to form?
11. What is the definition of cancer?
12. What are role do cyclins and CDK’s have in the cell cycle?
13. What is a carcinogen? Give examples.