

Grade 9-10

Distance Learning Module 9: Week of: June 1st - June 5th

Biology Level 2 - Modified from [Unit #4: Inheritance \(Meiosis and Comparing cell division\) into Mendel](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Mitosis is the form of cell division used for growth and cell replacement. Meiosis is the form of cell division that reduces the number of chromosomes in gametes for sexually reproducing organisms.

Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication

Vocabulary: cell division, mitosis, cytokinesis, chromatid, centromere, interphase, cell cycle, prophase, metaphase, anaphase, telophase, homologous, diploid, haploid, meiosis, tetrad, crossing-over, karyotype

Skills: Create models showing the processes of mitosis and meiosis.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Students will learn new vocabulary and add to understanding of the importance of the cell cycle	Take notes on Slideshow 1-8 in your notebook and submit the exit slip	Exit Slip
Tuesday: Overview of the process and steps of meiosis	Watch the Amoeba Sisters Meiosis video and complete the video recap (optional slides 9-25 also have steps outlined)	Hand in the video recap
Wednesday: Compare and Contrast Mitosis and Meiosis	Slides 27-29 Complete and Submit Venn diagram to compare and contrast mitosis and meiosis	Submitted Venn diagram (differences are outlined on slides, students need to add more than what is given and think of similarities) or

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
	Watch video to compare and add to Venn diagram	Summary worksheet with visuals
Thursday: Thinking critically about cell division	Analyze the GIF Answer the prompt on the discussion board and respond to one other student	Based on your observation of the How to Build a Human GIF What is being shown in this animation? Use vocabulary from class as much as possible in your response. Respond to at least one other persons observation with a question or point of your own. Don't get bogged down on the vocabulary you don't know- Check out the summary of events (lettered, below GIF)
Friday: Learn about karyotyping	Read over slides 35-40 for examples on what is a karyotype. Go to website and complete activity to diagnose 3 patients based on the karyotype generated	Hand in the completed online karyotype activity

Week criteria for success (attach student checklists or rubrics):

Successful completion of the daily assignments, accurate additions made to student models, and completion of the weekly check-in assignment.

Supportive resources and tutorials for the week (plans for re-teaching):

- ☐ Video chats with the teacher to answer questions.
- ☐ Pre-recorded instructional videos from the teacher
- ☐ Textbook 11-4
- ☐ YouTube Playlist of Meiosis Videos: posted in Google classroom
- ☐ Mitosis and Meiosis Quizizz – link posted in Google classroom