AP BIOLOGY
GENE TO PROTEIN UNIT
LEARNING SEQUENCE

Review:

Unit Test: TBD (Recuperation will only be available IF you have all items in the sequence complete BEFORE the test date).

Readings and Resources:

1. Read Chapter 13, take notes. Turn in on Classroom (TIOC)
2. Read Chapter 14 - Mostly Review - Take Notes (TIOC)
3. NPR Article to Check Out
    a. If you're interested, this was the outcome.
4. Crisper Article - We're living in the future people!
5. Wait…a pig heart….what about rejection?
    a. Quick read, think back to the immune system, what would need to be altered in order for the body to accept a porcine organ? What would happen if it was unaltered and which cells would be responsible?
6. DNA: The Secret of Life - If you haven't watched this you might want to!

Timing to be determined by you

Individual (Started as) Class Work:

1. Watson and Crick Website Introduction. Turn in on Paper (TIOP)
    a. Paper Sheet to Turn In!
2. Polished HC or AMM Website Construction (Due Monday 2/5 Share Link, turn in on Classroom (TIOC)
3. Watch
    a. Protein Synthesis - Take Notes
    b. Protein Synthesis lecture video, It's me, hi.
        i. PPT
4. Complete online Protein Synthesis Race. Google Classroom
    a. Prove with screenshots. TIOC.
    b. Prizes for 1st, 2nd, and 3rd fastest times.
5. Watch Mutations lecture video, take notes. TIOC Me again….
    a. PPT
6. Complete Mutations Activity (posted in classroom). TIOC. This can be done on paper if you want, but then scan it and upload it to the classroom for submission. Google Classroom
    a. Don't attempt until you truly understand protein synthesis and have read about different types of mutations.
    b. Doing this online with the aid of "Align" is going to make your live a lot easier…..
7. DNA Technologies Exploration - Turn in on classroom
8. Restriction Enzymes and You: An Exploration….

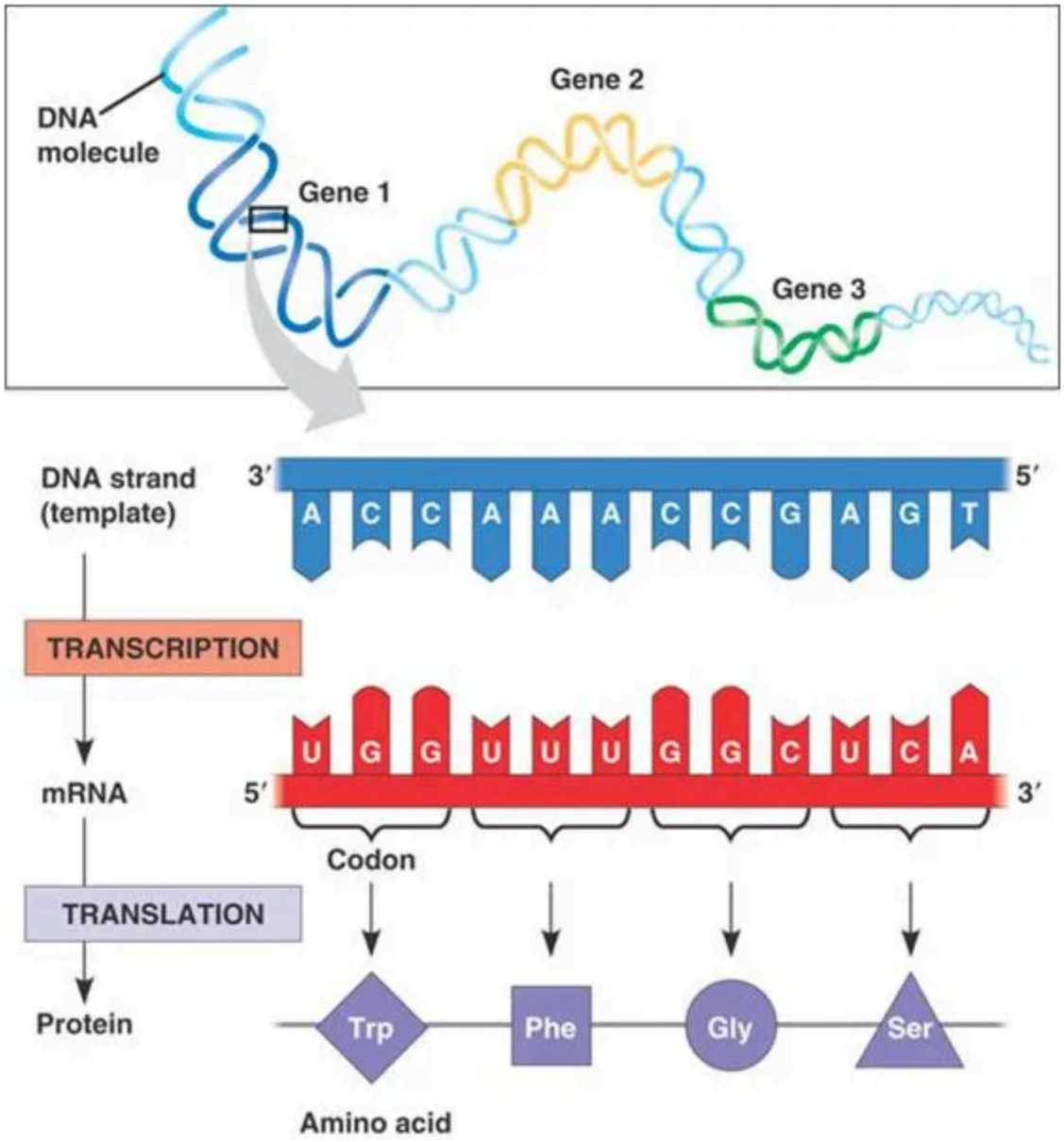
In Class/Group Work

1. Complete worksheet for your partner's website. Get them a copy and turn one in on Classroom. **BY... Final draft due to me _____ after peer edit revision.**
    a. AMM Worksheet
    b. HC Worksheet

2. Lab Synopsis:
    a. Dyephoresis - Practice but add it to LNB
        i. Dyephoresis Questions - LNB
    b. Product for Electrophoresis - TBD **LNB and Full Lab synopsis due,**
    c. **Focus Question**
        i. **Do different restriction enzymes really digest DNA differently?**

PA:
Gene to Protein PA - Paper Based

AAA:
Unit Test
AMM HC Website
Restriction Enzyme Lab Synopsis (Due Date to be determined)


DNA molecule
Gene 1
Gene 2
Gene 3
DNA strand (template)
3′
5′
A C C A A A C C G A G T
TRANSCRIPTION
mRNA
5′
3′
U G G U U U G G C U C A
Codon
TRANSLATION
Protein
Trp
Phe
Gly
Ser
Amino acid