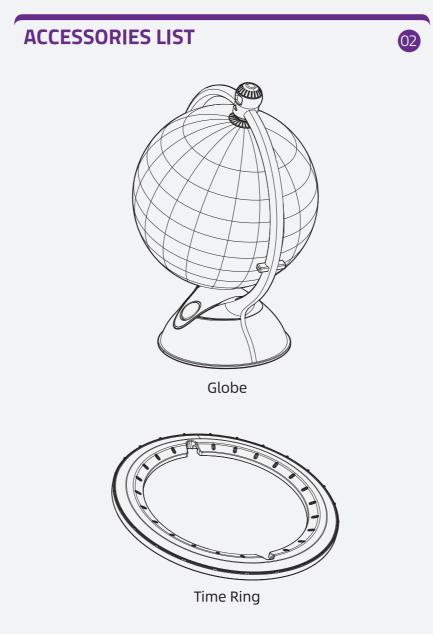
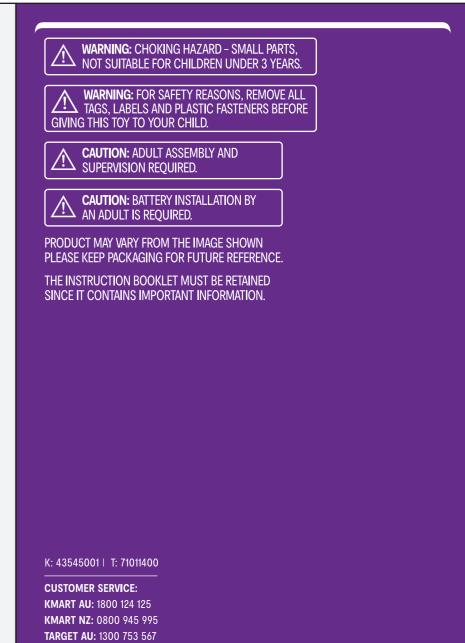


EARNING WITH FUN

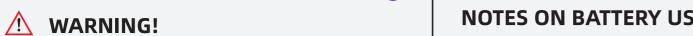
- 1. 24-Hour Time Ring, Clear Time Difference at a Glance
- 2. One-Click Day and Night Simulation, Easy to Understand
- 3. Switch Between Seasons with Ease, Instantly Grasp Spring, Summer, Autumn, and Winter
- 4. 3D Map Viewing to Foster Spatial Awareness
- 5. Includes Learning Booklet, An After-School Activity for Kids
- 6 .Eye-Friendly Soft Light Hemisphere Lamp, Gently Lulls Your Child to Sleep
- 7. 360° Rotating Globe, Explore Anywhere with a Simple Turn







正面



Any packaging material, including adhesive tapes, plastic pieces, binding wires, tags, etc, is not a part of the product and is not safe for children to play with. For the safety of your children, please dispose of the aforementioned packaging materials properly.

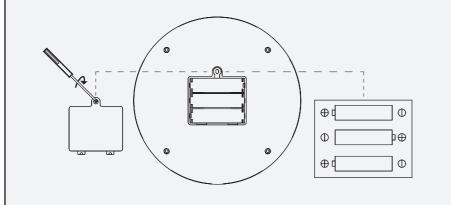
### TO INSERT BATTERIES:

1. Make sure that the device is turned off.

2. Use a screwdriver to unscrew the covers of the battery compartments at the bottom of the device.

3. Insert 3 new 1.5V AAA (LR03) batteries into the device, ensuring the correct polarity (+, -) as shown in the image below.

