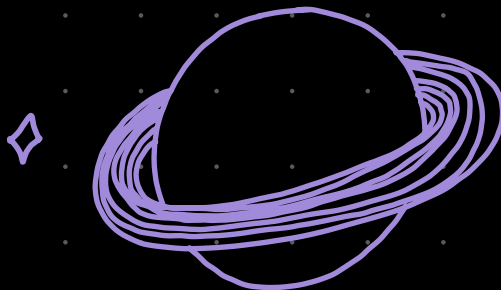
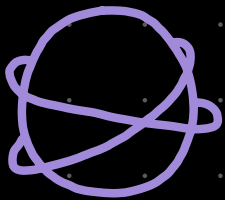
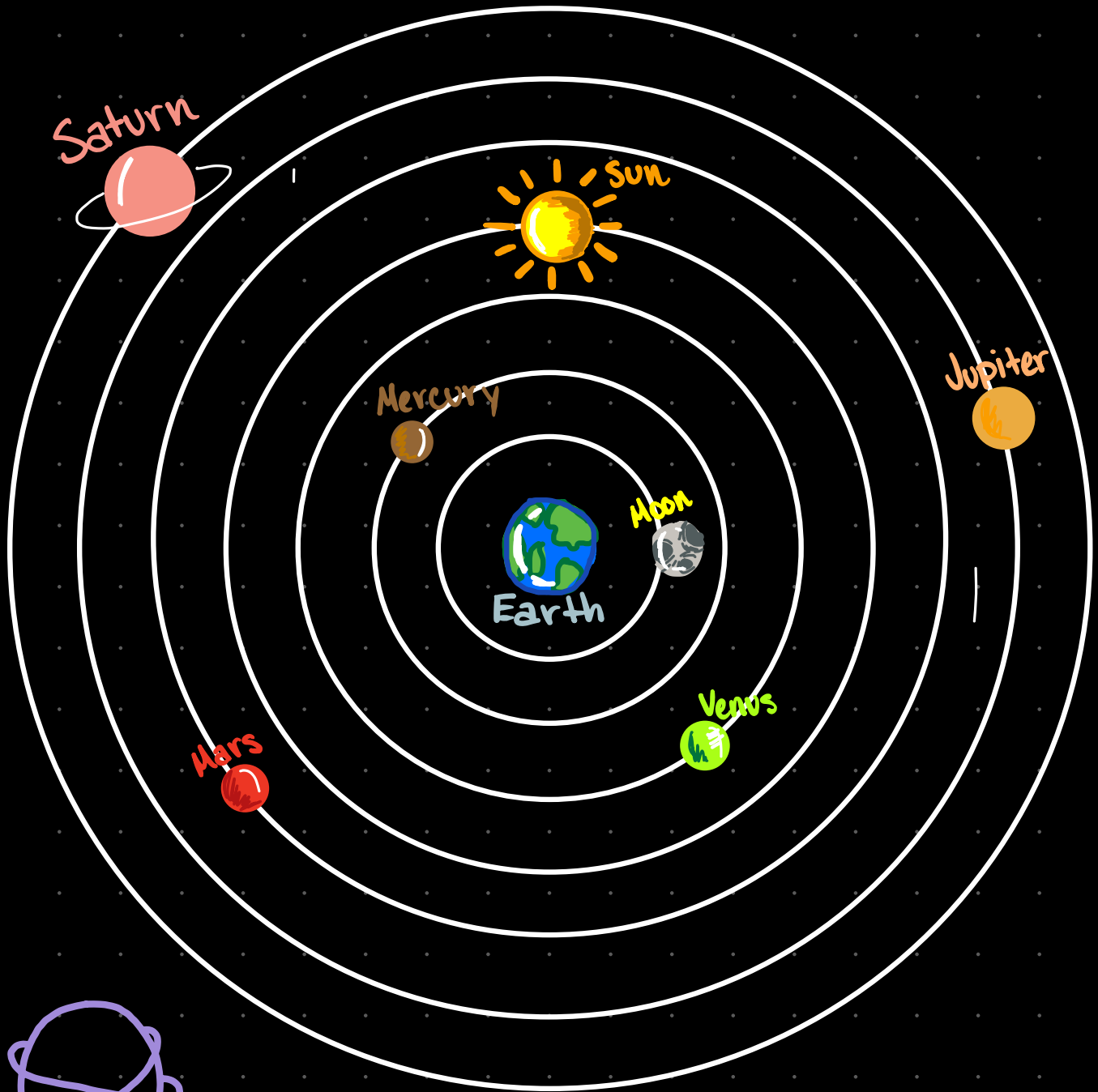
