

Geocentric

Heliocentric

Fill in the following graphic organizer with the words below. Each one will be used once

<p>Geocentric Theory</p> <p>Draw a picture of this model</p>	<p>Heliocentric Theory</p> <p>Draw a picture of this model</p>
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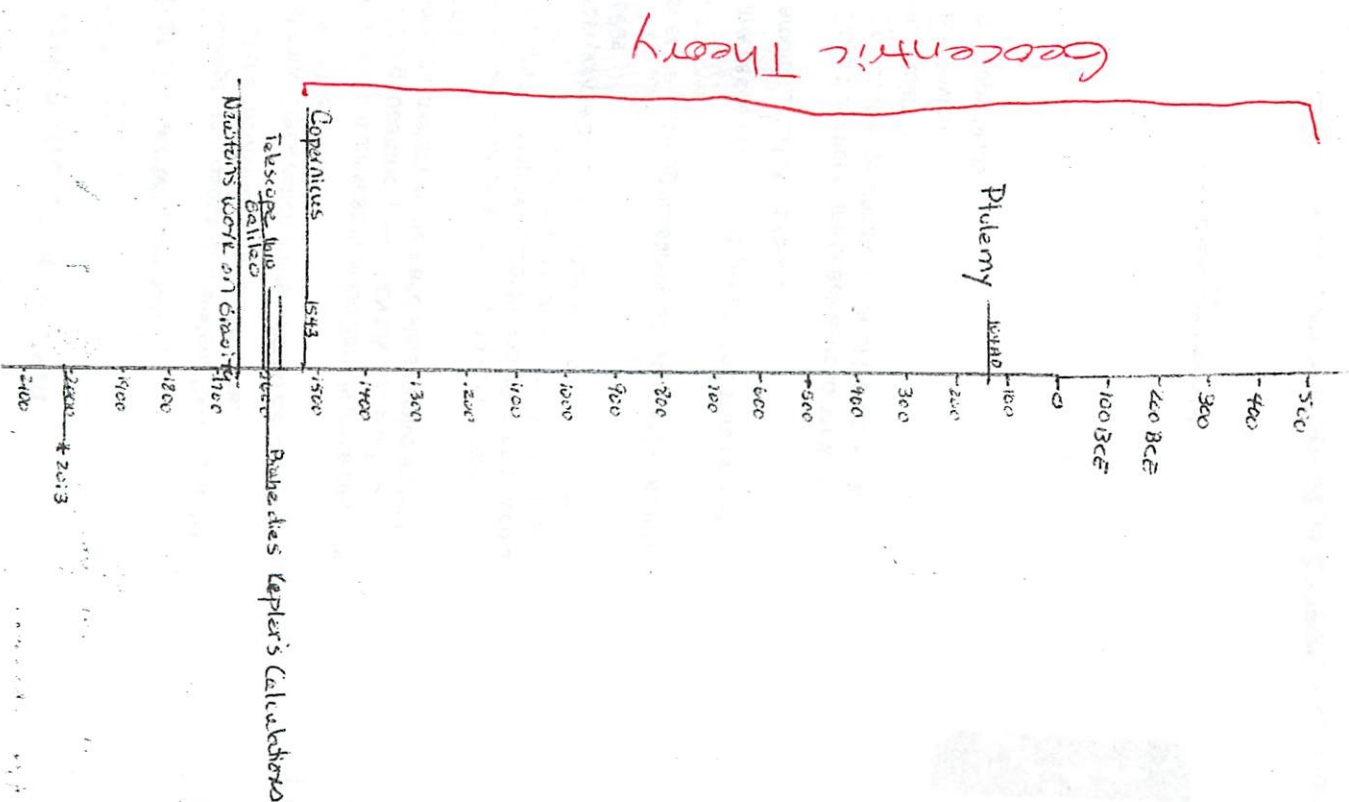
For sentences ↓ write Geocentric or heliocentric next to it ↓

Belief that the sun is the center of the solar system and all planets orbit around it. heliocentric

Belief that the earth is the center of the universe and the planets and sun orbit around it. geocentric

N. Copernicus	Aristotle	C. Ptolemy	Galileo G.	T. Brahe	J. Kepler
Current theory	previous theory				

Put these words in correct column



BC = Before Christ (AD = Anno Domini)

Observing the Solar System

(pages 554-559)

Earth at the Center (page 555)

Key Concept: In a geocentric system, Earth is at the center of the revolving planets and stars.

- Most early Greek astronomers believed Earth was the center of the universe.
- A model of the universe in which Earth is at the center is called a **geocentric** (jee oh SEN trik) system. In a geocentric system, planets and stars revolve around Earth.
- The Greek astronomer Ptolemy (TAHL uh mee) developed a complex geocentric model of the universe. Ptolemy's model seemed to explain motions in the sky. Most people believed in Ptolemy's model until the 1500s.

Answer the following questions. Use your textbook and the ideas above.

