theHoustonMuseumofnaturalscience Astronomy Merit Badge Prerequisite Workbook

Scout's Name:		Unit:
	_	

REQUIREMENT 4

PREREQUISITE/HOMEWORK

a. Identify in the sky at least 10 constellations, at least four of which are in the zodiac. See attachment at the back of the workbook.

Zodiac	Non-Zodiac
1.	1.
2.	2.
3.	3.
4.	4.
	5.
	6.

b. Identify at in the sky least eight conspicuous stars, five of which are of magnitude 1 or brighter.

Name of Star			
1.	5.		
2.	6.		
3.	7.		
4.	8.		

PREREQUISITE/HOMEWORK

c. Make two sketches of the Big Dipper. In one sketch, show the Big Dipper's orientation in the early evening sky. In another sketch, show its position several hours later. In both sketches, show the North Star and the horizon. Record the date and time each sketch was made.

Date:/	Time:	Date://	Time:	
	• North Star			
	1101til Stal			
West	North		East	
	Choose a clear night when you will have orth, draw the position of the Big Dipper v			
to it. Several hours later	r (six hours are best but at least four hour	rs and preferably more than	n five hours) draw the	
position of the Big Dipp which diagram represen	per with relation of the North Star and not tts which observation)	ote the time next to it. (Be s	ure to clearly identify	
d. Explain what we so	ee when we look at the Milky Way	у.		

REQUIREMENT 5

PREREQUISITE:

d. Observe a planet and describe what you saw. Using a star map, locate a planet in the night sky. Use binoculars or a telescope, if available. Make notes about the planet's color, brightness, direction (north, south, east, or west), altitude (e.g., close to the horizon, overhead), and the constellation it is in at the time of observation, together with any other observations and comments.

Name of Planet:
Date of Observation:
Time of Observation:
Color:
Brightness:
Direction:
Altitude:
Located in Which Constellation?
Other Observations and Comments:

REQUIREMENT 6

b. PREREQUISITE: Sketch the phase and the daily position of the Moon at the same hour and place, for four days in a row. Include landmarks on the horizon such as hills, trees, and buildings. South West East Date: ___/___ Time: _____

South

East

West

Date:/	/ Time:			
East		South	West	
Date:/	/ Time:			
East		South	West	
Explain the cha	Explain the changes you observe.			