

SCORE
(5 pts max)

**ASTRONOMY 5
THIRD HOUR SESSION "B"**

ACTIVITY: Introduction to the Constellation Charts

NAME KEY-B

DATE

ID#

1. What direction should you be facing while using the SC001 Constellation Chart to identify stars in the night sky?

South

2. Name three constellations on the Celestial Equator

Any 3 from Sextans, Hydra, Monoceros, Orion, Cetus, Pisces, Aquarius, Aquila, Serpens, Ophiuchus, Virgo

3. What direction should you be facing while using the SC002 Constellation Chart to identify stars in the night sky?

North

4. Which direction should you rotate the SC002 Constellation Chart in order to keep up with the natural progression of stars around the north celestial pole (clockwise or counterclockwise)?

Counterclockwise

5. The coordinates of a star are usually expressed in Right Ascension (RA) and Declination (Dec). The star Bellatrix is located at RA= 5h 25m and Dec = +6 degrees. On which chart (SC001 or SC002) is it located?

SC001

6. What range of declinations are common to both constellation charts?

+30 to +60 degrees

7. Refer to 'The 21 Stars To Know' list in your Student Handbook (also posted at the front of the classroom). How many of these stars are found on both constellation charts (SC001 AND SC002)?

7

(Questions continue on back)

8. What star is located at RA = 14h 51m ; Dec = +74° ? What constellation does it occupy? This star is part of what well known asterism?

Kochab	Ursa Minor	Little Dipper
--------	------------	---------------

9. Study the legend at the upper left or lower right of the SC001 Chart. What Type of object is located at RA = 08h 40m ;Dec= +20°

Cluster

10. For a Rocklin observer, objects with declinations further north than ? degrees will never set, and objects with declinations further south than ? degrees will never rise.

+50	50 (or -50)
-----	-------------

11. Is the star Capella circumpolar for Rocklin (Refer to “The 21 Stars to Know” list in your Student Handbook)?

No

12. Up to how many degrees (to nearest 10 degrees) from the center of the SC002 chart could an object be located in order to never set for a Rocklin Observer?

40

Note: At your earliest convenience, highlight all the stars on both star charts that are listed in ‘The 21 Stars To Know’ table. It will be helpful for future reference and in studying for the planetarium star quiz.