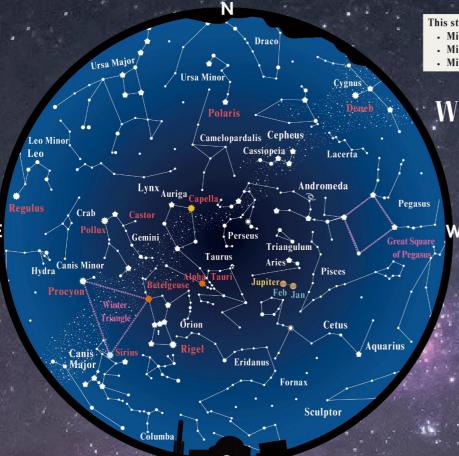
# PLANETARIUM GUIDE



This starry sky can be seen during:

- Middle of December at around 10PM
- Middle of January at around 8 PM
- Middle of February at around 6 PM

# WINTER STARRY SKY

In the winter night sky, there are many bright stars and numerous impressive constellations. Particularly, the constellation Orion, four bright stars surround the three stars of Orions's waist. To the northeast of the three stars, you can find the red star Betelgeuse, and to the southwest, the blue-white star Rigel. Additionally, the bright star shining to the southeast of Orion is Sirius the Canis Major constellation, the brightest star in the night sky. The triangle formed by connecting Sirius, Betelgeuse, and Procyon in the Canis constellation is known as the Winter Triangle. This winter, Jupiter is reaching its best viewing, its bright appearance constellation in the southern sky.

### WINTERS ASTRONOMICAL GUIDE

Jupiter in the southern sky, and in the early morning, Venus appears in the eastern sky, in February, during which Mars appears near Venus. On December 15th, the Geminid meteor shower reaches its peak, and on January 4th, the Quadrantid meteor shower reaches its peak.

The English audio guide is a free service offered by the EXPO Center that allows for any English-speaking visitors to watch the planetarium show with an English translated audio (through earphone sets)

To receive an earphone set, ask the staff at the planetarium reception desk

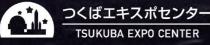


- 4th The Quadrantid meteor shower at its peak
- 12th Mercury furthest East in its Eastern movement
- 28th Mercury and Mars in their closest conjunction

## **FEBRUARY**

22nd Venus and Mars in their closest conjunction

公益財団法人 つくば科学万博記念財団







Starry Sky Show



· Original Show





#### **Days of Closure**

- Note: If monday is a national holiday, the center is closed the next day
- Exhibition only; Jan 30th

TSUKUBA EXPO CENTER

### Weekdays

#### Weekends & **National Holidays**

10:20	Pre-Reserved Groups	10:20	Children's Show
11:30	Starry Sky Show	11:30	Starry Sky Show
13:30	Original Show	13:30	Children's Show
14:40	Speical Show	14:40	Starry Sky Show
公益財団法人 つくば科学万博記念財団		15:50	Special Show

https://www.expocenter.or.jp/

# LET'S LOOK UP AND SEE TONIGHT'S STARRY SKY

If all the lights in the city could be turned off, there would be a sky full of stars. How to find the constellations that you can see tonight and how the starry sky changes a little bit everyday.

From 2024 Jan 4th ~ Feb 29th **Approximate Show Runtime**; 40 minutes

# SHELLS AND SPIRAL GALAXIES: Hidden Patterns in Nature

The earth, the planets of our solar system, the orbits of stars, and galaxies, which are large groups of stars. There are various forms hidden in this world. Is there something that connects the earth and the universe? Let's take a look at the mysterious and beautiful world of the universe through their shapes.

From 2024 Jan 12th ~ Jan 31st Approximate Show Runtime; 40 minutes AUDIO AVAILABLE IN ENGLISH

### CHALLENGING THE -MYSTERIES OF THE UNIVERSE

With the history of people, our imagination of the universe has expanded, and with the development of science, the universe we can observe has expanded. How far has modern science been able to enravel the mysteries of the universe?

From 2024 Feb 1st ~ Feb 29th **Approximate Show Runtime**; 40 minutes

# Admission Fees \*Children 3 y/o and under can enter for free

Entry Fees	Adult	Child (4 years ~ High School)	
Entry Fees	500 Yen	250 Yen	
Entry Fees +	Adult	Child (4 years ~ High School)	
Planetarium Entry	1000 Yen	500 Yen	
(Additional)	Adult	Child (4 years ~ High School )	
Planetarium Entry Fees	500 Yen	250 Yen	

January & February - open from 9:50 till 16:00 (Entrance closes at 15:30)

#### **Disclaimers:**

- Please kindly refrain from entering, and leaving the planetarium theatre during the program
  There is no age restrictions for the show
- Wheelchair access is available

FAX: 029 - 858 - 1107 (Azuma 2-9, Tsukuba) TEL: 029 - 858 - 1100

Made in collaboration with Tsukuba Internationl School