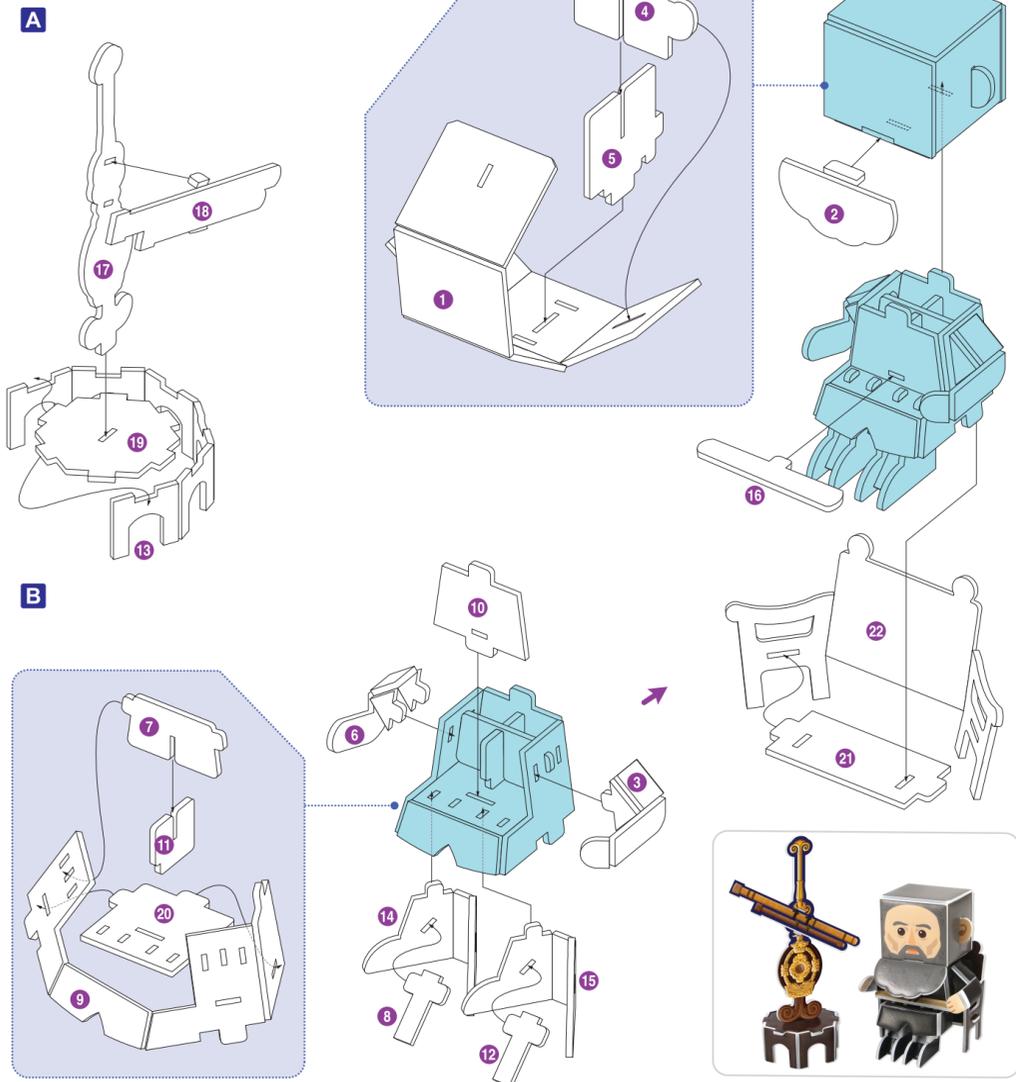
