The Universe Total Eclipse

1. **What did ancient civilizations do in response to eclipses?**
2. **Why did the techniques they used always work?**
3. **Babylonians used the “saros cycle” to determine eclipses. What is it?**
4. **How often will someone on Earth see a total eclipse of the sun?**
5. **When is the next eclipse going to be visible from the United States?**
6. **How long will this eclipse last for?**
7. **This eclipse will have a path of totality of miles wide.**
8. **How much can the temperature drop during a total eclipse?**
9. **What must occur for an eclipse to happen?**
10. **What is the penumbra?**
11. **What is the umbra?**
12. **If you are seeing a partial eclipse are you in the penumbra or the umbra?**
13. **An eclipse occurs whenever one object passes in front of another object blocking its .**
14. **Why don’t Mercury or Venus have eclipses?**
15. **There are how many know moons orbiting the planets in our solar system?**
16. **Why don’t many total solar eclipse occur on other planets?**
17. **Describe how, even though our moon is so much smaller then the sun it still covers it to produce a total eclipse.**
18. **What is the alignment of the Earth, moon and sun during a lunar eclipse?**
19. **The shadow of covers .**
20. **During a total lunar eclipse, the moon passes**

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1. **Who on Earth can see the lunar eclipse?**
2. **Why does the color of the moon turn red-orange during an eclipse?**
3. **What part of the sun is visible during a total solar eclipse which is normally not visible?**
4. **What is a coronagraph?**
5. **When was the coronagraph invented and what was it initially used on?**
6. **What are SOHO and Stereo Space Craft?**
7. **In 1971 coronal mass ejections were seen on the sun. Give some information about what CMEs are.**
8. **In 2003 there were very intense CMEs. What were some of the effects?**
9. **When are we at the greatest danger from CMEs?**
10. **In 1859 a super CME occurred. Describe some of the effects on Earth.**
11. **If one occurred today, how long would it take for a full recovery?**
12. **How often do scientists believe a super CME will occur?**
13. **The moon passing in front of the sun from a vantage point further in space is called a .**
14. **What is the Kepler Space Telescope looking for?**
15. **How does the Kepler telescope accomplish it’s task?**
16. **If a planet is in the habitable zone it will have a transient that will last and occur every .**
17. **In June 2010, how many Earth like planets candidates were there?**