

**Part One: Reading**

*Read the text carefully then do the following activities.*

(15pts)

Astronomy is one of the sciences to which amateurs can contribute the most.

Collectively amateur astronomers observe a variety of celestial objects and phenomena sometimes with equipment that they build themselves. Common targets of amateur astronomers include the Moon, planets, stars, comets, meteor showers, and a variety of deep-sky objects such as star clusters, galaxies, and nebulae. One branch of amateur astronomy, amateur astrophotography, involves the taking of photos of the night sky. Many amateurs like to specialize in the observation of particular objects, types of objects, or types of events which interest them.

Most amateurs work at visible wavelengths, but a small minority experiment with wavelengths outside the visible spectrum. This includes the use of infrared filters on conventional telescopes, and also the use of radio telescopes. The pioneer of amateur radio astronomy was Karl Jansky, who started observing the sky at radio wavelengths in the 1930s. A number of amateur astronomers use either homemade telescopes or use radio telescopes which were originally built for astronomy research but which are now available to amateurs (e.g. the One-Mile Telescope).

Amateur astronomers continue to make scientific contributions to the field of astronomy. Indeed, it is one of the few scientific disciplines where amateurs can still make significant and useful contributions. Amateurs can make occultation measurements that are used to refine the orbits of minor planets. They can also discover comets, and perform regular observations of variable stars. Improvements in digital technology have allowed amateurs to make impressive advances in the field of astrophotography.

Source: Wikipedia

**A/ Comprehension:**

(8pts)

1- Choose the general idea of the text a, b or c:

- a) True astronomers.
- b) Amateur astronomy.
- c) Astronomy is a useful science.

2 – Are the following statements true or false according to the text:

- a) Amateur astronomers observe the space individually.
- b) Amateur astrophotography means taking photos of the night sky.
- c) Some Amateur astronomers use both homemade telescopes and radio telescopes.
- d) Astronomy is a discipline which permits amateurs to take part in discoveries.

3 – What do the underlined words refer to in the text:

That (§1) → ..... ; Which (§1) → .....  
This (§2) → ..... ; Where (§3) → .....

4 – Answer the following questions according to the text:

- a) What are astronomer's targets?
- b) What is the amateur astrophotographers' activity?
- c) How do a few amateurs work outside the visible spectrum?
- d) Have amateurs made considerable advances in astrophotography?

5 – Is the text? a) Narrative                      b) Argumentative                      c) Expository.

**B/ Text Exploration:**

(7pts)

1 – Find in the text words whose definitions follow:

- Natural facts that is seen (§1) = .....
- A person who first studies some new objects (§2) = .....

2 – Build opposite from the following word keeping their roots:

Common – Regular – Useful.

3 – Ask questions on the underlined words:

- a) Karl Jansky was the pioneer of amateur radio astronomy.
- b) He started observing the sky at radio wavelengths in the 1930's.

4 – Rewrite the 2<sup>nd</sup> sentence so that it means the same as the 1<sup>st</sup>:

- a) Amateur astronomers observe a variety of celestial objects and phenomena.  
- A variety of celestial objects and phenomena .....
- b) In the future, I desire to specialize in the observation of particular types of objects.  
- I wish.....
- c) "Amateur astronomers continue to make scientific contributions to field of astronomy", he said.  
- He said that.....
- d) Amateur astronomers have made impressive advances because they have worked very hard.  
- .....consequently.....

5 – Classify the following words according to the pronunciation of their final "s":

Astronomers – Objects – Types – Advances.

6 – A child is asking his grandfather about the planet Jupiter. Complete the conversation:

A: .....

B: Jupiter is composed almost entirely of gas.

A: .....

B: Yes, it's the largest planet in the solar system.

A: .....

B: It's one of the slowest planets of the system.

A: One of my classmates told me that Jupiter is one of the easiest planets to spot from the earth.

B: You can get exact information from the encyclopedia or internet.

**Part Two: Written Expression**

**(5pts)**

Choose one of the following topics.

**Topic 1:**

Astronomy is one of the most useful sciences today. Use the following notes to write a paragraph of about 120 words.

Solving mysteries of universe – predicting catastrophes – improving telecommunication:

- Weather forecasting.
- Gathering information about other planets.
- Research / geology etc...

**Topic 2:**

For ages man has been interested in space so he hasn't stopped thinking how to get there.

Today many trips and expeditions are organized.

Write a presentation about the history of the space travel.

*Good Luck*