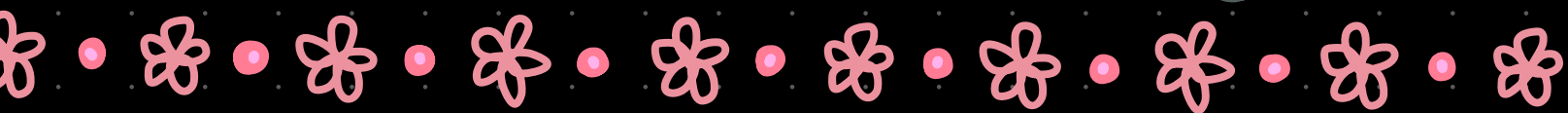
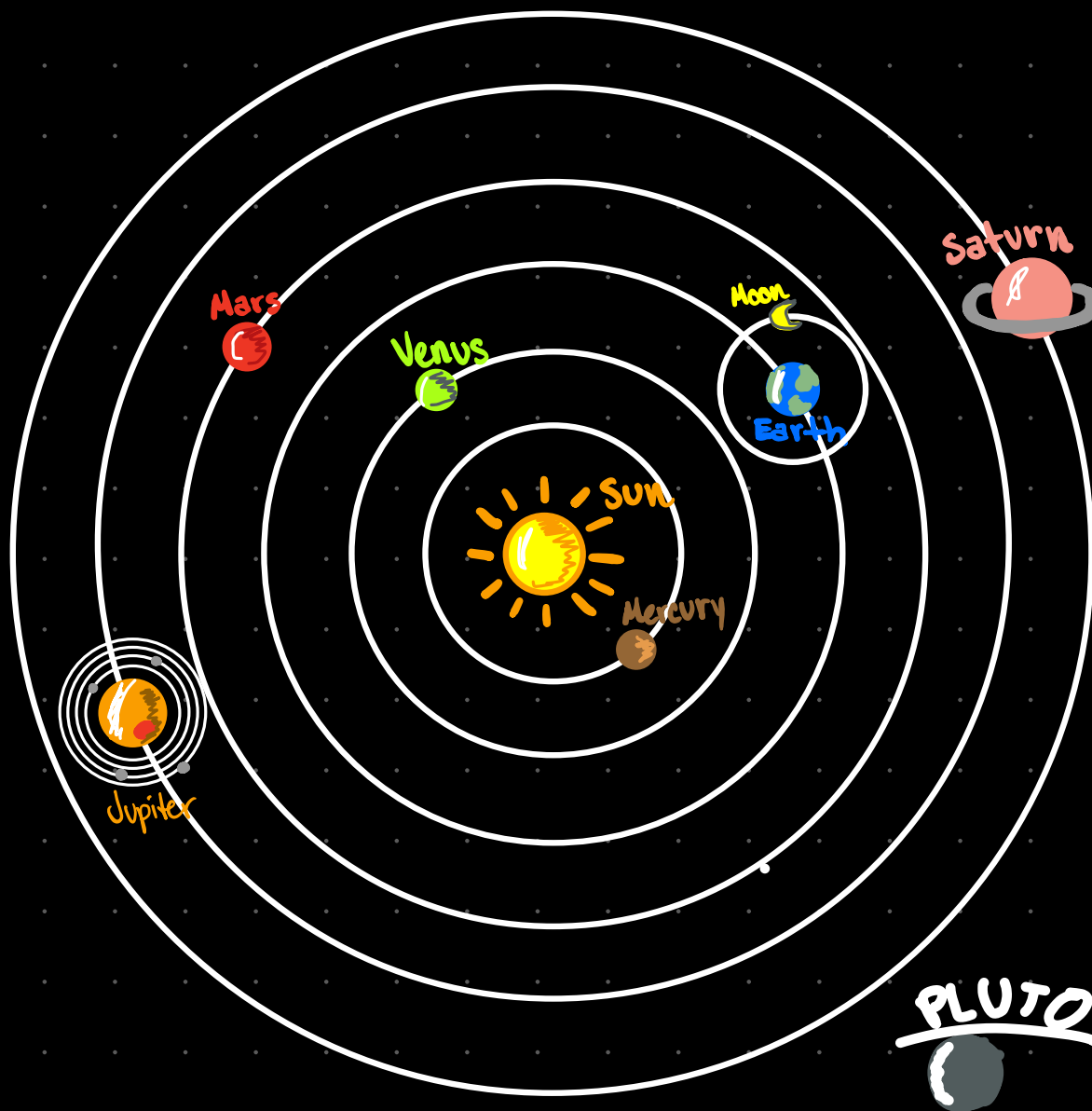


