

The Sun Quiz

1. What type of star is the sun today?
2. The thermonuclear reactions near the sun's center convert hydrogen to what?
3. About how much larger is the sun than the earth?
4. How long has the sun existed in its present state?
5. How do astronomers predict what the rest of the sun's life will be like?
6. In about how many years will the core of the sun begin to shrink and become hotter?
7. The outer regions of the sun will eventually expand about 35 million miles, which is about the distance to what planet?
8. When the sun becomes a red giant star, describe what will happen to the earth.
9. Describe what will happen to the sun once it has used up its thermonuclear energy as a red giant.
10. Violent eruptions of huge amounts of gases are called what?
11. The sun will have used up all of its fuel and lost all of its heat after about how many years as a white dwarf?
12. Describe what conditions on earth will be like once the sun has become a black dwarf.

The Sun Answers

1. Yellow dwarf
2. Helium
3. Thousands of times larger
4. 4 billion, 600 million years (About 4 billion years is okay)
5. By studying other stars
6. About 5 billion years
7. Mercury
8. Temperatures on the earth will become too hot for life to exist
9. It will begin to shrink AND/OR it will become a white dwarf star
10. Nova explosions
11. Billions of years
12. The earth will be dark and cold, and if any atmosphere remains there it will have frozen onto the earth's surface. (Dark and cold; frozen atmosphere okay)

Sea Otters Quiz

1. Where do sea otters dwell?
2. Sea otters are the largest of what group?
3. How long are most sea otters?
4. How much to most sea otters weigh?
5. Describe a way that sea otters are different from most marine animals.
6. Why don't sea otters' large appetites create food shortages?
7. Describe a way that sea otters play an important role in the environment.
8. In what position do sea otters eat and sleep?
9. What purpose does the soft outer fur of the sea otter serve?
10. How many hairs are contained in one square inch of underfur?
11. About how many sea otters perished during the 1989 oil spill mentioned in the paragraph?
12. Where did the oil spill take place?

Sea Otters Answers

1. The North Pacific
2. The mustelids
3. 4-5 feet
4. 60 to 85 pounds
5. Sea otters lack a layer of blubber and therefore have to eat up to 30% of their body weight a day to maintain body heat (No blubber is okay)
6. Sea otters are picky eaters, each animal preferring only a few food types. Thus no single type of food is exhausted. (Sea otters are picky eaters; each sea otter prefers only a few foods okay)
7. Sea otters protect forests of kelp, which provide shelter and nutrients to many species (Protect kelp is okay)
8. On their backs
9. Forms a protective cover that keeps the fine underfur dry (Protects underfur; keeps underfur dry okay)
10. One million
11. 5,000
12. Prince William Sound, Alaska (Alaska is okay)