Phases of the Moon Questions

1-6. Draw a Lunar Phase diagram similar to the one we drew in class and label all eight phases appropriately. But draw the diagram with *sunlight streaming in from the bottom of the page*.

7-8. Do the phases of the Moon look the same from every place on Earth, or is the Moon full at different times as seen from different locations?

9-10. What phase would the Earth be in if you were on the Moon when the Moon was

   Full?

   First Quarter?

   Waning Crescent?
11-12. If one complete hemisphere of the Moon is always lit by the Sun, why do we see different phases of the Moon?

13-16. Identify the phases of the Moon if *at sunset* the Moon were

(a) Near the eastern horizon:

(b) High in the south:

(c) in the southeast:

(d) in the southwest:

(Remember where the Sun is at these times and the answers will be easier.)

17-18. If the Sun has just risen and the Moon is in the southeast, what phase is it in?

19-20. About how many days must elapse between 1\textsuperscript{st} Quarter and 3\textsuperscript{rd} Quarter Moon? How many days between New Moon and 3\textsuperscript{rd} Quarter?