Star Clock

Procedure

1. Use the chart below to record your data.

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2. Cut out the Star Clock base and the Star Clock wheel. Place the wheel on top of the base. Attach the two parts by pushing a paper fastener through the center of each. **Safety:** Be careful. The paper fastener is sharp.

3. **Collaborate** Work with a partner. Discuss the times given on the base of the clock. Note how this is different from a time clock.

4. **Use Models** Turn the wheel so that the Big Dipper is at the left. Find March and read and record the time for mid-March. That is the time when the Big Dipper will be in that position in the sky.

5. **Record Data** Turn the wheel so the Big Dipper is at the top, to the right, and then to the bottom. For each position, read and record the times for mid-March.

6. Follow steps 4 and 5 to complete your chart for the other three months.
Conclusion

Write the answers to the questions below.

1. **Observe** How does the position of the North Star change during the night?

2. **Infer** How could people use the pattern of the Big Dipper’s movement to tell time?

**Investigate More!**

**Design an Experiment** Use your star chart at home with an adult family member. Find the Big Dipper and North Star. Use your star clock to find the time.