

NOTES PROMPTS FOR COSMOS – EPISODE VII: *The Backbone of Night*

“Imagine the possibilities available when you have a hundred billion galaxies each having a hundred billion suns”

1. The old neighborhood.

When Sagan learned stars were suns, his universe got much _____

Kids ask the darndest questions: What makes planets round (spherical) and can non-round worlds exist?

2. In Sagan’s tribesman’s soliloquy, he wonders if the stars are simply...

Which Greek goddess is associated with the name we still use for the home galaxy?

3. The Great Awakening

Sixth-century BC big new idea: The universe is _____

This idea was the first known conflict between...

Ionia: the isolated Greek island city-state where science was _____.

4. The first Ionian scientist was named _____.

Twenty-four centuries before Darwin, Anaximander concluded that life must have originated...

5. The water thief.

What had Empedicles discovered in the observations of the water thief?

6. Who carried this idea further, an ancient Greek scientist of the first order (from the marginalized town of Abdura)?

7. Pythagoras believed the laws of nature could be deduced by...

The first four regular geometric solids represented

The fifth was...

Plato expressed hostility toward...

8. The methods of scientific inquiry that began in Ionia were (advanced / diminished) by Pythagoras, Plato, and Aristotle.

The European Renaissance saw a reawakening of the ideas and processes of

__Thales, Anaximander, and Democritus

__Pythagoras, Plato, and Aristotle

9. Copernicus did not acknowledge Aristarchus in *On the Revolution of Heavenly Orbs*. Was Copernicus aware of Aristarchus' work?

10. An experiment to determine how far away the stars are was first conducted by

11. Planet hunting.

One way to see if there are planets around a distant star is to obscure the light of the star. The other (and currently more effective) method is to...