

Heredity and Environment Worksheet

Chart 1. Before Reversal

	Seeds in Light		Seeds in Dark	
	Green	Albino	Green	Albino
Number				
Ratio of Green:Albino				

Chart 2. After Reversal

	Seeds in Light (original "dark")		Seeds in Dark (original "light")	
	Green	Albino	Green	Albino
Number				
Ratio of Green:Albino				

Questions

1. If the parents of the tobacco seeds used in this experiment were heterozygous for albino (green being dominant), what ratio of green to albino would you expect in this generation of tobacco plants? Did the expected ratio result? In the light? In the dark?

2. How do you explain what happened when you reversed the environmental conditions?

3. Defend which is most important for tobacco seedlings—its heredity or its environment. Use your data to help defend your answer.