

## THE MAKING OF A THEORY—FACT OR FICTION

### INTRODUCTION

The film *The Origin of Species: The Making of a Theory* tells the story of the epic voyages of two British naturalists, Charles Darwin and Alfred Russel Wallace. You have likely heard about Darwin, author of *On the Origin of Species*, but what about Wallace? Both Darwin and Wallace independently made observations and gathered key evidence during their voyages, which led them to formulate similar ideas about evolution by natural selection at about the same time.

This activity will require you to evaluate eight statements related to Darwin’s and Wallace’s work. Before you watch the film, discuss each statement with a partner and circle **T** for any statement you think is true and **F** for any statement you think is false in the table labeled “Before Watching the Film.” Record your reasoning for making that particular choice, including whether you just made a guess. (It’s okay to guess.) As you watch the film, record any evidence or information pertaining to each statement in the table labeled “After Watching the Film.” After you finish watching the film, discuss the statements once more with your partner and circle either **T** or **F** for each.

### Before Watching the Film

T / F	1. Most people living around Darwin and Wallace’s time, including most scientists, believed in special creation—meaning that God created each species on Earth in its present form. Reasoning: _____
T / F	2. Before he set sail on the HMS <i>Beagle</i> , Darwin was training to be a minister. He was asked to join the voyage to be of company to the <i>Beagle</i> ’s captain. Reasoning: _____
T / F	3. The observation that fossils of extinct organisms are found where similar organisms live today can be explained by the fact that species don’t change over time. Reasoning: _____
T / F	4. Darwin was eager to share his ideas about evolution with the rest of the world, so he wrote and published his book, <i>On the Origin of Species</i> , in just two years after returning from his voyage on the HMS <i>Beagle</i> . Reasoning: _____
T / F	5. The observation that the more similar two species are, the closer they tend to live geographically is evidence that species descend from other species. Reasoning: _____
T / F	6. The finger bones inside manatee and whale flippers are evidence that these living species are modified forms of older species. Reasoning: _____
T / F	7. Darwin and Wallace made observations of the natural world, including that individuals within a species have variations that affect how well they compete for limited resources. Reasoning: _____
T / F	8. Darwin and Wallace used DNA evidence to support their ideas about evolution and how species are related. Reasoning: _____

**After Watching the Film**

T / F	1. Most people living around Darwin and Wallace's time, including most scientists, believed in special creation—meaning that God created each species on Earth in its present form. Evidence/information: _____ _____
T / F	2. Before he set sail on the HMS <i>Beagle</i> , Darwin was training to be a minister. He was asked to join the voyage to be of company to the <i>Beagle's</i> captain. Evidence/information: _____ _____
T / F	3. The observation that fossils of extinct organisms are found where similar organisms live today can be explained by the fact that species don't change over time. Evidence/information: _____ _____
T / F	4. Darwin was eager to share his ideas about evolution with the rest of the world, so he wrote and published his book, <i>On the Origin of Species</i> , in just two years after returning from his voyage on the HMS <i>Beagle</i> . Evidence/information: _____ _____
T / F	5. The observation that the more similar two species are, the closer they tend to live geographically is evidence that species descend from other species. Evidence/information: _____ _____
T / F	6. The finger bones inside manatee and whale flippers are evidence that these living species are modified forms of older species. Evidence/information: _____ _____
T / F	7. Darwin and Wallace made observations of the natural world including that individuals within a species have variations that affect how well they compete for limited resources. Evidence/information: _____ _____
T / F	8. Darwin and Wallace used DNA evidence to support their ideas about evolution and how species are related. Evidence/information: _____ _____