

SCORE
(5 pts max)

**ASTRONOMY 2
THIRD HOUR SESSION "F"**

ACTIVITY: Introduction to the *Sky Gazer's Almanac*

NAME **KEY - F**

DATE

ID#

1. What time does the Sun rise on October 22 ?

6:15 AM (\pm 5 minutes)

2. What time does the Sun set on October 21 ?

5:15 PM (\pm 5 minutes)

3. What time does evening twilight end on October 21 ?

6:40 PM (\pm 5 minutes)

4. What time will Venus rise on November 5 ?

5:25 AM (\pm 5 minutes)

5. What time does Saturn set on October 21 ?

8:55 PM (\pm 5 minutes)

6. On what date does Mars transit at 7:00 PM ?

October 28 (\pm 2 day)

7. Is Mars above the horizon on December 2 at midnight?

No

8. How many hours and minutes earlier does Betelgeuse rise between the dates of October 28 and December 2 ?

2 hours 20 minutes (\pm 10 minutes)

9. What date will the planet Uranus next be located at opposition?

October 23 (\pm 1 day)

10. What day will celestial objects Mars and Saturn be in conjunction with each other?

April 2 (\pm 1 day)

(Questions continue on back)

11. What day will celestial objects Venus and Mars be in opposite parts of the sky this year?

June 23 (± 1 day)

12. The times given on the Almanac are given in local mean time (close to standard time for a Rocklin observer). If we were on daylight savings time, what time will our watches show for sunset on August 26?

7:45 PM (± 5 minutes)

13. Assuming that Rocklin is at a latitude of 40° north and a longitude of 121° west, how many minutes must the *Almanac's* local mean times be corrected to give the standard time on your watch for a given event? And are these minutes added or subtracted from the *Almanac's* local mean time?

4	added
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