4. Close the battery compartment cover and tighten the screws.



#### **NOTES ON BATTERY USE:**

WARNING: BATTERIES ARE TO BE INSERTED WITH THE CORRECT POLARITY (+AND-). BATTERIES ARE ONLY TO BE CHARGED BY ADULT. RECHARGEABLE BATTERIES ARE TO NOT TO BE SHORT-CIRCUITED. REMOVE BATTERIES FROM THE TOY WHEN NOT IN USE FOR EXTENDED TIME OR WHEN BATTERIES BECOME EXHAUSTED. BATTERY INSTALLATION BY AN ADULT IS REQUIRED. DISPOSE OF BATTERIES RESPONSIBLY.DO NO DISPOSE OF IN FIRE. KEEP NEW AND USED BATTERIES AWAY FROM CHILDREN.

### **MAINTENANCE:**

- 1. Wipe the toy exterior gently with a piece of soft, dry cloth to keep the frame clean.
- 2. Keep the main unit away from sunlight and any other heat source.
- 3. Please remove the batteries if the toy is to be left unused for a long time.
- 4. Do not touch the main unit with any hard object or try to disassemble it. 5. Do not put the main unit in water; please keep it from moisture.

### **COMMON TROUBLES AND** TROUBLESHOOTING:

- If the toy stops responding for some reason, please: 1. Shut down the main unit.
- 2. Remove the batteries and cut off the power supply.
- 3. Keep the main unit motionless for a few minutes, and then install the batteries
- 4. Restart the main unit and use it.
- 5. Please install new batteries if the main unit still doesn't work.

### **INSTRUCTIONS FOR USE**

### MAP FUNCTION

Rotate the globe to explore the maps, oceans and rivers, deserts, reefs, ocean currents, and other geographical features.



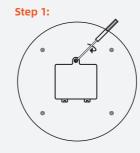


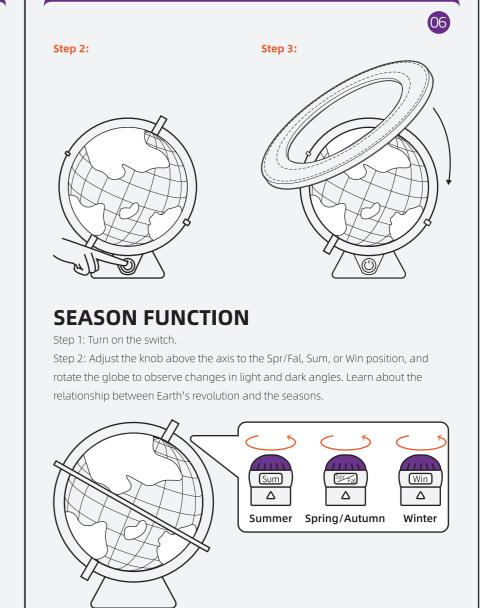
### **DAY AND NIGHT & TIME ZONE FUNCTION**

