<u>CHAPTER 2</u> BEFORE THE BEGINNING

And the earth was formless and void, and darkness was over the surface of the deep; and the Spirit of God was moving over the surface of the waters.

Genesis 1:2

Cosmologists are scientists who study the Universe as a whole entity. That is, they look for the big picture -- the overall patterns of the Universe -- not simply at individual stars and planets. Many cosmologists believe that the Universe did not exist at all before its moment of birth in the Big Bang. In their view, the Universe-to-be was once total darkness and nothingness. Darkness, nothingness, emptiness, and total void are difficult concepts to grasp. Space and time are simply not meaningful concepts before the instantaneous birth of the Universe.

IS THERE A DESIGN?

There is a view held by some cosmologists called the theory of the *Pulsating* or *Oscillating Universe*. This theory holds that the Universe eternally oscillates between expansion, starting with a Big Bang, and contraction, resulting in a *Big Crunch*. In the Big Crunch, all matter in the Universe is squashed together in a fiery apocalypse due to gravitational attraction. This could result in either a meltdown or, as the proponents of the oscillating Universe suggest, another Big Bang.

In either case, all matter would be destroyed in a furnace of unimaginable heat. The cremation of the world would leave no ashes. Would another Universe, either past or future, have the same physical properties as ours? Many scientists feel that matter would have vastly different chemical, nuclear, electrical, and gravitational properties in either past or future universes. Even a small change in