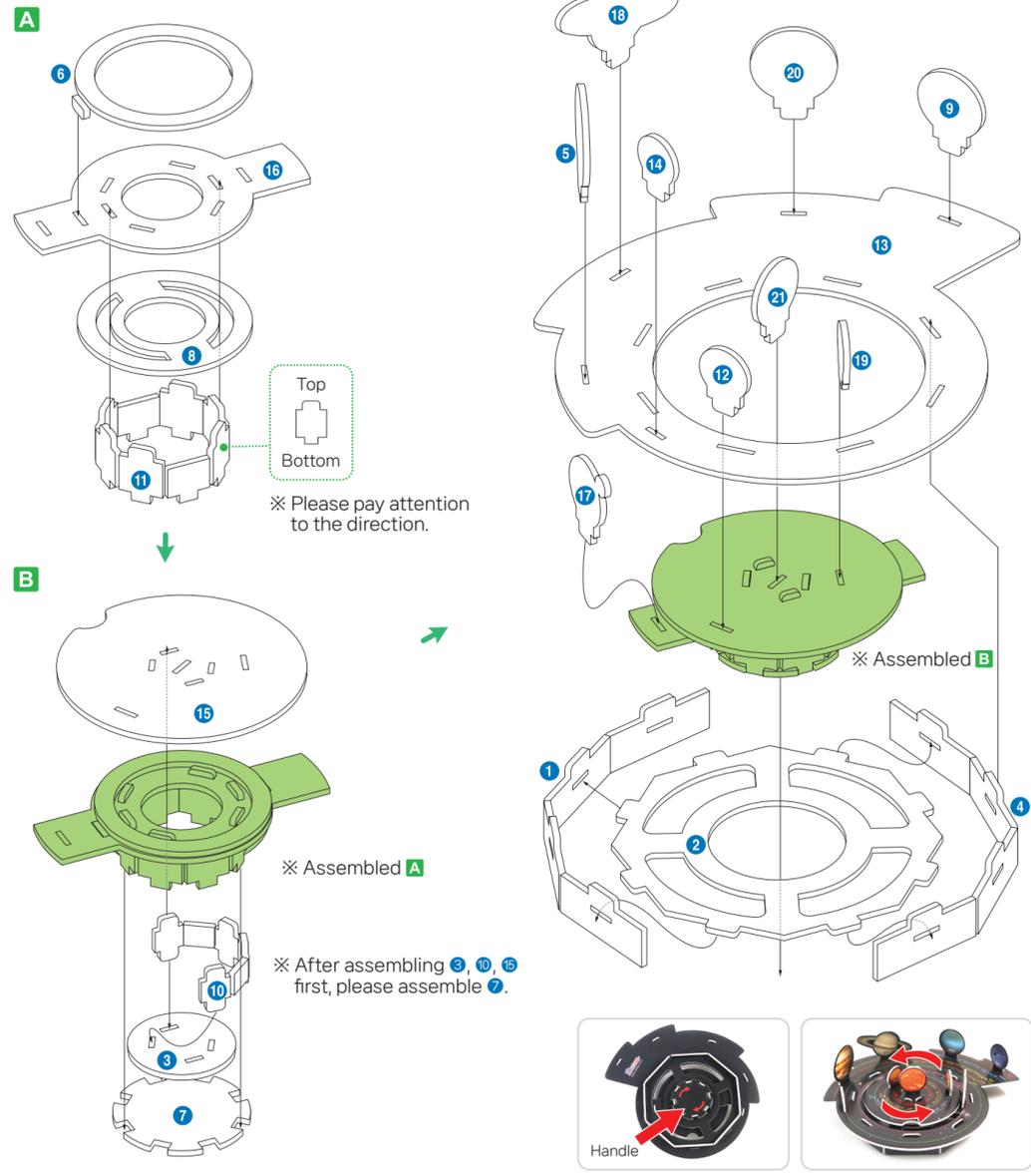


