**Name**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period:\_\_\_\_\_\_\_\_\_

**Define the vocabulary and Latin roots for this unit before beginning.**

Mitosis reading:

<http://www.yourgenome.org/facts/what-is-mitosis>

Video:

<http://utah.pbslearningmedia.org/resource/tdc02.sci.life.stru.dnadivide/mitosis/>

1. What is mitosis?
2. What are the names of the phases?
3. What is happening in each stage?

I-

P-

M-

A-

T-

C-

1. Come up with an anagram to help you remember the stages. (For example, never eat shredded wheat would help you remember North, East, South and West.)
2. Why is mitosis important?

Chromosomes:

<http://www.yourgenome.org/facts/what-is-a-chromosome>

1. How does our DNA differ from bacteria?

Meiosis:

<http://www.yourgenome.org/facts/mitosis-versus-meiosis>

1. Compare and contrast mitosis and meiosis?

Watch video and read article:

<http://study.com/academy/lesson/meiosis-i-reductional-cell-division.html>

1. What type of reproductive strategies would these methods of division?

Sexual-

Asexual-

1. What is the purpose of crossing over? How does it make us genetically unique?
2. What are the phases of meiosis?
3. Why is it essential to go through the process similar to mitosis twice?
4. How is mitosis similar to cloning?

<http://www.sciencefocus.com/qa/can-two-people-have-same-dna>

1. What are the odds of having someone on this planet with the same DNA as you?
2. What is the most interesting think you learned from this?