

# Satellites and Eclipses

**Spoken Tutorial**

**<https://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://sakshat.ac.in>**

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# Learning Objectives



# Learning Objectives

**We will learn about,**



# Learning Objectives

We will learn about,

- **Satellites**



# Learning Objectives

We will learn about,

- Satellites
- Eclipses



# Learning Objectives

We will learn about,

- Satellites
- Eclipses
- Configure satellites and eclipses



# System Requirements



# System Requirements

- **Ubuntu Linux OS v 16.04**





# System Requirements

- **Ubuntu Linux OS v 16.04**
- **Marble v 1.12.20**



# System Requirements

- **Ubuntu Linux OS v 16.04**
- **Marble v 1.12.20**
- **Working internet connection**



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- **Ubuntu Linux OS v 16.04**
- **Marble v 1.12.20**
- **Working internet connection**

**The process demonstrated in this tutorial is identical in,**



# System Requirements

- **Ubuntu Linux OS v 16.04**
- **Marble v 1.12.20**
- **Working internet connection**

**The process demonstrated in this tutorial is identical in,**

- **Ubuntu Linux OS v 18.04**



# System Requirements

- **Ubuntu Linux OS v 16.04**
- **Marble v 1.12.20**
- **Working internet connection**

**The process demonstrated in this tutorial is identical in,**

- **Ubuntu Linux OS v 18.04**
- **Marble v 2.2.20**



# Pre-requisites



# Pre-requisites

- Learner should be familiar with **Marble** interface





# Pre-requisites

- Learner should be familiar with **Marble** interface
- For the prerequisite **Marble** tutorials, please visit this site  
<https://spoken-tutorial.org>



# Satellites



# Satellites

- **A satellite is an object in space that orbits around a bigger object**



# Satellites

- A satellite is an object in space that orbits around a bigger object
- An orbit is a regular, repeating path that an object takes around another object



# Assignment



# Assignment

- Explore more about different satellites of the Earth



# Assignment



# Assignment

- **Download Venus Topography map**





# Assignment

- Download Venus Topography map
- Find the Venus Express satellite of Venus



# Assignment

- Download **Venus Topography map**
- Find the **Venus Express** satellite of Venus
- Open its information data sheet



# Assignment

- Download **Venus Topography map**
- Find the **Venus Express** satellite of Venus
- Open its information data sheet
- **Display its orbit**



# Assignment

- Download **Venus Topography map**
- Find the **Venus Express** satellite of Venus
- Open its information data sheet
- Display its orbit
- **Track its position**



# Eclipse



# Eclipse

**An eclipse occurs,**



# Eclipse

**An eclipse occurs,**

- **when an astronomical object or spacecraft is temporarily obscured by passing into the shadow of another object**



# Assignment





# Assignment

- Using Show eclipses for year: text box change the years to 2018 and 2019



# Assignment

- Using **Show eclipses for year:** text box change the years to 2018 and 2019
- **Observe the solar eclipses in these years**



# Summary



# Summary

**We have learnt about,**

- **Satellites**
- **Eclipses**
- **Configure satellites and eclipses**



# About the Spoken Tutorial Project

- Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- It summarises the Spoken Tutorial project



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- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



# Spoken Tutorial Workshops

## The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)



# Forum for specific questions

- Questions in THIS Spoken Tutorial?
- Visit <https://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer

**You will have to register to ask questions**





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