

# OUTER SPACE

Looking into space

## **Work in pairs. Do the quiz about astronomy.**

**1. What do we use a telescope for?**

- a) to study the planets b) to study the stars

**2. Who made/used the first telescope?**

- a) Ulug'bek b) Galileo Galiley

**3. What are the parts of a traditional telescope?**

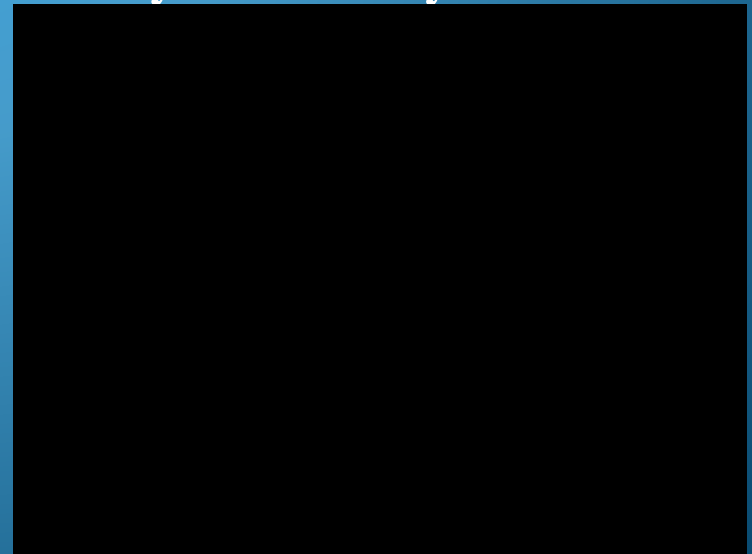
- a) a mirror and a lens b) a mirror, a tube and a lens

**4. Name a famous Uzbek astronomer and say which city he worked in.**

- a) M.Ulug'bek, Samarqand  
b) M.Ulug'bek, Shakhrisabz

**5. Where is the Hubble telescope?**

- a) in the UK b) in space



## Check yourself.

1. What do we use a telescope for?

a) to study the planets b) to study the stars

2. Who made/used the first telescope?

a) Ulug'bek b) Galileo Galilei

3. What are the parts of a traditional telescope?

a) a mirror and a lens b) a mirror, a tube and a lens

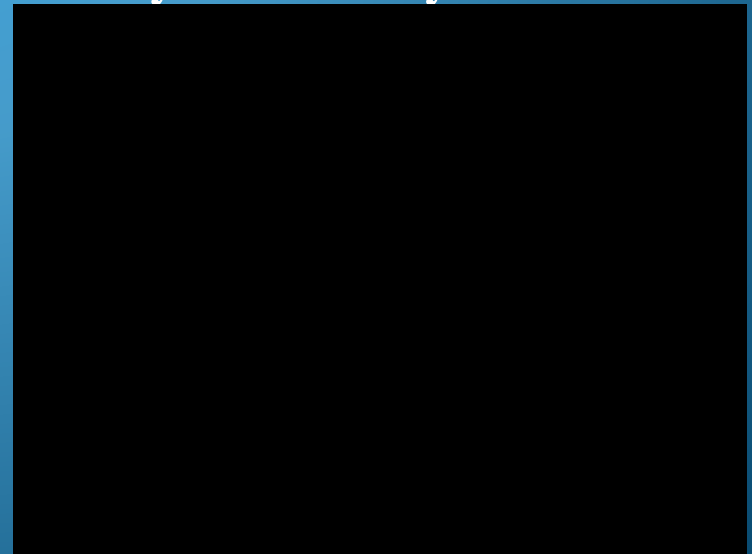
4. Name a famous Uzbek astronomer and say which city he worked in.

a) M.Ulug'bek, Samarqand

b) M.Ulug'bek, Shakhrisabz

5. Where is the Hubble telescope?

a) in the UK b) in space



## **Read and check your answers to questions.**

**Ulug'bek (1394-1449) was has grandson of Temur, a famous scientist and ruler of Movorounnahr. He built an observatory in Samarqand and studied the stars with a telescope. He made a famous map of the movement of 1054 different stars. It is still used today. Modern astronomers are surprised at the accuracy of his work. His book with the map is called "Ziji Ko'ragoniy".**



## Read and answer.

1. Where does this text come from?  
How do you know?
2. What information comes first in the text?
3. What comes next?  
What comes after that?



