



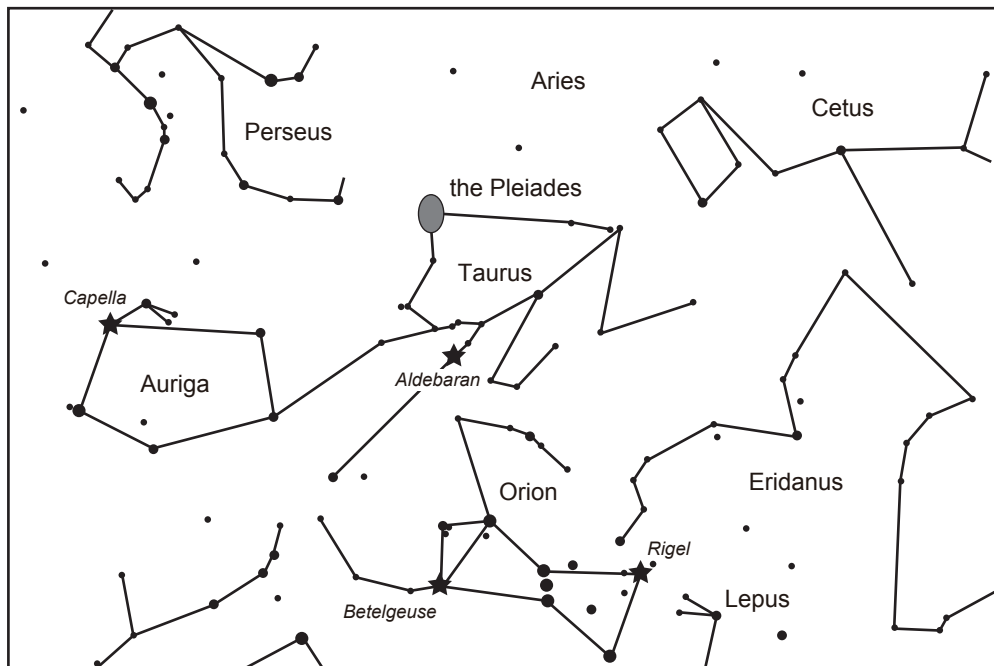
Let's Observe the Pleiades!

Observation and Sketch (1)

Name _____

Galileo Galilei was an Italian scientist. He made the first astronomical observation in 1609, using his small hand-made telescope. He made some discoveries by observing the Pleiades. What did he find? Let's experience his surprise by recreating his observations by yourself.

■ The Pleiades is a star cluster in the constellation of Taurus, the bull. Let's find it in the sky!



■ At first, observe the Pleiades by your naked eye. How does it look?

It looks different according to the sky darkness and your eyesight.

You could see...

something blurry OR a number of stars. How many? ()

■ Ancient people named the Pleiades in many ways.

For example:

"Seven Sisters" in Greek mythology (because they saw 7 stars),
"Subaru" in Japanese (meaning that the stars "gathers" together), etc.

How would you name this object?

■ How many stars are there in the Pleiades?

Using your telescope, observe, sketch, and find out!



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Observation and Sketch (2)

Name _____

Address _____

Age _____

■ Let's observe the Pleiades, and sketch what you see.

