Chart the movement of constellations over the course of 1 month

**Purpose:**

You will watch the stars over the course of a month to see how their location changes at the same time during the night.

**Equipment Needed:**

Paper and pencil

**Procedure:**

You will need some familiarity with the constellations to perform this experiment. You can use the planetarium software included in your book, or find a local Astronomy club to aid you with your experiment if you need help.

1) Over the period of 1 month go outside once a week (for four weeks) at the same time each night. You should use the same clock or watch to make sure you are going out at the same time.

2) Observe the stars which are rising in the eastern sky from the horizon to about 45°. If you live in an area with mountains use the top of the mountains, if there are trees, measure from the top of the trees, etc.

3) Draw a diagram of what you see each night and try to identify the constellations. Be sure to record what time you chose to make your observations.

**Data:**

Use the tables on the next 2 pages to record your observations.

**Questions:**

1) What did you find out about the motion of the stars while you watched?

2) Did the stars rise earlier or later over the time you watched them?

3) If you were to go out in two weeks where would you look to find a constellation that was just rising during your last observation?