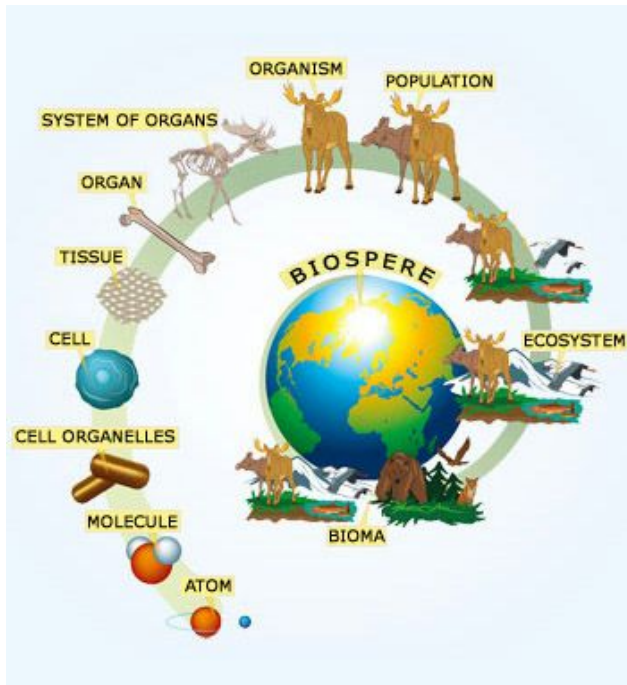


Name: _____ Date: _____

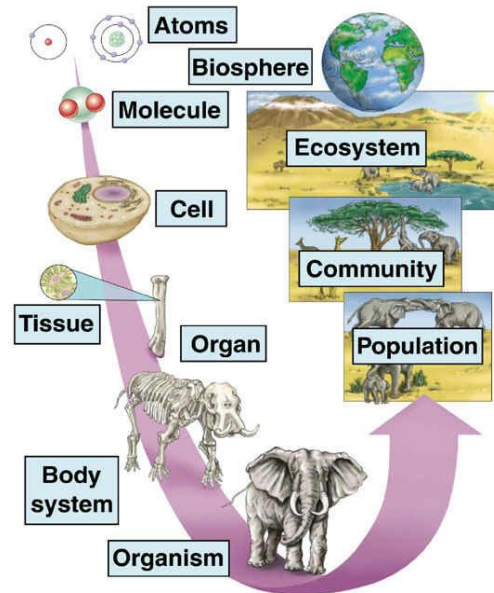
AP Biology Chapter 1 Review

Key Questions

1. Did you watch David Christian's TED Talk and highlight some of his key points?
 - a. Second Law of Thermodynamics
 - b. Creating increasing complexity
 - c. Goldilock's Conditions
 - d. Threshold moments
 - e. Big History Timeline
 - f. Collective Learning
2. Did you review the Big History Project Website?
3. Do you know what makes something living? Can you identify those characteristics, specifically?
4. Can you arrange living things into manageable levels of organization? (i.e. Life's Hierarchy)



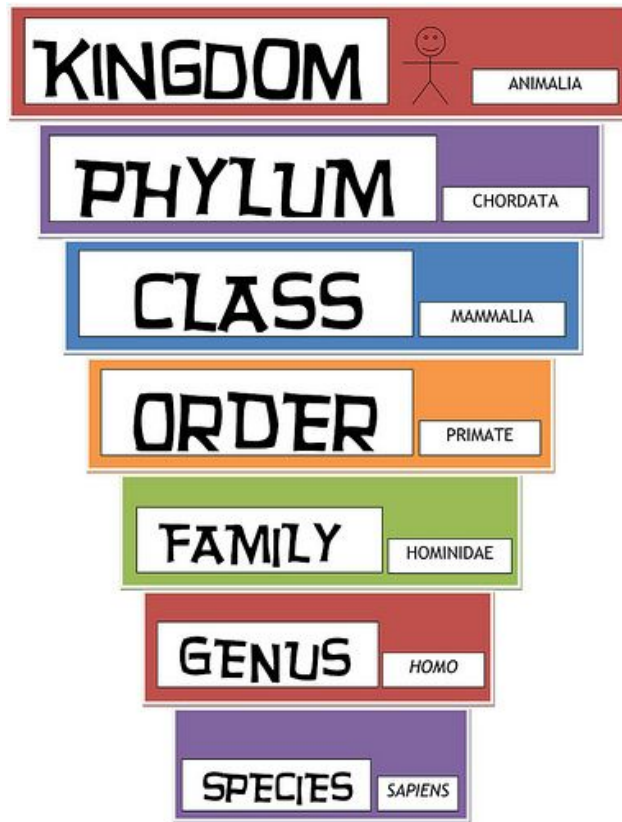
Raven/Berg, Environment, 3/e
Figure 4.1



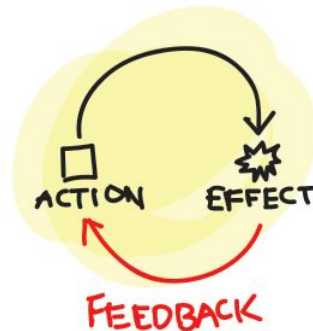
Harcourt, Inc.

5. Do you know the difference between eukaryotes and prokaryotes?

6. Do you know how living things are classified through taxonomy?

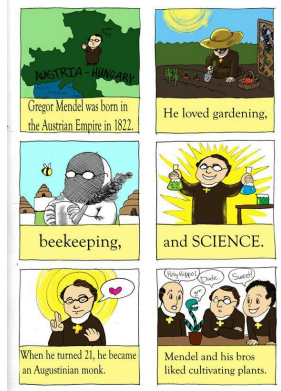


7. Could you identify the three domains of life?
8. Are you able to explain the concept of emergent properties?
9. Do you understand feedback mechanisms? Can you explain it and/or highlight examples?



10. Why is evolution an underlying concept within the study of biology?
11. What's the difference between discovery science and hypothesis based science?
12. Can you identify appropriate scientific methodology?

13. Do you understand Mendel's Work and how it highlights the limits of scientific theories?



14. Do you know who Phoebe Levene, Erwin Chargoff, Rosalind Franklin, James Watson and Francis Crick are? Do you know how they contributed to science and how they are connected with each other?

15. Are you comfortable with dimensional analysis? (Metric unit conversions)

List of the Metric Prefixes

Prefix	Symbol	Numerical	Exponential
yotta	Y	1,000,000,000,000,000,000,000,000,000	10^{24}
zetta	Z	1,000,000,000,000,000,000,000,000	10^{21}
exa	E	1,000,000,000,000,000,000,000	10^{18}
peta	P	1,000,000,000,000,000,000	10^{15}
tera	T	1,000,000,000,000,000	10^{12}
giga	G	1,000,000,000	10^9
mega	M	1,000,000	10^6
kilo	k	1,000	10^3
hecto	h	100	10^2
deca	da	10	10^1
no prefix means:		1	10^0
deci	d	0.1	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}
micro	μ	0.000 001	10^{-6}
nano	n	0.000 000 001	10^{-9}
pico	p	0.000 000 000 001	10^{-12}
femto	f	0.000 000 000 000 001	10^{-15}
atto	a	0.000 000 000 000 000 001	10^{-18}
zepto	z	0.000 000 000 000 000 000 001	10^{-21}
yocto	y	0.000 000 000 000 000 000 000 001	10^{-24}