**Biology Unit 6 Calendar – Ch. 10: Cell Division & Ch. 11-4 Meiosis**

**November 7, 2013 – November 22 2013**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Monday | Tuesday | Wednesday | Thursday | Friday |
| 4  Study Guide for Ch. 9 | 5 (Sub)  Ch. 9 test | 6  Myth Busters Movie | 7  10-1 Notes  10-1 Section Review- **Due Friday!** | 8  TED-Ed Video and notes/discussion |
| 11  **NO SCHOOL**  **Veterans Day** | 12  Mitosis Poster  10-2 Section Review **Due Thursday!** | 13  Complete and **present Posters** | 14  Mitosis Lab | 15  Ch. 10 review  **Mitosis Lab Due!** |
| 18  Ch. 10 Quiz  Start Meiosis – Vocab and figure 11-15 | 19  TED-Ed Video and notes/discussion | 20  11-4 section review – **Due Tomorrow!** | 21  Chapter 11-4 Review | 22  Ch. 11 Quiz  **Unit 6 Packet Due!** |

\*\*All work not complete in class becomes homework. Homework can also be assigned randomly- does not have to be indicated on this calendar.

\*\* Read Chapter 10, sections 1-2 and Chapter 11 section 4 to keep up with class discussions and assignments.

**Participation Packet Grading Rubric:**

Unit calendar and Rubric \_\_\_\_\_\_\_\_/5 Points

Unit Notes \_\_\_\_\_\_\_\_/ 8 Points (2 points per page)

Daily Pages \_\_\_\_\_\_\_\_/ \_\_\_\_\_\_\_\_ Points (5 points per page)

Graphic Organizer \_\_\_\_\_\_\_\_/ 10 Points

Unit Study Guide \_\_\_\_\_\_\_\_/ \_\_\_\_\_\_\_\_ Points (1 point each)

Vocabulary (Ch. 10-11) \_\_\_\_\_\_\_\_/ 17 Points

**Total Points \_\_\_\_\_\_\_\_\_/**\_\_\_\_\_\_\_\_ **Points**

**Cell Division**

**Ch. 10 Notes**

When a living thing grows, what happens to its cells?

Living things grow by producing more \_\_\_\_\_\_\_\_\_\_\_; the cells of adults are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than those of a young person (just \_\_\_\_\_\_\_\_\_\_\_ of them)

Limits to Cell Growth:

Two reasons why cells divideinstead of continue to grow:

a) The larger a cell becomes, the more demands the cell places on its \_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) The more trouble the cell has moving enough nutrients and wastes across the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DNA Overload:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stores the information that controls a cell’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

When a cell is small, the DNA is able to meet all the cells needs

As a cell increases in size, it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ make extra copies of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

If cells continued to grow without limit = “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”

Why A Small Cell Functions Better Than a Larger Cell

Think of a library in a small town…

And the town has been constantly growing, but the library was not able to add more books?

If a cell continued to grow the amount of DNA it contained would not be enough to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Moving Materials

Food, Oxygen, Water & Waste enter/leave a cell through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a) The rate at which moving materials takes place depends on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the cell (total area of cell membrane)

b) The way the materials are used in the cell depends on its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ratio of surface area to volume:

Volume increases much more rapidly than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = the ratio of surface area to volume ­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

This causes problems with the movement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Maintaining volume to surface area is key for processes of the cell** to happen quickly and efficiently, and for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ movement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Division of the cell:

Before a cell gets WAY TOO big, it will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and form 2 “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” CELLS

This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Cell Division:

Before a cell divides:

a) It \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (copies) all of its DNA

b) Each “daughter” cell gets a complete set of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why it Divides:

a) Division keeps the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ratio appropriate

b) And allows for optimal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of molecules in, out and within!

**WHAT DO YOU KNOW NOW?!?!?!**

**Answer the following in complete these sentences, below the prompt/question in the space provided!!**

1.Cells divide because \_\_\_\_(2 reasons)\_\_\_\_\_\_.

2.It is not ideal for cells to increase in size because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3.(Pick one) Volume or Surface area increase more rapidly.

4.Just before division the cell must \_\_\_\_\_\_\_\_\_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

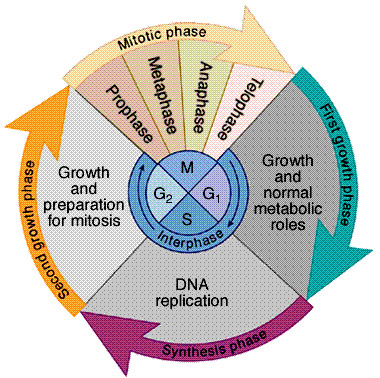
**The Cell Cycle:10-2**

During the cell cycle:

a) The cell grows

b) Prepares for division

c) Divides to form 2 daughter cells



Phases of the Cell Cycle

1. \_\_\_\_\_\_ Phase – Growth

2. \_\_\_\_\_\_ Phase – DNA Replication

3. \_\_\_\_\_\_ Phase – Prep for mitosis

a) G1, S, and G2 phases are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_\_\_\_ Phase – Cell Division (Mitosis)

Three reasons why cells reproduce:

1.

2.

3.