



# Let’s Observe the Orion Nebula!

## Observation and Sketch

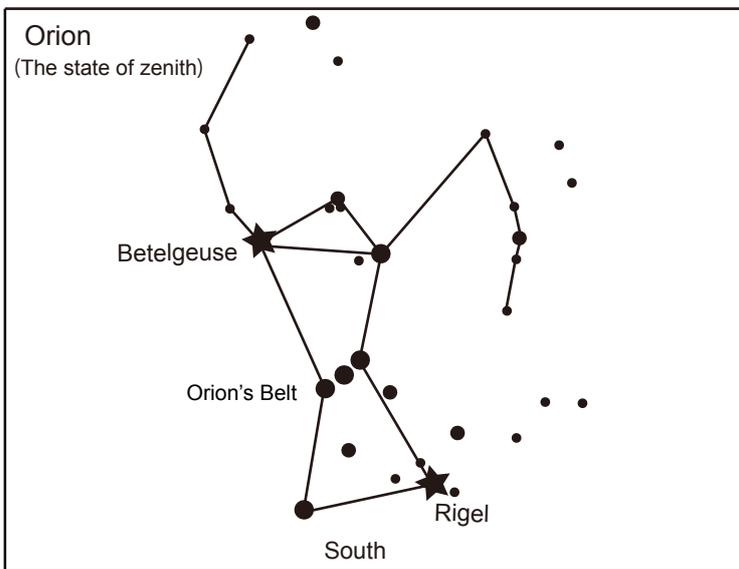
Name \_\_\_\_\_

Address \_\_\_\_\_

Age \_\_\_\_\_

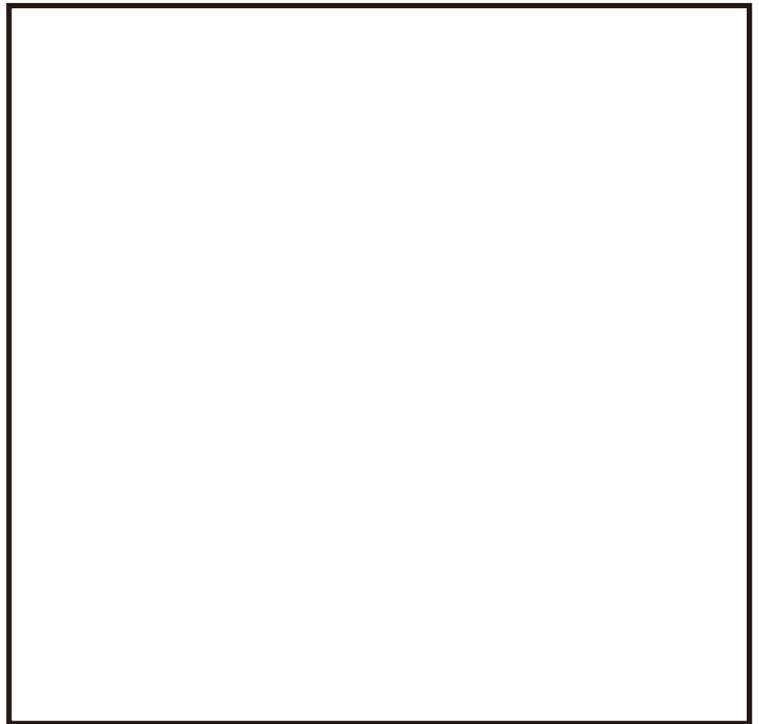
In 1906, the Italian Scientist Galileo Galilei became the first person to make an astronomical observation using a telescope. He made a great discovery when he was observing the Orion. What was his great discovery? Let’s use our telescope and experience his great discovery!

- Orion is easy to find because of the unique position of stars. Let’s observe with the naked eyes and draw sketches of Orion.



Date & Time \_\_\_\_\_

Site \_\_\_\_\_



- Write down what you have noticed through observation, and anything peculiar you found.

- Using your telescope to observe the Orion!



# Let's Observe the Orion!

■ Let's observe the Orion's Belt and faint three-stars near it, and sketch what you see.

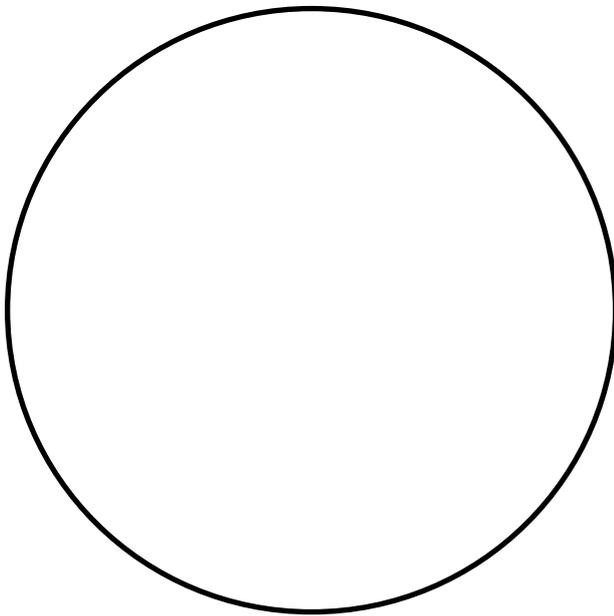
Date & Time \_\_\_\_\_ Diameter of telescope \_\_\_\_\_ cm

Site \_\_\_\_\_ Magnification \_\_\_\_\_ x Field of view \_\_\_\_\_ deg.