Date and time _____

Diameter of telescope _____ cm

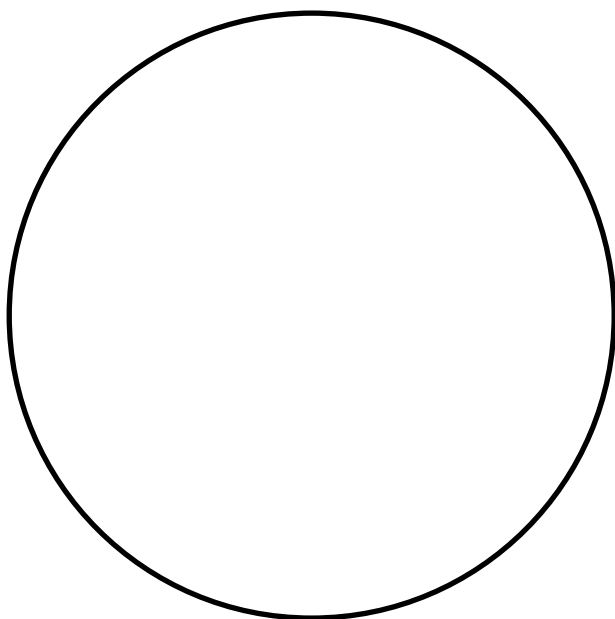
Location _____

Magnification _____ X Field of view _____ deg.

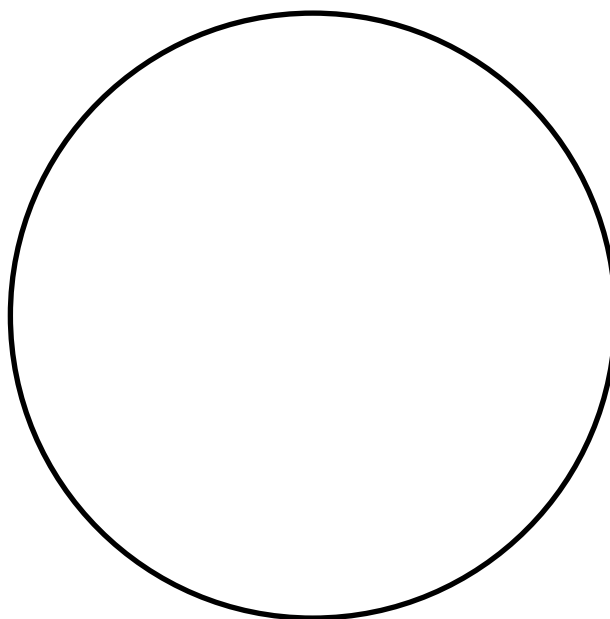
* Magnification of the telescope can be calculated by dividing "the focal length of the telescope" by "the focal length of the eyepiece".

* The field of view depends on the telescope and eyepiece, so check the telescope's manual or the vendor's web page.

the Pleiades



other star (for example, Capella)



■ Write down anything you have noticed or wondered why.

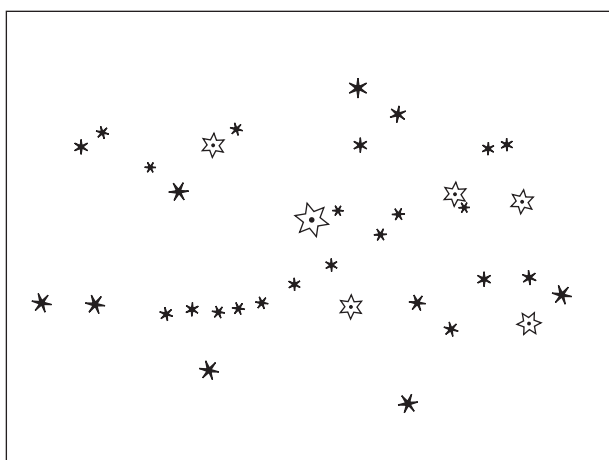


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Post Observation Study

Name _____

- By using your telescope, how many stars could you see in the Pleiades? () stars
- Compare your sketch with the Galileo's. Look at the photo.



Galileo made sketch of 36 stars.



In fact, there are about 100 stars in the Pleiades!

- Why stars gather together?

The stars in the Pleiades are very young children stars.
Stars are born together from cloud of gas in cluster.
Stars in the Pleiades are about 100 million years old.
Life of ordinary stars is several billion years long, so
they are still young children stars.



“Orion Nebula”, where stars are forming from a cloud of gas.

- Write down what you have learned, and what you would like to know more about.