1. In a geocentric system, planets and stars revolve around Earth.
2. Circle the letter of the Greek astronomer who developed a geocentric model of the universe.
 a. Ptolemy
 b. Newton
 c. Copernicus



The Solar System

Sun at the Center (pages 556-557)

Key Concept: In a heliocentric system, Earth and the other planets revolve around the sun. Copernicus was able to work out the arrangement of the known planets and how they move around the sun. Galileo used the newly invented telescope to make discoveries that supported the heliocentric model. Kepler found that the orbit of each planet is an ellipse.

- A system in which the sun is at the center is called a **heliocentric** (hee lee oh SEN trik) system. Earth and other planets revolve around the sun in a heliocentric system.
- In 1543, a Polish astronomer named Nicolaus Copernicus developed a good heliocentric model of the universe.
- In the 1600s, the Italian scientist Galileo Galilei made discoveries that supported the heliocentric model.
- In the 1600s, the Danish astronomer Johannes Kepler discovered that the planets orbit the sun in a shape called an ellipse. An **ellipse** is an oval shape.

Answer the following questions. Use your textbook and the ideas above.

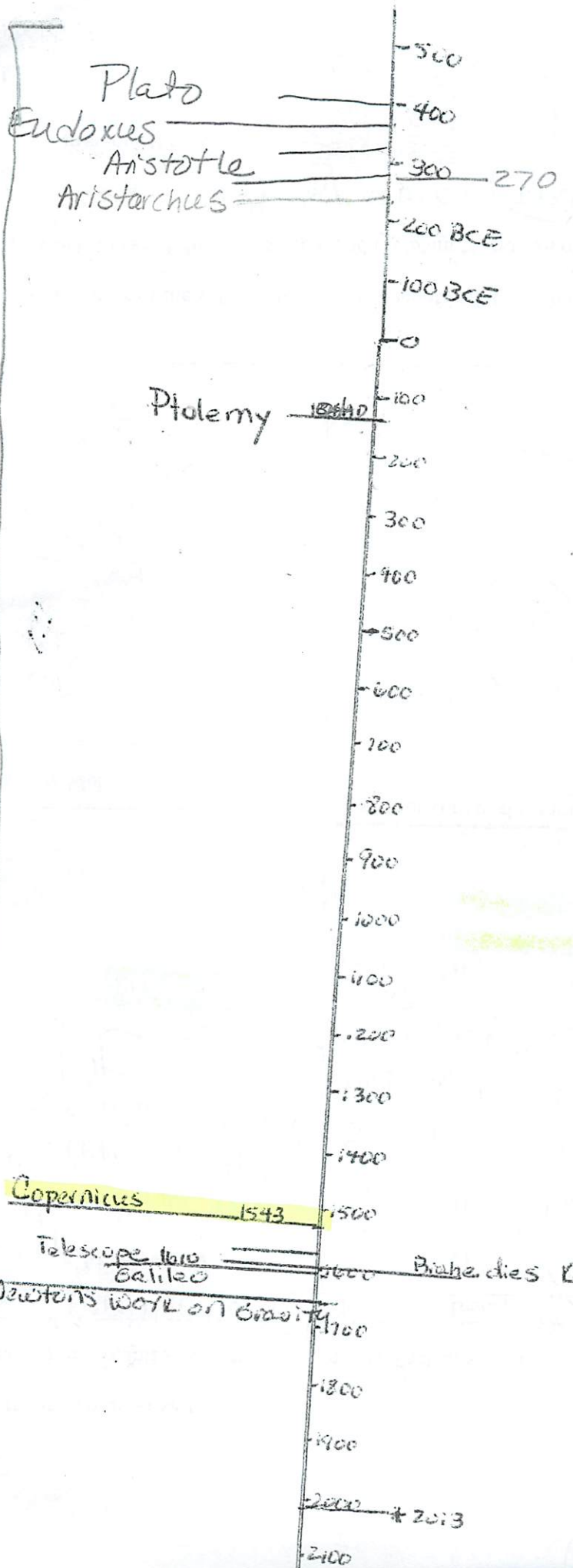
3. Circle the letter of the astronomer who developed a heliocentric model in the 1500s.
 a. Ptolemy
 b. Galileo
 c. Copernicus

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AD = Anno Domini
BCE = Before Common Era (BC = Before Christ)

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Geocentric Theory




Heliocentric Theory

theories of solar system


Fill in the following graphic organizer with the words below. Each one will be used once

<p>Helio-centric Theory "Sun Centered"</p>	<p>Geocentric Theory = "Earth Centered"</p>
<p>Current (now) theory the belief (theory) that the Sun is the center of our solar system and the planets orbit around it.</p>	<p>Previous (past) theory The belief (theory) that the Earth is the center of the universe (sun, planets, stars) orbit around it.</p>
<p>people Aristarchus (270BC) Copernicus Galileo Kepler</p>	<p>people Ptolemy Aristotle Eudoxus Plato</p>

Draw a picture of this model



Draw a picture of this model (555)



Belief that the sun is the center of the solar system and all planets orbit around it.

! Belief that the earth is the center of the solar system and the planets and sun orbit around it.

- N. Copernicus
- Aristotle
- C. Ptolemy
- G. Galileo
- T. Brahe
- J. Kepler

Current theory

previous theory

Bonus* Plato

Aristarchus

Bonus

6th
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