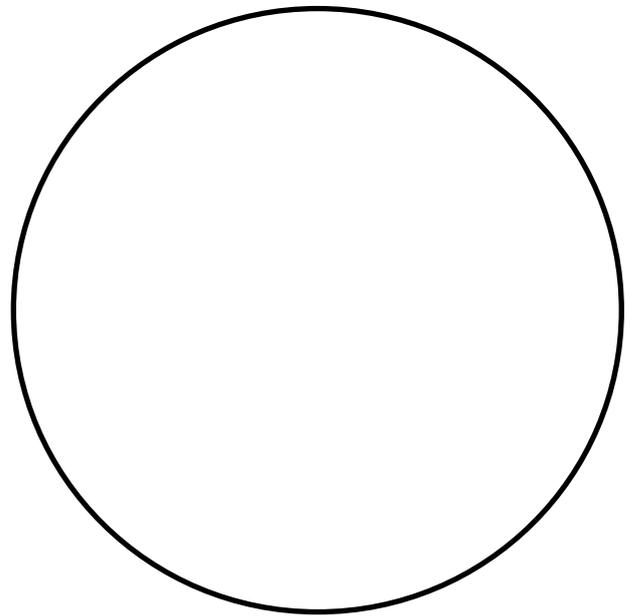
\*Magnification of the telescope can be calculated by dividing “the focal length of the telescope” by “the focal length of the eyepiece”.

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

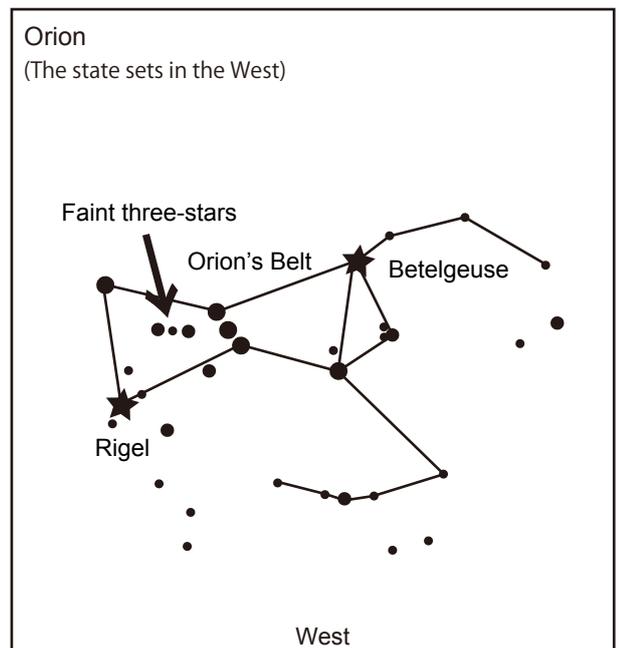
Orion's belt



Faint three-stars



■ Write down what you noticed or wondered why when sketching the Orion.





# Let's Observe the Orion!

## Post Observation Study

Name \_\_\_\_\_

### ■ Compare your sketch with the Galileo's.



Galileo turned his telescope to the Orion, he found that many stars much more than that he saw with the naked eyes.

On the left, Galileo sketched around the Orion's Belt and he found there are faint three-stars.

Can you see the fuzz around these faint three-stars when you look the area carefully?

This fuzzy cloud is called “Orion Nebula”, known as a place the gas and clouds are concentrate.

According to the Galileo's sketch, he did not see the gas, but he noticed that there are many stars in the field.

### ■ Orion Nebula is a stellar nursery.

Can you see many stars in the Orion Nebula and around it?

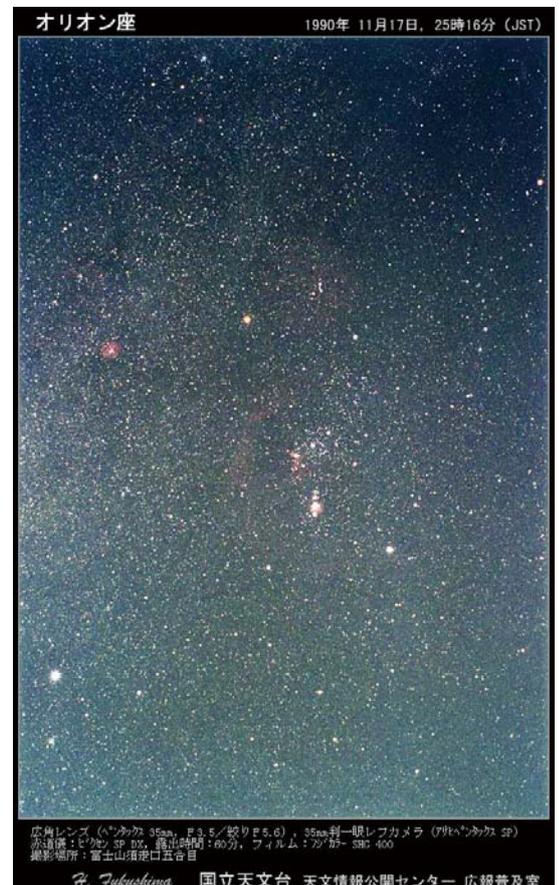
can see

cannot see

In the Orion Nebula, there are a lot of gases and dusts. Stars are born in these gas clouds.

The Orion Nebula is like a stellar nursery where the new stars born.

### ■ Write down what you found out and what you want to know more.



There are many nebula in the Orion.