

AP Biology Practice 2 – Using Mathematics

Video Review Sheet

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NEED YOUR CALCULATOR!!!

A. All sciences have what at their core?

B. What is “Mathematical Biology” driven by:

1. _____: sequencing DNA – what is the trend?
2. _____ Theory: being used to predict
3. Computing _____: computers are getting
4. Laboratory experiments in silico:
 - a. In vitro:
 - b. In vivo:
 - c. In silico: simulating

C. Four equations in the four big ideas: want to be familiar with these

1. Evolution:
2. Free energy:
3. Information:
4. Systems:

D. Understandings in Using Mathematics:

1. _____ the _____ of a Mathematical Routine: Pause video, try and do it and then check it. You should do this one no problem. Show your work below
2. Apply _____ Routines: Again, try this problem, showing your work below. I think you can do this one based on common sense!
3. _____ quantities that _____ natural phenomena.
 - a. You can absolutely do this, show work.
 - b. Potatoes: you can do this too! _____ M Sucrose