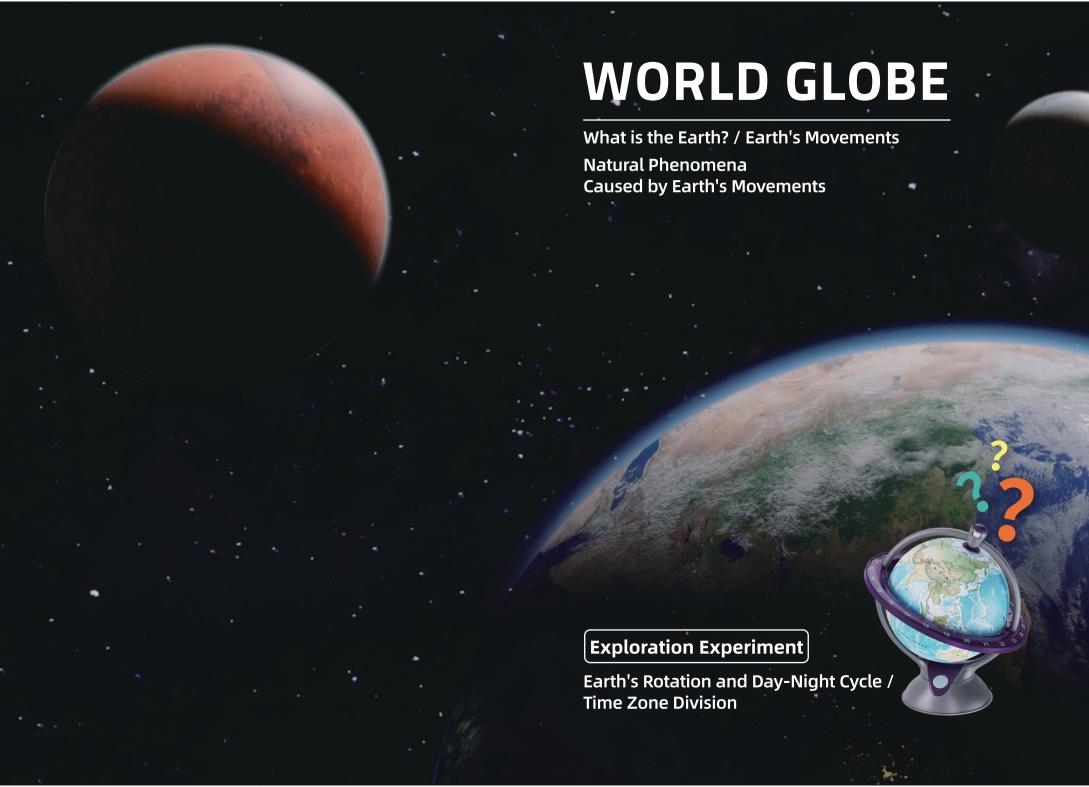
Step 1: Open the battery compartment at the bottom and install the batteries.

Step 2: Turn on the switch, rotate the globe, and observe the changes in light and darkness to learn about the relationship between the Earth's rotation and day/night cycles.

Step 3: Attach the time ring to the globe stand, and observe the time in different regions to understand that time varies across different locations.





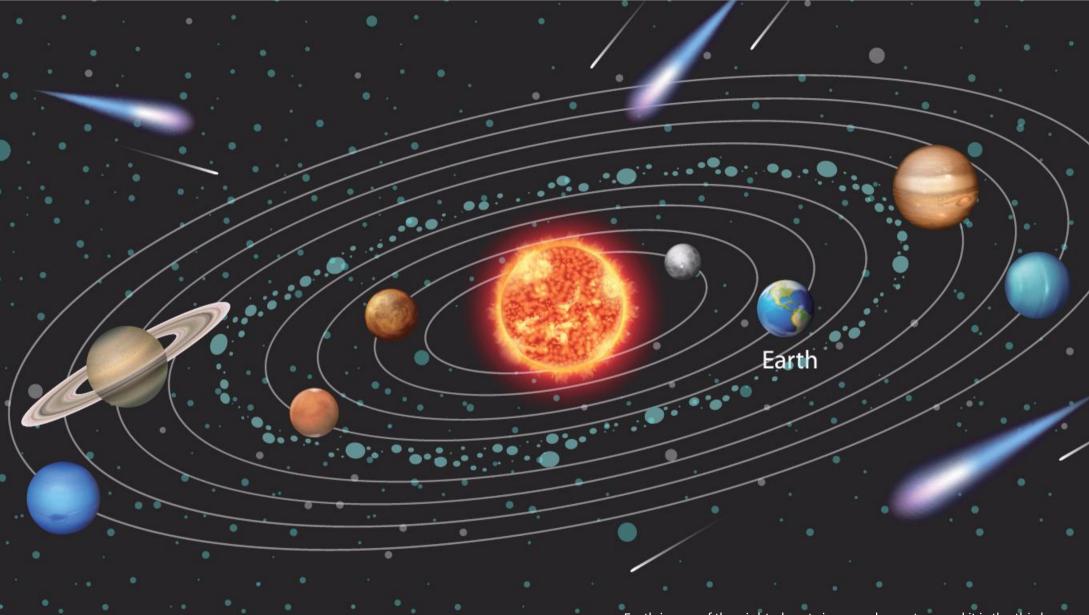


### **WORLD GLOBE**



# **CONTENTS**

<b>01</b> Background Information	P01 <b>-</b> 07
What is the Earth?	P03
Earth's Movements	P04
Natural Phenomena Caused by Earth's Movements -	P05 <b>-</b> 06
What is a Globe?	P07
02 Exploration Experiment	P08 <b>-</b> 14



