Lesson 1 – Structure of the Universe

1. What makes up the universe?

2. How are distances in the universe measured?

3. How are sizes in the universe measured?

4. What is the size of the observable universe?

5. What is the structure of the universe?

Lesson 2 – Stars

1. What is a star?

2. How is star brightness measured?

3. How is star luminosity measured?

4. How are the surface temperatures of stars measured?

5. How are the sizes of stars measured?

Lesson 3 – The Life Cycle of Stars

1. What is the life cycle of a star?

2. What is the life cycle of a low-mass star?
Lesson 4 – Observing the Universe

1. What is electromagnetic radiation?
2. How is electromagnetic radiation classified?
3. What is a spectroscope?
4. How is spectral analysis used in astronomy?
5. What are types of visible spectra?
6. What is the Doppler effect?
7. What information about star can be gained using the Doppler effect?
8. What are telescopes?
9. What are two types of optical telescopes?
10. Where are telescopes located?
11. How are other parts of the electromagnetic spectrum observed?
12. What can you learn from space images?
Lesson 5 – The Origin of the Universe

1. What is the universe?

2. What large-scale structures make up the universe?

3. Who are some scientists who contributed to our understanding of the universe?

4. What evidence supports the Big Bang theory?

5. What were the conditions of the early universe?

6. How can scientists estimate the age of the universe?