**Notes Chapter 10 Cell Growth and Division: Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Cell Size Limitations--- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Diffusion---- \_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_ over \_\_\_\_\_\_\_\_ distances, it is \_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the \_\_\_\_\_\_\_\_\_\_\_\_ becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
3. **DNA Content--- most \_\_\_\_\_\_ contain only \_\_\_\_ nucleus. Bigger \_\_\_\_\_\_\_\_\_ require more \_\_\_\_\_\_\_ to run things.**
4. **Surface area-to-volume ratio ---- as cell’s size \_\_\_\_\_\_\_\_\_\_\_\_\_\_, its \_\_\_\_\_\_\_\_\_\_\_\_\_\_ increases much \_\_\_\_\_\_\_\_\_\_ than its \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_.**
5. **The Role of Chromosomes:**
6. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ---- dark-staining \_\_\_\_\_\_\_\_\_\_\_ that contain \_\_\_\_\_\_\_\_\_\_\_\_\_ material.**
7. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_---- are strands of \_\_\_\_\_\_\_\_ wrapped around \_\_\_\_\_\_\_\_\_\_ molecules.**
8. **\_\_\_\_\_---- is actively involved in making \_\_\_\_\_ and in \_\_\_\_\_\_\_\_\_\_\_\_\_ itself.**

**LABEL this Diagram:**

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1. **The Cell Cycle---- \_\_\_\_\_\_\_\_\_\_\_ is a \_\_\_\_\_\_\_\_\_ that \_\_\_\_\_\_\_\_\_\_ nuclear material \_\_\_\_\_\_\_\_\_\_\_ between \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ cells.**
2. **\_\_\_\_\_\_\_\_\_\_\_ --- normal cell \_\_\_\_\_\_\_\_\_\_\_ take place. \_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_ are copied.**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_---- Chromatin becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Nuclear \_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_ disappear. \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ form.**
2. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_---\_\_\_\_\_\_\_\_\_\_\_\_ attach to spindle fibers and \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_.**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_---- Sister \_\_\_\_\_\_\_\_\_\_\_\_ (paired chromosomes) separate and \_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ of the cell.**
2. **\_\_\_\_\_\_\_\_\_\_\_\_\_---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ uncoil; spindle fibers \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_; the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_ membrane reappears. \_\_\_\_\_\_\_\_\_\_\_\_\_ membrane & \_\_\_\_\_\_\_\_\_\_\_\_\_\_ divides(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ).**

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1. **Mitosis is a \_\_\_\_\_\_\_\_\_\_\_\_ that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ genetic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Resulting in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_ new \_\_\_\_\_\_\_\_\_\_ with the \_\_\_\_\_\_\_\_\_\_ number of chromosomes as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cell.**