Chpt. 2 - Evolution: Change Across Time

Homework	/Activities
----------	-------------

•	Engage: Lucy (p.37)	Due:	
	Process and Procedures #1-2		
	Analysis #1-2		
•	Explore: Modeling the Earth's History (p.	38) Due:	
	Process and Procedures: Separate Handout		
	Analysis: Separate Handout		
•	Explore/		
	Explain: Evidence for Change Across Tim	e (p.41) Due:	
	Process and Procedures: per teacher instructi	ons	
	Procedures for the Specialists: per teacher in	structions	
•	Explain: Explaining Evolution (p.50)	Due:	
	Process and Procedures: teacher led discussion	on	
	Analysis #1-2		
•	Elaborate: Modeling Natural Selection (p.52	2) Due:	
	Process and Procedures: per teacher instructi	ons	
	Analysis: per teacher instructions		
•	Evaluate: Evolution in Action (p.58)	Due:	
	Process and Procedures #1-2		
	Analysis #1-2		
	Further Challenges #2-3		

Concepts/Topics

- Geologic time scale: 4 major eras; mass extinctions
- Evidence of evolution: Fossils, Morphology, Embryology, Biochemistry
- Dating fossils relative dating (superposition), radiometric dating
- Fossils sedimentary rock, petrified fossils, molds/casts, frozen, amber
- · Holes in the fossil record
- Morphology: homologous, vestigial, and analogous structures
- Traits: variations vs. adaptations (mimicry, camouflage)
- Lamarck, Darwin (acquired traits vs. natural selection); Artificial selection
- Natural selection; Fitness (survive, reproduce)
- Gene pool; Evolution: populations, *not* individuals
- Convergent evolution, divergent evolution, adaptive radiation, coevolution

Chpt. 2 - Evolution: Change Across Time

Homework/Activities		
• Engage: Lucy (p.37)	Due:	
Process and Procedures #1-2		
Analysis #1-2		
• Explore: Modeling the Earth's History (p.33	8) Due:	
Process and Procedures: Separate Handout		
Analysis: Separate Handout		
• Explore/		
Explain: Evidence for Change Across Time	(p.41) Due:	
Process and Procedures: per teacher instruction	ns	
Procedures for the Specialists: per teacher instructions		
• Explain: Explaining Evolution (p.50)	Due:	
Process and Procedures: teacher led discussion	1	
Analysis #1-2		
• Elaborate: Modeling Natural Selection (p.52)	Due:	
Process and Procedures: per teacher instruction	ns	
Analysis: per teacher instructions		
• Evaluate: Evolution in Action (p.58)	Due:	
Process and Procedures #1-2		
Analysis #1-2		

Concepts/Topics

- Geologic time scale: 4 major eras; mass extinctions
- Evidence of evolution: Fossils, Morphology, Embryology, Biochemistry
- Dating fossils relative dating (superposition), radiometric dating
- Fossils sedimentary rock, petrified fossils, molds/casts, frozen, amber
- · Holes in the fossil record

Further Challenges #2-3

- Morphology: homologous, vestigial, and analogous structures
- Traits: variations vs. adaptations (mimicry, camouflage)
- Lamarck, Darwin (acquired traits vs. natural selection); Artificial selection
- Natural selection; Fitness (survive, reproduce)
- Gene pool; Evolution: populations, *not* individuals
- Convergent evolution, divergent evolution, adaptive radiation, coevolution