

Answer Sheet

How long ago?	Event
4.56 Billion Years Ago	Planets Form: All of the planets in the solar system form.
4.5 Billion Years Ago	Formation of the Moon: Earth was hit by a planetary body half Earth's width! Debris blown into space around Earth formed our Moon.
4.5 Billion Years Ago	Oldest Moon Rocks: The Moon's magma ocean cooled, allowing a crust to form. Apollo Astronauts collected Moon rocks from some of this ancient crust.
4.4 Billion Years Ago	Earliest Remnants of Earth's Crust: Tiny zircon grains within sedimentary rocks of the Jack Hills of Western Australia formed about this time. These zircon grains are the remnants of some of the Earth's oldest crust.
4.2 Billion Years Ago	Earth's Early Atmosphere and Oceans: Volcanos spewed gases — including water vapor and carbon dioxide— into the atmosphere. When the Earth's surface cooled down enough the water vapor condensed as liquid water to form our oceans.
3.5 Billion Years Ago	Lunar Volcanism Winds Down: While the Moon has been geologically inactive for many millions of years, the youngest volcanic flows are about 1 billion years old.
3.0 Billion Years Ago	Earth's Moon Becomes Geologically Inactive: Okay, except for occasional volcanism . . .
1.5 Billion Years Ago	Oldest Rocks in the Grand Canyon: In the last 10 million years or so, the Colorado River has cut a 1.5-kilometer-deep channel into Earth's crust, slicing through almost 1.5 billion years of geologic history. These oldest rocks, exposed at the bottom of the Grand Canyon, provide geologists with evidence of ancient environments and events.
100 Million Years Ago	Tycho Crater Forms on the Moon: The edges of this small crater are sharp indicating that it is a recent – or young crater on the Moon.
65 Million Years Ago	Asteroid Smashes Into Earth – Extinction of Dinosaurs: When the dinosaurs went extinct, mammals increased in number and type.
About 200,000 Years Ago	<i>Homo sapiens</i> (Modern Humans) First Appear: Hominids (upright human ancestors) appear in the fossil record a couple of million years earlier.
40–50 Years Ago	One Giant Leap for Mankind: On July 20, 1969, Neil Armstrong was the first human to set foot on the lunar soil of our Moon.