## Check your answer.

1. An encyclopedia. We know from the layout with the keyword, then the date, and then the information. This is how encyclopedia entries are always organised and presented.
2. Name
3. Date, definition of a thing or description of a person



Read and check your answers to questions.

**Telescope** We can study the sky and the stars through a **telescope**. Telescopes are used to make distant things look much bigger. Most astronomical telescopes are called reflecting telescopes because they use a large mirror and a lens to make a picture. The Hubble Space Telescope is a reflecting telescope in space. It can see stars much more clearly than telescopes on earth.



## Answer the following question

1. Is the Sun a planet or a star?
2. Does the Sun go around the Earth?
3. How long does it take light to reach us from the Sun?
4. What does it take Pluto 248 times longer than Earth to do?
5. Does the Sun rise in the east or west on Earth?
6. Which planet is known as the “red planet”?
7. How many moons does Jupiter have?
8. Would Saturn be a nice place to live?





**Match the first half of each sentence (on the left) with its correct second half (on the right).**

- |                  |  |
|------------------|--|
| 1. There are     | a) on its side.                            |
| 2. Mercury is    | b) nine planets in our solar system.       |
| 3. The Moon is   | c) famous for its Great Red Spot.          |
| 4. On Mars       | d) is dark on Pluto.                       |
| 5. Jupiter is    | e) the nearest planet to the Sun.          |
| 6. Saturn has    | f) blue because its atmosphere is methane. |
| 7. Uranus spins  | g) a day is 24 hours and 37 minutes.       |
| 8. Neptune looks | h) eighteen moons. One is called Titan.    |
| 9. Every day     | i) 384,000 km from Earth.                  |

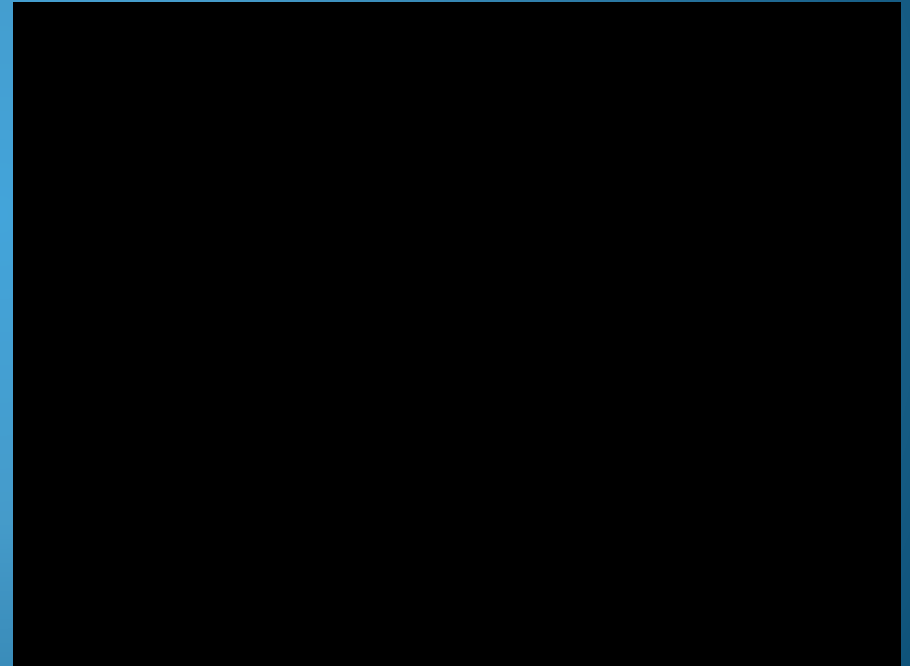
# Check yourself.

