

Questions on the Evidence for the Big Bang Presentation

Answer the following questions during the presentation on Basic Astronomy.

1. What is the big advantage of the Big Bang model? (slide 2)
Explains three things at once
2. What is red shift? (slide 3) **Increase in wavelength for light from distant galaxies**
3. What did Hubble plot? (slide 4) **Velocity of galaxy (from red shift) against distance**
4. What do Hubble's original data show? (side 5) **Rough straight line**
5. What is the main implication of Hubble's law? (slide 6) **Universe had a start**
6. What does the Hubble constant tell us? (slide 6) **Age of the universe**
7. Is there any empty space for galaxies to expand into? (slide 7)
No, space is expanding
8. When did Penzias and Wilson win the Nobel Prize? (slide 8) **1978**
9. What type of wave makes up the cosmic background now? (slide 9) **Microwaves**
10. What was the early universe filled with? (slide 9) **Electrically charged particles**
11. When did atoms form? (slide 9) **380,000 years into history**
12. What fraction of the universe is made from helium? (slide 10) **24%**
13. How do stars make helium? (slide 10) **Fusion (joining) of hydrogen atoms**
14. What happened in the first three minutes of the universe? (slide 10)
Fusion throughout the whole universe
15. What has the universe done over history? (slide 11) **Evolved**