peppered moth lab answer key

Peppered moth lab answer key is an essential resource for students and educators alike, particularly in the fields of biology and environmental science. This lab exercise typically focuses on the study of natural selection using the peppered moth (Biston betularia) as a model organism. Through this experiment, participants can observe how variations in coloration affect the survival of these moths in different environments, particularly during the Industrial Revolution in England. This article will delve into the significance of the peppered moth, the methodology of the lab exercise, the key findings, and the implications for understanding evolutionary principles.

The Significance of the Peppered Moth

The peppered moth is a striking example of natural selection and evolutionary change. Before the Industrial Revolution, the majority of peppered moths were light-colored, which allowed them to blend in with the lichen-covered trees in their natural habitats. However, as industrial pollution killed off the lichens and darkened the trees with soot, a previously rare dark-colored variant of the moth became more prevalent. This phenomenon provides a clear illustration of how environmental pressures can influence which traits are favored in a population.