

- I. General Topics
 - A. The Movie
 - 1. Know the characters
 - 2. Know the events
 - 3. Know the planets, Gargantua, wormhole
 - 4. Dust Bowl and Blight and Other Disasters
 - B. The Science
 - 1. Gargantua - features
 - 2. Wormhole
 - 3. Visualization
- II. Physics
 - A. Classical Physics
 - 1. Newton's physics
 - a. Gravitation
 - b. Escape Velocity
 - c. Halley's Comet
 - d. Gravitational Slingshot
 - 2. Electromagnetism
 - a. Electromagnetic waves
 - b. Visible Light and other relevant wavelengths
 - c. Doppler Effect
 - d. Spectral Lines
 - 3. Optics
 - a. Reflection, Refraction, Snell's Law, Apparent Depth of objects
 - 4. Thermal physics
 - B. Relativity
 - 1. Time Dilation
 - 2. Gravitational Redshift
 - 3. Spacetime
 - 4. General vs Special
 - 5. Tidal Gravity, Ocean Tides
 - 6. GPS
 - 7. Gravitational Lensing, Einstein Ring, Multiple images
 - 8. Time-like geodesics and null geodesics
 - 9. Embedding Diagram
 - C. Astronomy
 - 1. The Universe
 - a. Size, age, number of objects
 - b. Major galaxies
 - c. Milky Way
 - d. Solar system
 - 2. Telescopes - Optical, Radio, Hubble, Webb
 - 3. Stellar evolution
 - a. White dwarfs, neutron stars, black holes, IMBHs

4. Space Exploration
 - a. Sputnik, Mercury, Gemini, Apollo, Artemis
 - b. Voyager, Pioneer, Mariner, Cassini, New Horizons
 - c. Space Stations, Mars Rovers
 5. Interstellar Travel
- D. Black Holes
1. History
 2. Quasars, Jets
 3. Shadow
 4. Accretion disks
 5. Event Horizon
 6. Spinning vs non-spinning
 7. Space Dragging
 8. Shell of Fire
- III. People
- A. Isaac Newton
 - B. James Clerk Maxwell
 - C. Albert Einstein
 - D. Karl Schwarzschild
 - E. Roy Kerr
 - F. Max Planck
 - G. Niels Bohr
 - H. Marie and Pierre Curie
 - I. Sir Arthur Eddington
 - J. Robert J. Oppenheimer
 - K. Chandrasekhar
 - L. Edwin Hubble
 - M. John Wheeler
 - N. Richard Feynman
 - O. Donald Lynden-Bell
 - P. Stephen Hawking
 - Q. Kip Thorne
 - R. Chris Nolan
 - S. Jonah Nolan
 - T. Paul Franklin
 - U. Professor Brand, Cooper, et al.
 - V. Edmunds, Miller, Mann
 - W. Endurance, Ranger