

**assignment 2: brief history**      **NAME** \_\_\_\_\_

1) circle the right answer:

Galileo Galilei was sentenced by the Roman catholic church to :  
be burned at stake, clean the tower of Pisa, stay under home arrest, be banished

Kepler got the data from the family of Tycho Brahe (after Brahe's death) by:  
stealing them, buying them, borrowing them, he didn't need the data

To unify the motion on and in Heaven, Newton introduced:  
the electromagnetic force, the force of gravity, the static force, the anti gravity pull

Halley's comet can be seen every:  
86 years, 16 years, 66 years, 76 years

The comet of Halley's can be seen in the 15<sup>th</sup> century , 77 yards long tapestry in Bayeux:  
Italy, Spain, France, England, Greece

The general relativity tells us that:  
The orbits of the planets are elliptical, large mass deform the fabric of space,  
gravity is a force that acts at distance, nothing can go faster than sound

The Big Bang was a term used by a journalist to make fun of this theory that describes  
Explosion of dying star into gamma ray bursts, The creation of the Universe including space and time,  
the burst of radio waves from the galactic center

We now knows that the Universe is :  
expanding at a constant rate, expanding and accelerating, slowing down, static

The maximum number of extra solar planets where:  
10, 2, 5

2)  
2.

A solar system with the Sun at the center is called a \_\_\_\_\_ system

A solar system with the Earth at he center is called a \_\_\_\_\_ system

Who was burned at stake for supporting Copernicus ideas ? \_\_\_\_\_

Who discovered the 4 closest moons of Jupiter ? \_\_\_\_\_

Who discovered Uranus and the center of the Milky Way ? \_\_\_\_\_

Hubble figured out the expansion of the Universe by studying the r\_\_\_\_\_ of galaxies.

What object lies in the center of our galaxy and emits radio waves first recorded by Jansky:

\_\_\_\_\_  
We can “ look” at our ancient Universe, 300,000 years after the Big Bang thanks to :  
\_\_\_\_\_ radiation.

3.

Who is the last astronomer who used his naked eyes to record the positions of Mars in the sky ?

Who unified motion in the heaven and motion on Earth and wrote the *principia*?

Galileo reasoned the Earth might rotate after looking at sunspots. Explain

Galileo watched the phases of a planet and concluded the Earth was orbiting the Sun and not the other way around. Which planet was it?

How the theory of general relativity explains the orbits of planets around heavy object like stars?

What is dark matter ? (you can use notes + wikipedia.org)

Using what kind of waves did scientists find out the black hole at the center of our Galaxy.

What is the size of our galaxy in light years ?  
So how long it takes the light to cross it?

How far, in light years, is our closest star proxima centauri ?

4.

Check this article.

<http://news.nationalgeographic.com/news/2009/04/090403-gamma-ray-extinction.html>

How scientists explain most gamma rays burst ?

Why a gamma ray burst aimed at us can be dangerous for the life on Earth ?