# Creation and Intelligent Design

Week 5 Third Stone from the Sun

> Greg Nordstrom Bruce Zupa

## The "Goldilocks Enigma"

#### Not too hot, not too cold... Just Right!

Paul Davies



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- Sun's interior burning at 20,000,000°C
  10% further away and we'd freeze to death
  10% closer and we'd burn up
- Earth's orbit about sun
  - Departs from straight line 1/9" every 18 miles

18 mile

- If 1/8", atmosphere would boil away
- If 1/10", too cold to support life
- We're just the right distance for life

Most amazing (and unexplainable):
Distance maintained for <u>as long as life has been here</u>

The consistency of earth's parameters (orbital diameters, atmospheric content, temperature variations, etc.) continues to baffle scientists

While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease. - Gen 8:22

18 miles

#### Moon

- 25% size of earth
- Freakishly large as moons go
- 240,000 miles away, causes our tides
- 20% closer, 35-50 ft waves twice a day
- Slightly farther, "tidal engine" fails and no life exists!
- The moon is *just the right distance* from earth
  - And has *maintained* that distance for as long as life has been on earth!

- Earth orbits the sun once per year
- What if it took two years?
  - Seasons too long and harsh for life
- What if it only took six months?
  - Seasons too short to grow enough food

Let there be lights in the firmament of heaven to divide the day from the night: and let them be for signs and for seasons, for days and for years.

- Gen 1:14

- Earth's average radius is 3963.19 miles
- Increase radius by ¼ mile (1320 feet, or 0.0063%)
  - Atmosphere too thin to support life
- Decrease radius by ¼ mile
  - Much of current landmass would be underwater
- That's like changing the radius of a 3-foot beach ball <u>less than the</u> width of one human hair!

Earth's diameter is *just right for life!* 

3962.94 mi (-¼ mile) 3963.19 mi 3963.44 mi (+¼ mile)



## Entropy

"The quantity of energy no longer available to do physical work."

- Entropy is a measure of d<sup>is</sup>o<sup>r</sup>de<sub>r</sub>
  - Systems tend to maximum disorder
  - i.e. entropy increases naturally

#### • Observations:

- Universe tends naturally toward disorder
- Things tend to decay, to become chaotic and random
- It takes energy to organize; disorganization happens naturally
- God put energy into His creation to give it order
  - *Erev* and *Boker* (evening $\rightarrow$ morning, chaos $\rightarrow$ order)
- Entropy is a powerful scientific argument against evolution

# No known examples of order coming from disorder given only random chance and large amounts of time

## Entropy in Action





## Entropy in Action



### Entropy in Action

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### The Anthropic Principle

Anthropic: adj. Of or relating to humans or the era of human life. American Heritage Dictionary

- Says the universe must have been fine-tuned very, very early in its lifetime
  - If any of various physical parameters had been only slightly different, then we could not be here!
- Cosmos extremely complex
  - Too complex to have "just happened"
- Universe appears to have begun from a carefully selected and balanced set of initial conditions

The universe appears to have been made **specifically to support human life!** 

### The Anthropic Principle

"The universe and laws of nature appear very finely adjusted... One can take this either as evidence of divine purpose in Creation and the choice of the laws of science, or as support for the strong anthropic principle."

> Dr. Stephen Hawking From his book, *"A Brief History of Time"*

"So many essential conditions are necessary for life to exist on our earth that it is mathematically impossible that all of them could exist in proper relationship by chance on any one earth at one time."

> Dr. A. Cressy Morrison Former President of the New York Academy of Sciences

### The Anthropic Principle

"The rules look as if they are the product of intelligent design. I do not see how that can be denied... To what purpose has God produced this design?... It would mean our own existence formed a central part of God's design."

> Paul Davies From his book, *"The Mind of God"*

### The Jehovah Principle

"Who has measured the waters in the hollow of His hand, measured heaven with a span and calculated the dust of the earth in a measure? Weighed the mountains in scales and the hills in a balance?"

- Isaiah 40:12

*"For You formed my inward parts; You wove me in my mother's womb. I will give thanks to You, for I am fearfully and wonderfully made; Wonderful are Your works, and my soul knows it very well ."* 

- Psalm 139:13,14