1. There are ~~a) on its side.~~
2. Mercury is ~~b) nine planets in our solar system.~~
3. The Moon is ~~c) famous for its Great Red Spot.~~
4. On Mars ~~d) is dark on Pluto.~~
5. Jupiter is ~~e) the nearest planet to the Sun.~~
6. Saturn has ~~f) blue because its atmosphere is methane.~~
7. Uranus spins ~~g) a day is 24 hours and 37 minutes.~~
8. Neptune looks ~~h) eighteen moons. One is called Titan.~~
9. Every day ~~i) 384,000 km from Earth.~~

## Reading

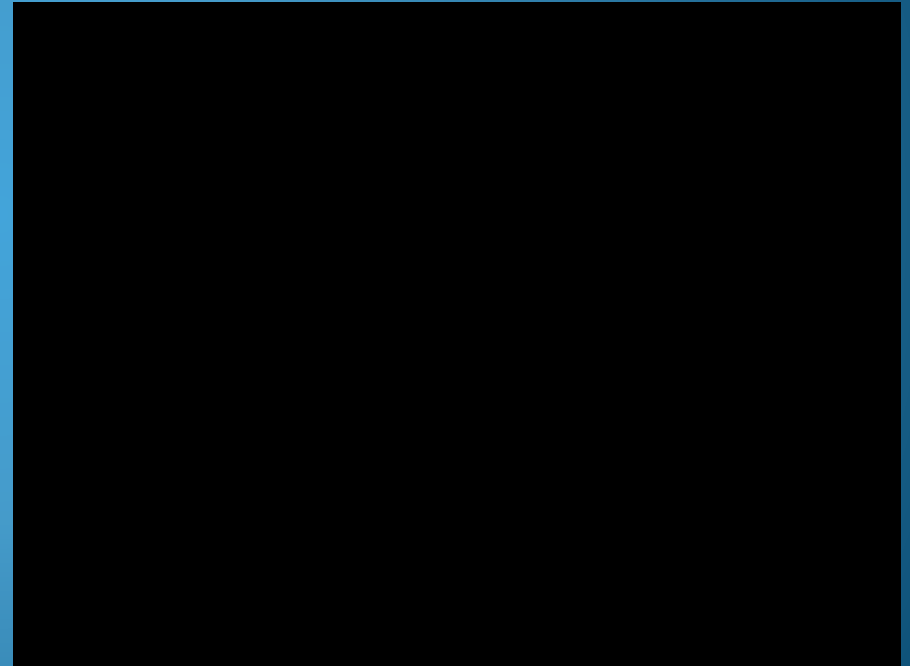
Read the text and find answers to the following question.

1. What are 'fallin stars'?
2. What does the Earth's atmosphere do?
3. Why don't meteors burn up in Space?



## WHAT IS A FALLING STAR

Falling stars are small, solid bodies that travel through Space. These stars are commonly called 'meteors'. Meteors can enter the atmosphere of the Earth at great speed. As a result, the friction that is created causes the meteor to begin to burn up. This produces the light that we refer to as a falling star. Our atmosphere protects the Earth's surface from the travel through the atmosphere. In Space there is no such barrier, so meteors do not burn up. Since the Moon does not have an atmosphere as dense as ours, many scientists think the craters on the Moon may have resulted from the impacts of meteors.



## Vocabulary and matching.

Match the words in column A with the definitions in column B.

A	B
1. Crater	a) a small piece of rock
2. meteor	b) the mixture of gases that surround a planet
3. atmosphere	c) the outside part of an object
4. surface	d) the rubbing of one thing against another
5. scientist	e) the action of one object hitting another
6. friction	f) a large hole in the ground
7. impact	g) a person who studies or teaches Science

# Vocabulary and matching

Match the words in column A with the definitions in column B.

A		B
1. crater	(f)	a) a small piece of rock
2. meteor	(a)	b) the mixture of gases that surround a planet
3. atmosphere	(b)	c) the outside part of an object
4. surface	(c)	d) the rubbing of one thing against another
5. scientist	(g)	e) the action of one object hitting another
6. friction	(e)	f) a large hole in the ground
7. impact	(d)	g) a person who studies or teaches Science