



## TRABAJO PRÁCTICO N° 6

### Objetivos

- ⊕ Verificar la comprensión lectora
- ⊕ Estructuras Gramaticales: Verbos que se refieran al tiempo pasado – Estructuras Pasivas

#### • PRIMERA PARTE

##### Who Was Eratosthenes?

Eratosthenes (276 BC-194 BC) was a Greek mathematician, geographer and astronomer. He was born in Cyrene (now Libya) and died in Ptolemaic Alexandria. He is noted for devising a map system based on latitude and longitude lines and computing the size of the Earth.

Eratosthenes studied at Alexandria and for some years in Athens. In 236 BC he was appointed by Ptolemy III Euergetes I as librarian of the Alexandrian library. He made several important contributions to mathematics and science, and was a good friend to [Archimedes](#). Around 255 BC he invented the [armillary sphere](#) (an astronomical instrument for determining celestial positions), which was widely used until the invention of the [orrry](#) in the 18th century.

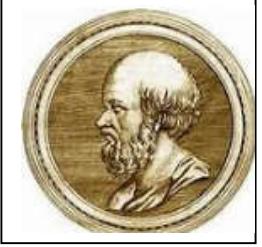


An [orrery](#) is a mechanical [model of the solar system](#) that illustrates or predicts the relative positions and motions of the [planets](#) and [moons](#), usually according to the [heliocentric model](#).



## ACTIVIDADES PARA LA PRIMERA PARTE

1- **TRANSFERIR** la información necesaria para completar la siguiente tabla.

ERATOSTHENES	
	
Nacionalidad y lugar de nacimiento	
Se distinguió por	
Trabajó como	
Hizo aportes a	
Áreas de estudio	

2- **COMPLETAR** las definiciones con la información aportada por el texto.

ORRERY (antiguo planetario de mesa)

ARMILLARY SPHERE (esfera armilar o estrolabio)

- **SEGUNDA PARTE**

Circa 200 BC Eratosthenes is thought to have coined or to have adopted the word geography, the descriptive study of the Earth.

Eratosthenes' other contributions include:

1. The Sieve of Eratosthenes as a way of finding prime numbers.
2. The measurement of the Sun-Earth distance, now called the astronomical unit (804,000,000 stadia, 1 stadion varies from 157 to 209 meter).
3. The measurement of the distance to the Moon (780,000 stadia).
4. The measurement of the inclination of the ecliptic with an angle error of 7'.
5. He compiled a star catalogue containing 675 stars, which was not preserved.
6. A map of the Nile's route as far as Khartoum.
7. A map of the entire known world, from the British Isles to Ceylon, and from the Caspian Sea to Ethiopia.

### **Eratosthenes' Experiment**

Eratosthenes will always be remembered for the calculation of the Earth's circumference circa 240 BC, using trigonometry and knowledge of the angle of elevation of the Sun at noon in Alexandria and Syene (now Aswan, Egypt). The calculation is based on the assumption that the Earth is Spherical and that the Sun is so far away that its rays can be taken as parallel.

Details of his method were published in a work *On the measurement of the Earth* which unfortunately was lost. We know indirectly about his method from other authors.



### **ACTIVIDADES PARA LA SEGUNDA PARTE**

- 3- **ESCRIBIR en castellano las 7 contribuciones que se listan arriba.**



## ACTIVIDADES

**4- CONTESTAR** las siguientes preguntas para verificar la comprensión lectora.

- 1) ¿Por qué siempre se recordará a Eratosthenes?
- 2) ¿Qué conocimientos utilizó?
- 3) ¿En qué hipótesis se basó el cálculo que se hace referencia en este párrafo?

- **Estructuras Gramaticales**

-  Hacer un listado de los verbos que se refieran al tiempo pasado y clasificarlos según sean regulares o irregulares

VERBOS REGULARES	VERBOS IRREGULARES+INFINITIVOS	SIGNIFICADO

- **SUBRAYAR** en el texto las **estructuras pasivas** y **TRADUCIRLAS** al castellano.