Galileo Galilei

*Please follow the instructions and assemble the educational kit in the order specified.

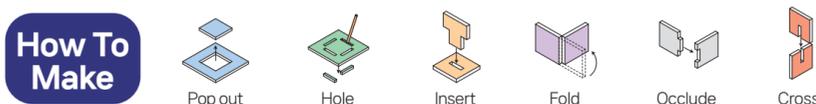


Solar System



※Instructions
Do not pop out all the parts at once. Please follow the instructions and pop them out one by one in the order specified.

<Caution>
After assembling the 3D puzzle, please put the small leftover parts in the trash bin. Also, be careful that children do not put the product or plastic packaging in their mouth, nose, or ears.



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• You can firmly assemble the 3D puzzle without glue or scissors.
• The 3D puzzle is an educational kit designed to enhance problem solving skills and spatial perception.

Learning Objectives
Be able to compare the Earth and the Moon and explain why life can exist on Earth.
Ages: 8+



Scientist

Exploring Characters

Who Am I?

I was born in Pisa, Italy in 1564. I entered medical school to become a doctor, but I was more interested in astronomy than medicine, so I became an astronomer. However, observing distant stars closely with just my naked eyes was very difficult. Then, one day, I heard the news that a telescope had been invented in the Netherlands. I taught myself how to make a telescope and observed distant stars as much as I could. I also observed the Moon, Earth's satellite, and made drawings of it. Then, I discovered 4 satellites orbiting Jupiter in our solar system. When I said that

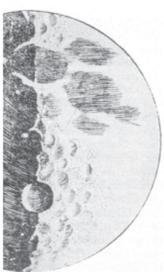


Jupiter had satellites like Earth, people thought it was impossible. People back then believed that "the center of the universe is Earth, and celestial bodies (all objects in the universe) moves around Earth." Claiming that Jupiter had satellites was against the Biblical idea that Earth is the center of the universe. The world was in shock, and I was put on trial by the church. Who am I?

①

The person looking through something is me. What tool am I using, and what am I doing?

By or with (②),
I (③) the night sky.



I'm quite good at drawing. But people were astonished when they saw my drawings. I drew a celestial object, which was believed to be smooth and perfectly round, in a bumpy and irregular shape. (A) is a hand-drawn version of what I saw, and (B) is a photo taken later. What is this?

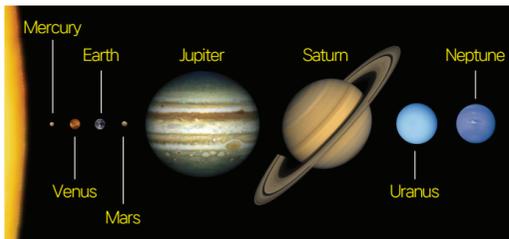
④



Observation · Inference

Exploration 1

Why Life Exists on Earth?



The following picture shows the solar system, with Earth as one of its planets. We live on Earth, but is there life on other stars as well? Let's explore why humans can live on Earth.

Question 1 | The closest planet to the Sun is Mercury. If Earth were the closest to the Sun, could humans or other life forms survive?

⑤

Question 2 | The farthest planet from the Sun is Neptune. If Earth were the farthest planet from the Sun, could humans or other life forms survive?

⑥

Question 3: Why can life forms survive on Earth?

⑦

In 2009, NASA launched the Kepler space telescope to find life similar to humans. This mission was the beginning of a discovery to find stars with environments similar to Earth's, and such missions will continue in the future. Imagine that one day you become an astronaut and meet beings from another star. Write a message to these beings, who have never been to Earth, explaining why life can exist on Earth.



Observation · Inference · Communication

Exploration 2

What are the similarities and differences between Earth and the Moon?

Activity 1 | Follow the assembly instructions to create a solar system model that includes Earth and the Moon.

Activity 2 | Compare the sizes of the Earth and the Moon.

Look at the model you assembled and answer the following questions:

How many times larger is the diameter of Earth compared to the diameter of the Moon?

⑧

Times

What are the common features of Earth and the Moon?

⑨

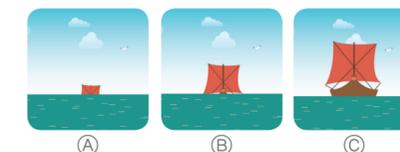
What are the differences? Write only two points.

⑩

⑪

Activity 3 | Write what you think or guess based on the picture.

In the past, even before humans could see Earth from space, sailors knew the Earth was round, not flat, simply by observing the ships coming into the harbor. Look at the pictures (A), (B), and (C), and write why people believed Earth was round.



Ships entering the ports

⑫