

The Mechanical Universe
KEPLER'S LAWS
16min



Read the following questions before the video begins. Answer them while the video is in progress. Make note of when you are asked to pass this paper forward for collection. This is an *individual* effort. That means you **DON'T ASK OTHERS FOR ANSWERS** *It may* count as 10 lab points.

LISTEN! CONCENTRATE ON THE WORDS! DO NOT BE DISTRACTED BY THE IMAGES! IF YOU ARE EASILY DISTRACTED BY VISUALS, CLOSE YOUR EYES AND JUST LISTEN!

1. Around 1500, Copernicus wrote a book entitled
A. *The Starry Messenger* B. *Harmony of the Worlds*
C. *Dialogues Concerning the Two Chief World Systems*
D. *The Revolution of Heavenly Orbs*
E. *The Mathematical Principles of Natural Philosophy*
(The book was not published until the day of his death in 1543.)
2. Kepler became known as the “_____ mathematician.”
3. On January 1, 1600, Johannes Kepler set out to find
A. Brahe B. Galileo C. Descartes D. Jearl Walker
4. How did Kepler finally get the planetary data he sought?
5. Mars was an early Roman god of (circle all that apply)
A. Agriculture B. Love C. Commerce
D. Health E. War F. Beauty
6. Kepler's *first* step was to determine the orbit of
A. Earth B. Mars C. Sol (the sun) D. Luna (the moon)
7. When the eccentricity of an ellipse is zero, the curve is a(n) _____
8. If Kepler had analyzed the orbit of a planet other than Mars, he would have
A. settled on the ellipse as the path followed by planets in their orbits
B. settled on the circle as the path followed by planets in their orbits
9. Kepler's third law is the “law of _____.”
10. In all, Kepler is attributed with _____ laws.