A. Goodison

Watch the video and answer the following questions:

Name of video on youtube: "The Big Bang, Cosmology part 1: Crash Course Astronomy #42" by CrashCourse. Link: <u>https://www.youtube.com/watch?v=9B7Ix2VQEGo</u>

- 1. 2:10 Astronomer Vesto Slipher observed that galaxies were red shifted. What does redshift mean in terms of galaxies? (are they moving **away** from us or **towards** us)
- 2. 2:55 Einstine thought that the universe was static (unchanging). Did Georges Lemaitres agree or disagree? Did he propose that the size of the Universe was getting bigger or smaller? Circle the correct answers.
- 3. 3:20/3:40 Fill in the blanks relating to the work of Edwin Hubble and Milton Humason. "When they compared distances to the redshifts Slipher observed, they found that the ______ away the galaxy was, the ______ it was moving away from us.
- 4. 4:05 From the observations of the galaxy's we can conclude that the universe is ______ (expanding or contracting)
- 6. 5:10 As all of the energy in the universe was squeezed into one place, would this mean the early universe was very _____? (hot **or** cold)
- 5:14 When the universe was a tiny dot it would have been "unimaginably hellishly hot". Then, for some reason, it suddenly _______ violently and started ______ (expanded or contracted, warmed or cooled)

8. 6:05 How fast is the speed of light? _____

- 9. 6:40 Complete the sentence: "the _____away something is, the _____in the past we see it"
- 10. 7:50 In 1965 a pair of radio astronomers "discovered the ______ of the fireball left over from the birth of the Universe".
- 11. 8:20 This glow or cosmic background radiation was ______ (predicted **or** not predicted) by the big bang theory?
- 12. 8:30 The redshift of distant galaxies and cosmic microwave background radiation confirms that the big bang theory is ______ (correct **or** wrong)
- 13. 9:30 The space between the galaxies is _____? (expanding or contracting)

14. 11:00 Does the universe have a centre?

15. 11:50 What is our best estimate for the age of the universe?