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| Topic | Notes |
| Timeline of the Big Bang | * Universe started as hot, dense ball – known as cosmic egg/primordial atom   + Protons, electrons & neutrons formed * Dark ages – no stars, matter & atoms (gas) * Hydrogen fusion 🡪 heavier elements 🡪 stars 🡪 galaxies * Universe today is currently expanding * Future Predictions:   + Universe expands 🡪stars die out 🡪 too cold for life   + Kaboom! Andromeda galaxy is eventually colliding with ours   + Gravity is going to collapse the universe |
| Lemaitre | * Universe is expanding * Priest – work accepted * He came up with the idea of the cosmic egg/primordial atom and that the universe is expanding * Use red shift to provide evidence for the expansion of the universe |
| Hubble | * Universe was expanding * Hubble constant (H=V/D) – find the rate at which the universe expands * First to show existence of other galaxies * Calculations incorrect, however formula right – not accepted * Supported by Doppler effect (light – red shifts) |
| Wilson/Penzias  COBE- Smoot  Background Radiation | * NASA research project ECHO – create longer transmissions of radio waves * Stumbled upon background radiation * To create the universe background radiation map through the cosmic background explorer * When look at the background radiation map really looking at past and this shows there was radiation/heat left over from an explosion (KABOOM!!!) |