# What is the Earth?

Earth is one of the eight planets in our solar system and it is the third closest to the Sun. It is the largest rocky planet in our solar system.

71% of Earth's surface is covered by oceans, while 29% is land. From space, Earth appears as a beautiful blue planet.

Earth is also the only known planet that supports life, making it truly special in the vast universe.

## Earth's Movements

### **Earth's Revolution**

The Earth's revolution refers to the movement of the Earth around the Sun along a specific orbit.

The time it takes for the Earth to complete one full revolution is called a sidereal year.

The interval between two consecutive solar direct rays at the Tropic of Cancer is called the tropical year.

A tropical year is slightly shorter than a sidereal year.

### **Earth's Rotation**

Earth's rotation refers to the movement of the Earth around its axis from west to east.

Viewed from above the North Pole, it rotates counterclockwise; viewed from above the South Pole, it rotates clockwise.

One full rotation takes approximately 23 hours and 56 minutes, which is known as a sidereal day.

However, what people commonly refer to as "a day" is a solar day, which is 24 hours.

## Natural Phenomena Caused by Earth's Movements

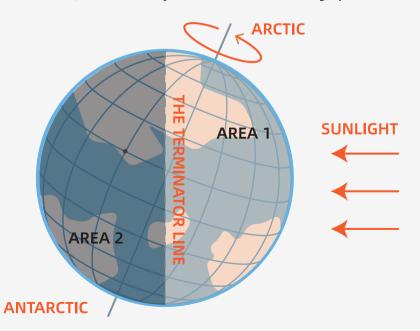
### **Day and Night Alternation**

Cause: Solar radiation, the Earth does not emit light nor is it

transparent; Earth's rotation.

Cycle: One solar day, which is 24 hours.

Time Zone Division: Due to the Earth's rotation from west to east, locations in the east experience sunrise earlier than those in the west. Therefore, the time in the east is earlier, while the time in the west is later (as shown in the diagram, the eastern region 1 is already in daylight, while the western region 2 is still in darkness). Using the Prime Meridian as the reference, 24 time zones are established, with each adjacent time zone differing by 1 hour.



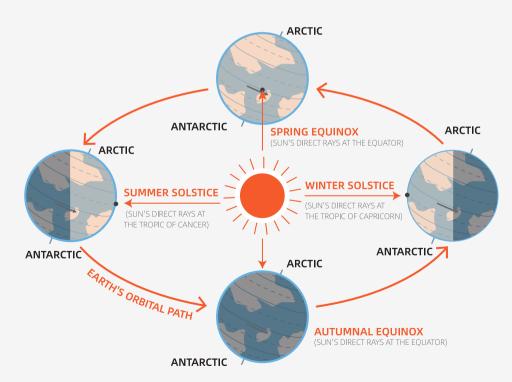
### **Changes in the Seasons**

Cause: The Earth's revolution around the Sun; the tilt of the Earth's axis.

Cycle: One tropical year, which is 365 days.

**Time Zone Division:** The Earth's revolution forms the ecliptic plane and the Earth's axial tilt forms the equatorial plane, creating an angle between the ecliptic and equatorial planes. The point of direct sunlight moves back and forth between the Tropics of Cancer and Capricorn.

(The point of direct sunlight refers to the location on Earth where the Sun's rays are perpendicular to the surface.)



## What is a Globe?

A globe is a model of the Earth.

