

#	<h2 style="text-align: center;">Evolution</h2> <p style="text-align: center;">Read each statement, decide whether it is True or False based on the bold word(s). If the statement is False record the correct word in the corrections box.</p>	T/F	Correction
Darwin & Natural Selection			
D1	Evolution acts on individuals and changes their allele frequency.		
D2	Charles Darwin gathered evidence for his theory of natural selection, published in the Origin of Species while sailing the world and visiting the Seychelles Islands .		
D3	Darwin's theory of natural selection sometimes is referred to as survival of the smartest .		
D4	The fuel for selection is Captain Crunch .		
D5	The fuel (see above) is generated through random mutation .		
D6	Limited resources and more being born than can survive generate competition		
D7	The favorable characteristics that aid in survival are referred to as vestigial structures .		
D8	When medium colored moths are favored by selection this form of pressure is considered stabilizing .		
D9	The Dodo bird failed to adapt to European's taste for chicken-like food. This resulted in their inevitable adaptation .		
D10	Alfred Wallace proposed a similar theory to Darwin, which is what forced him to publish.		
D11	Kettlewell grew peppered moths in his laboratory to mark and release in the wild. He found that selection favored dark colored moths in the country .		
Evidence for Evolution & Fossil Record			
FR1	The fossil record demonstrates that as organisms evolve they continue to get less complex over time.		
FR2	The arm of a human, wing of a bat, and flipper of a dolphin are all vestigial structures .		
FR3	A couple of examples of transition forms are a horse with "extra" toes and whales with legs.		
FR4	A sample of owl vomit from the Galapagos tests to have only 1/16 of its Carbon-14 (half-life 5730yrs) left. That indicates it is almost 46,000 years old (45,840).		
FR5	You find a fossil of a kangaroo two feet lower than a human skull in sedimentary rock. From this you know that the kangaroo lived after the human specimen.		
FR6	The phylogenetic tree below shows that pine trees are most distantly related to sassafras .		
FR7	The phylogenetic tree below shows gradualism because the changes occur slowly over time .		

	Population Genetics							
PG1	All of the genes in a population are called the genome .							
PG2	Tom the turkey cannot evolve, but his flock can .							
PG3	Genetic drift is the result of random changes in the allele frequency of a population that generally occurs in small populations.							
PG4	If a huge earthquake were to split California off from the rest of the U.S. it would create a lot of reproductive isolation of populations when the ocean flooded in.							
PG5	A species is any group of individuals that can interbreed and create viable offspring .							
	Vocabulary Used During the Unit							
	Match the vocabulary word with the definition, not all will be used.							
1	Mutation	13	Sexual Isolation	25	Theory		A structure that shows two species shared a common ancestor.	
2	Gene pool	14	Geographic Isolation	26	Law		An explanation of something backed up by lots of evidence.	
3	Natural selection	15	Fossil	27	Hypothesis		The dude that gets credit for natural selection even though someone else figured it out too.	
4	Charles Darwin	16	Radioactive Dating	28	Phylogenetic Tree		Slow and steady change over time	
5	Alfred Wallace	17	Relative Dating	29	Variation		Selective pressure that favors intermediate forms over extremes.	
6	Bernard Kettlewell	18	Carbon-14	30	Population		An educated guess about something.	
7	Limited Resources	19	Transition Form	31	Species		A branching diagram that shows how species are related to each other.	
8	Competition	20	Vestigial Structure	32	Gradualism		Left over instructions for parts that no longer exist in the adult organism.	
9	Genetic Drift	21	Homologous Structure	33	Punctuated Equilibrium		A change in the DNA of an organism, example is an albino deer.	
10	Gene Flow	22	Embryological Patterns	34	Direction Selection		Any trace of a once living organism.	
11	extinction	23	Speciation	35	Disruptive Selection		When two populations accumulate more and more differences.	
12	Adaptation	24	Divergence	36	Stabilizing Selection		When individuals from a normally isolated population add their genes to the pool.	
	Survival of the fittest, more adapted organisms pass on more of their genes.						This happens when ecological races develop too many differences with each other.	
	Using position in rock layers or reference organisms to tell the age of something.						A favorable characteristic that aids in survival or reproduction.	
	Evolution that shows little change followed by brief periods of rapid change.						Has a half-life of 5730 years.	
	Describes a relationship that has always been found to be true.						Happens when a species is no longer able to adapt to changes.	