

Name \_\_\_\_\_

## Timeline of Gravity Discoveries Answer Key

- 1 – Indian mathematician and astronomer Aryabhata writes about the Earth's rotation and gravitational effects in his work *Aryabhatiya*.
- 2 – Galileo Galilei studies the motion of falling objects and challenges Aristotle's ideas about gravity.
- 3 – Johannes Kepler formulates his three laws of planetary motion, describing how planets move around the Sun.
- 4 – Isaac Newton publishes *Philosophiæ Naturalis Principia Mathematica*, introducing the law of universal gravitation.
- 5 – Henry Cavendish uses a torsion balance to measure the gravitational constant ( $G$ ) for the first time.
- 6 – Albert Einstein presents the theory of general relativity, explaining gravity as the curvature of space-time.
- 7 – NASA's Gravity Recovery and Climate Experiment (GRACE) mission launches to map variations in Earth's gravitational field.
- 8 – The LIGO observatory detects gravitational waves for the first time, confirming a major prediction of general relativity.