

*“The Cosmos on the Table”*

Whence come most of those elements on the periodic table? How many derive from the Big Bang?

Why is hydrogen especially significant to humankind? What is the second most abundant element?

What element appears in more kinds of molecules than the sum of all other molecules combined?

Whence comes oxygen? Sodium? What should we know about titanium? Aluminum? Iron? Gallium? Technetium?

How did phosphorus get its name? What about selenium, cerium, palladium, mercury? What do we remember about the significance of iridium?

What is the Kuiper belt?

*“On Being Round”*

Why is the sphere the most likely of all natural shapes? What causes spheres?

How spherical is Earth? What does Tyson say about our ocean trenches and our tallest mountain with regard to our sphere?

Why are Mars mountains much taller than Mount Everest?

What is the Roche lobe? What does it tell us about binary stars? What happens when one of the binary stars becomes a red giant?

How is the Milky Way shaped? Why? Why is it not spherical?

What are oblate spheroids and prolate spheroids? Where do we find them?

What are pulsars? Where do they come from? Why are they the perfect spheres? How quickly do they move?

See p. 145: “When you combine Einstein’s relativity and the velocity of light and the expanding universe and the spatial dilution of mass and energy as a consequence of that expansion, there is a distance in every direction from us where the recession velocity for a galaxy equals the speed of light. At this distance and beyond, light from all luminous objects loses all its energy before

reaching us. The universe beyond this spherical 'edge' is thus rendered invisible and, as far as we know, unknowable." What does that mean?

*"Invisible Light"*

How do we know about invisible light? What is infrared light? Ultraviolet light? What are gamma rays? Microwaves? Radio waves? Who is Roy G. Biv?

What is the difference amongst all these types of light?

Are all telescopes the same? How do you know?