Geocentric Model:



Heliocentric Model:



★ Famous Astronomers! ★

• Aristotle (384-322 BCE)

↳ Was one of the most important and influential scientists in history!

• Geocentric Model  → Earth is the center of the universe! Everything orbits the Earth.

↳ He believed that PARALLAX proved that the Earth was the center of the universe.

★ Greek Astronomer / Scientist / Mathematician

★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★

• Aristarchus (310-230 BCE)

↳ Was the first scientist/mathematician to try to measure the distances and sizes of the Earth and Sun!

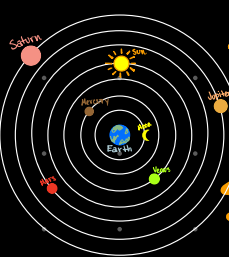
• First known scientist to demonstrate the HELIOCENTRIC Model to be true.

★ Greek Mathematician / Scientist

★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★ . ★

• Ptolemy of Alexandria (about 100-170 CE)

↳ Ptolemy did research on books in the Library of Alexandria that dated back 800 years. He gathered everything he could on Astronomy.

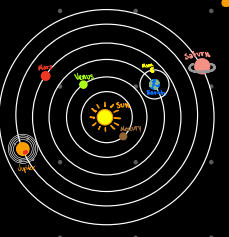


the measurement of stars, the Sun, the Moon, and the planets. Ptolemy believed and attempted to prove mathematically that all celestial objects moved in perfect circles. His theory of "wheels on wheels" was introduced in his book the Almagest.

★ Greek-Roman Citizen → lived in Egypt → Astronomer/Scientist / Mathematician!



• Nicolaus Copernicus (1473 - 1543 CE)



(H)

↳ Copernicus felt that Ptolemy's "wheels on wheels" Geocentric model was good, but too complicated. Copernicus knew about Aristarchus, and believed a Heliocentric "wheels on wheels" model was correct. He studied it, and was able to prove it mathematically.

→ Copernicus released his ideas after his death.

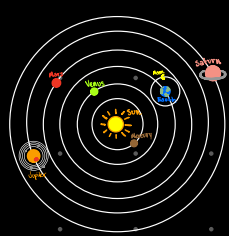
★ Polish - Astronomer/Mathematician



• Galileo Galilei (1564 - 1642 CE)



↳ Galileo used the scientific method to prove the heliocentric model. Galileo used the telescope to make observations



of the planets.

• He saw phases of Venus (like moon phases), and he found 4 moons orbiting Jupiter (the Galilean Moons of Jupiter are Io, Callisto, Europa, and Ganymede).

• These observations could be made by all scientists with telescopes! His books, in Italian, FOREVER removed any doubts about the Heliocentric model. Galileo also mapped the moon, and made significant advancements in the understanding of gravity!

★ ITALIAN - Astronomer / Mathematician / Scientist = The man!



★ Johannes Kepler (1564 - 1630 C.E.)

↳ Kepler made detailed observations of circular orbits, and made the discovery that the orbits were actually ELLIPSES!

• The Sun was at one of the foci of the ellipse.

★ GERMAN - Mathematician / Astronomer / Scientist