To help people understand the Earth, a smaller version of the Earth was made, shaped like the real one. This model is called a globe. A globe is used to show things on Earth and how they are connected to each other.



## **Exploration Experiment**

### **Activity 1: Get to Know the Earth**

Materials: World Globe

**Exploration Question:** The Earth's surface is covered by oceans

and land. Which one has a larger area?

#### **Exploration Steps:**

Step 1: Use your eyes or a magnifying glass to observe the globe and learn what different colors represent different terrains.

Record the information in the table.



Step 2: The surface of the globe is divided into many small squares by vertical lines of longitude and horizontal lines of latitude.

Observe whether each square contains land or ocean, and count the number of squares accordingly. (If a square contains both land and ocean, assign the square to whichever occupies a larger area.)



Step 3: Compare the number of blue squares with the number of squares in other colours to draw a conclusion.

Globe				
Colour	Blue	Other colours (yellow, green, etc.)		
Content				
Number of				
squares	Gre	eater than		

<b>Conclusion:</b>	

# Activity 2: Earth's Rotation and Day-Night Cycle / Time Zone Division

Materials: World Globe, Batteries, Time Ring

**Exploration Question:** Why is it daytime in Beijing right now, but

nighttime in New York?

#### **Exploration Steps:**

Step 1: Use a screwdriver to open the battery compartment at the bottom and install the batteries.

Step 2: Install the time ring onto the globe's orbit and find the Sun symbol (the Sun symbol represents 12:00 noon).



Step 3: Turn on the power switch, adjust the axis to SPR/FAL, and rotate the globe with your hand, aligning China (Beijing) with the time ring at 17.

Observe and record from directly above the axis.



Step 4: Find the time in the United States (New York) and the United Kingdom (London) at this moment and record the

comparison.



Step 5: Rotate the globe again to align China (Beijing) with a different time, then observe from directly above the axis the current time in the United States (New York) and the United Kingdom (London), and record the results.

Country	China (Beijing)	United States (New York)	United Kingdom (London)
	17:00		
Time			

Conclusion: \_\_\_\_\_

# Activity 3: The Relationship Between Seasonal Changes and Day-Night Cycle

Materials: World Globe, Batteries

**Exploration Question:** As the seasons change, how does the

direction of direct sunlight change?

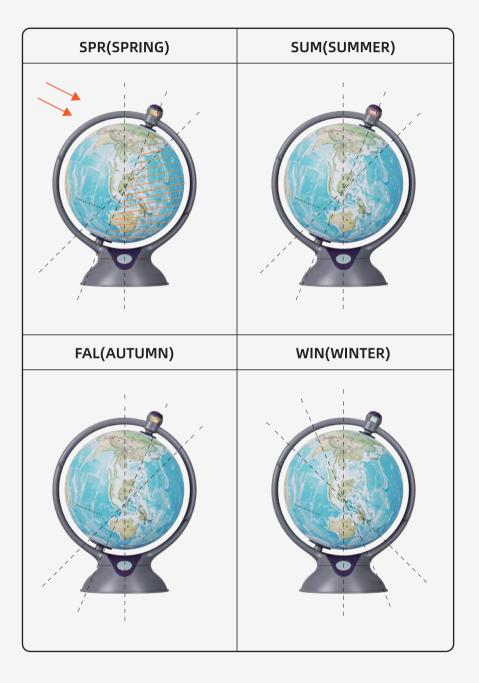
#### Steps:

Step 1: Turn on the power, adjust the axis knob to SPR/FAL, and rotate the globe. Observe the phenomena and record your findings (use a pencil to shade the night area and draw the direction of sunlight).

Step 2: Adjust the axis knob to SUM, rotate the globe, observe the phenomena, and record your findings.

Step 3: Adjust the axis knob to WIN, rotate the globe, observe the phenomena, and record your findings.

\* For the best observation, the summer sunlight model can be observed from the back of the product by tilting the axis angle.



Conclusion:			