

Savage Sun

1. How long would it take the Earth to freeze if the Sun were suddenly “turned off” ?
2. What is the “fuel” for the Sun ?
3. How do the scientists at Big Bear observatory make the Sun’s features viewable ?
4. What are the bright patches seen on the Sun’s surface ?
5. What are the dark patches seen on the Sun’s surface ?
6. What force stops the Sun from blowing itself to pieces ?
7. How long ago did the Sun begin to form ?

8. How far from the Sun does SOHO orbit and why ?

9. What “molds, shapes, and constrains” everything we see on the Sun ?

10. Why is the McMath Solar Telescope built into a deep tunnel ?

11. What substances are used to cool the McMath Solar Telescope to about 3 K ?

12. What are the massive loops that trace out extended portions of the Sun’s magnetic field called ?

13. How long would it take a solar flare to traverse a distance equal to the width of the United States ?

14. Why are solar flares dangerous ?

15. Where is the National Space Weather Center located ?

16. How long does it take the X-rays and UV-rays released by a flare to reach Earth ?

17. What was our first clue to the existence of the solar wind ?

18. What force is used to squeeze plasma together in an Earth-bound fusion generator instead of gravity ?

19. What part of the Sun is seen during a total solar eclipse ?

20. What medium is used at the Solar Neutrino Observatory to detect neutrinos ?

21. How much time before our Sun swells and destroys the Earth ?