Day 2
THE ATMOSPHERE IS DESIGNED FOR LIFE

The Earth is just the right size
The Earth is just the perfect size for supporting an atmosphere. Any smaller and, like Mars, our gravitational field wouldn't be able to hold it. Any larger, like Saturn, and the gravitational field would also retain gases such as hydrogen and helium making it unbreatheable.

Earth’s atmosphere has just the right combination of gases
Carbon dioxide levels are at the appropriate amounts for human life. Too little would limit plant growth and would permit wild temperature swings. Too much and we would have a runaway greenhouse that would lead to toxic conditions.
We have just the right combination of gases to sustain life. Carbon dioxide and oxygen are in suitable supply while toxic gases are very minimal.
Oxygen is at the appropriate levels for human life. Too little and we couldn't breathe. Too much would become toxic and allow fires to burn out of control.

Our atmosphere is safe and nonvolatile due in large part to the gas that makes up the majority of our atmosphere. 78% of our atmosphere is composed of nitrogen, which is harmless for us because it is a relatively inert gas. This makes our atmosphere unique among planets.

The major component of the atmosphere that surrounds Venus is hydrogen sulfide.
Saturn’s lower cloud layers are thought to be composed of ammonium hydrosulfide. This salt is easily converted to hydrogen sulfide, an extremely poisonous gas.

The Earth has just the right atmosphere
Of all the planets in our solar system we are the only planet to have life and we are the only planet to have a transparent atmosphere. Recent research suggests that perhaps the requirements for life are the same as those required for allowing purposeful discovery of our planet and solar system.

Even a small change in the carbon levels in our atmosphere would cause it to become like Saturn’s moon, Titan, making it impossible to see out.