

Sisters of the Sun

1. What is the cost for having our electric lights?
2. How much brighter than the Sun are the Pleiades?
3. What did Edward Charles Pickering call the room full of women he employed?
4. How many stars did Annie Jump Cannon catalogue?
5. How did Annie Jump Cannon lose her hearing?
6. What did Henrietta Swan Leavitt discover?
7. How many major categories of stars are there?
8. What American University accepted Cecilia Payne?
9. What did Henry Norris Russell discover about the Earth and the Sun?
10. After listening to Russell's speech, what did Payne figure out about Cannon's data?
11. Why did Russell reject Payne's thesis?
12. Which stars are considered "newborns"?

13. How old are most of the stars in the Big Dipper?
14. What kind of star will the Sun be after it becomes 100 times its original size?
15. What kind of star will the Sun be after it collapses like a “soufflé”?
16. What is the name of the brightest star in our sky?
17. What is the fate of the star Rigel?
18. With a star as big as Alnilam in Orion’s belt, what will it eventually become after it implodes?
19. What pattern did the Aboriginal people of Australia see in between the stars?
20. How far away is the star in our galaxy that will hypernova?
21. When hydrogen fuses in the Sun, what does it make?
22. How long will it be before Orion finally catches up to the Pleiades?

(22 marks)

7Sp7 – Sisters of the Sun

1. What is the cost for having our electric lights?

We can't see many stars

2. How much brighter than the Sun are the Pleiades?

40 times

3. What did Edward Charles Pickering call the room full of women he employed?

His computers

4. How many stars did Annie Jump Cannon catalogue?

A quarter of a million

5. How did Annie Jump Cannon lose her hearing?

Scarlet fever

6. What did Henrietta Swan Leavitt discover?

A law to measure distances to stars and the size of the cosmos

7. How many major categories of stars are there?

Seven

8. What American University accepted Cecilia Payne?

Harvard

9. What did Henry Norris Russell discover about the Earth and the Sun?

40 to 45 of the elements on Earth are present in the Sun

10. After listening to Russell's speech, what did Payne figure out about Cannon's data?

The spectrum of stars tells you their temperature

11. Why did Russell reject Payne's thesis?

He thought it 'fundamentally flawed'

12. Which stars are considered "newborns"?

Those in the nebula below Orion's Belt

13. How old are most of the stars in the Big Dipper?

Half a billion years

14. What kind of star will the Sun be after it becomes 100 times its original size?

A red giant

15. What kind of star will the Sun be after it collapses like a “soufflé”?

A white dwarf

16. What is the name of the brightest star in our sky?

Sirius

17. What is the fate of the star Rigel?

Supernova and Neutron star

18. With a star as big as Alnilam in Orion’s belt, what will it eventually become after it implodes?

Black hole

19. What pattern did the Aboriginal people of Australia see in between the stars?

An emu

20. How far away is the star in our galaxy that will hypernova?

7,500 light years

21. When hydrogen fuses in the Sun, what does it make?

Helium

22. How long will it be before Orion finally catches up to the Pleiades?

10 or 20 million years

(22 marks)