# Hunting the edge of space

**Galileo observed the moon and turned his telescope on Jupiter. /10**

Galileo’s discovery of Jupiter was a revelation.

1. However, the observation of the planet was difficult, due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Jupiter was not a spot of light but a larger round disk. Galileo’s conclusion was that Jupiter was a sphere, another world, a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. He also discovered stars following Jupiter, like little ducklings following a duck.

What was his conclusion?

Explain in your own words :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. He published his \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in one of the most influential scientific books ever written, *The Starry Messenger*.

The most enduring mystery was Venus.

* 1. He observed the planet Venus while it was changing \_\_\_\_\_\_\_\_\_\_\_+\_\_\_\_\_\_\_\_\_\_\_ over a period of months.
  2. He even saw \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ floating around the planet.
  3. This specific pattern can only mean that Venus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  4. This discovery therefore implies that the planet Earth is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Galileo’s assertion did not confirm to the principles of old cosmology.

1. It brought him into conflict with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Explain why in your own words: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hunting the edge of space  **(11’20 – 15’34) KEYS suggestion: spelling not taken into account if it’s clear ---- UNLESS the meaning is different ☺**

From: But this is just the beginning.

Until: He was contradicting what was considered as the legitimate interpretation of the Bible, and the church couldn't tolerate this

**Galileo observed the moon and turned his telescope on Jupiter. /10**

1. Galileo’s discovery of Jupiter was a revelation.

However, the observation of the planet was difficult, due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **(the poor lens quality of his telescope). /1**

1. Jupiter was not a spot of light but a larger round disk. Galileo’s conclusion was that Jupiter was a sphere, another world, a \_\_\_\_\_\_\_\_\_\_\_\_. (**planet**) /1
2. He also discovered stars following Jupiter, like little ducklings following a duck.

What was his conclusion? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (= **moons around/** **orbiting Jupiter**). /1

1. He published his \_\_\_\_\_\_\_\_\_\_\_\_ (**findings**) in one of the most influential scientific books ever written, *The Starry Messenger*. /1
2. The most enduring mystery was Venus:
   1. He observed the planet Venus while it was changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**size 0.5 + shape 0.5 )** over a period of months.
   2. He even saw \_\_\_\_\_\_\_\_\_\_\_\_ (**shadows**) floating around the planet. /1
   3. This specific pattern can only mean that Venus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. **(is going around the Sun) /1**
   4. This discovery therefore implies that the planet Earth is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (no longer **the center of the cosmos/ universe) /1**
3. Galileo’s assertion did not confirm to the principles of old cosmology.
   1. It brought him into conflict with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. **(the Roman Catholic Church**) /1
   2. Explain why in your own words : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ /1

**(Both OK : He was contradicting what was considered as the legitimate interpretation of the Bible/ the church taught that God placed mankind on Earth, at the very center of creation)**

**Fill in the blanks. Complétez les phrases. Chaque phrase sera lue deux fois.**

**Veuillez noter que les questions d’audition seront reprises 10 min après la fin de l’exercice.**

Suggestion : 1 OR 0 /20

1. I think this has been one of the toughest years to forecast.
2. The year before they had this drought, these bone-dry fields were awash in rain; so much rain that it broke all records.
3. The weather here has all the hallmarks of global weirding.
4. When an animal dies in the sea, normally, bacteria destroy the soft parts very quickly. Later on, all researchers can find are the hard parts such as bones or shells.
5. Mammals have insulated their bodies to adapt to every climate and humans have used their intelligence to overrun the planet.
6. Stars are the only places in the universe that are hot and dense enough to fuse atoms together.
7. Forming heavy elements requires extremely high temperatures that can only be reached at the end of a star’s life.
8. The most important event in Egyptian agriculture was the annual flooding of the Nile.
9. The Babylonians appeared interested in solving practical problems to do with measuring and weighing. The Babylonian solutions to these problems are written like mathematical recipes.
10. In order to calculate and cope with large numbers, humans needed to invent a new symbol. And in so doing, they made one of the greatest breakthroughs in the history of mathematics – they invented the zero.