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| Topic | Notes |
| Timeline of the Big Bang | * Beginning 10 billion degrees Fahrenheit
* 13.8 billion years ago – age of universe
* Started as a cosmic egg/primordial atom/primeval atom – hot/dense matter
* Inflation stage – expanding, no stars
* Gravity, hydrogen fusion 🡪 get heavier elements, stars/galaxies form
* Future:
	+ Andromeda Galaxy collides with our galaxy
	+ Stars burn out in 100 trillion years
	+ Universe can
		- Gets too cold
		- Keep expanding
		- Gravity can cause it to collapse
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| Lemaitre | * Theory of expansion
	+ Hubble’s Law
	+ Relationship between speed and light
	+ Did not calculate universe expanding correctly
	+ Not fully accepted at time due to incorrect calculations
	+ Believed in cosmic egg 🡪 expanding out
	+ Universe had no sides, never ending
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| Hubble | * Universe is expanding
* Identified distance of galaxies versus speed they were moving
	+ Created a formula- it finds the rate at which the universe expands
* Red shift
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| Wilson/PenziasCOBE- SmootBackground Radiation | * NASA project called ECHO- create longer transmissions of radio waves
* Accidentally find background radiation
* Used COBE to create the background radiation map
* The map created is really looking back in time since it takes so to reach us (looking at early universe)
* Helps show universe is cooling off
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