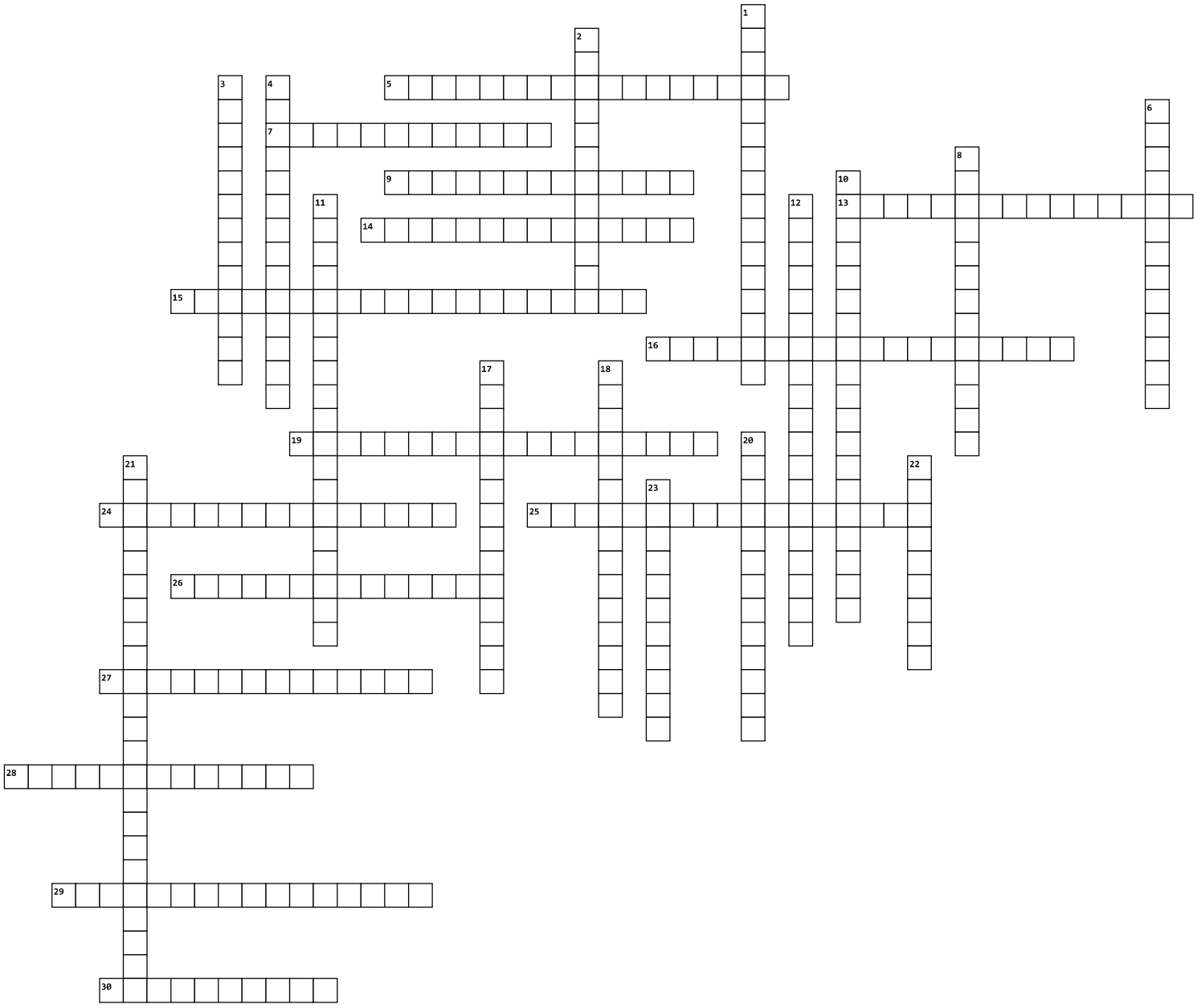
Gravitation-2



Across

5. A unit of distance used in astronomy, approximately equal to the distance from Earth to the Sun.

7. A law stating that every mass exerts an attractive force on every other mass.

9. Three laws describing the motion of planets around the Sun.

13. The minimum speed needed for an object to escape the gravitational pull of a celestial body.

14. The motion of an object in an orbit around a celestial body due to gravity.

Down

1. The shape of orbits that most planets and satellites follow around celestial bodies.

2. The force exerted on a mass due to the gravitational field of the Earth.

3. The gravitational acceleration experienced by objects near the Earth's surface.

4. The energy required to remove an object from a gravitational field completely.

6. The boundary around a black hole beyond which nothing can escape the gravitational pull.

15. An experiment by Henry Cavendish that determined the value of the gravitational constant.

16. A measure of the gravitational force experienced by an object.

19. A constant value in the equation of Newton's law of gravitation, denoted by G.

24. The path followed by a satellite revolving around a planet due to gravitational force.

25. A force that keeps a body moving in a curved path, directed toward the center of rotation.

26. A relationship where force decreases with the square of the distance between objects.

27. The relationship between the gravitational force and the distance between objects.

28. The gravity experienced on the Moon, which is weaker than Earth's gravity.

29. The predictable path of a planet as it orbits around a star or another planet.

30. A region in space with gravity so strong that even light cannot escape it.

8. A measure of an object's resistance to acceleration when a force is applied.

10. An orbit where a satellite remains in a fixed position relative to the Earth's surface.

11. A region in space where an object experiences a force due to gravitational attraction.

12. The force of attraction between two masses due to gravity.

17. The force per unit mass experienced by a small test mass in a gravitational field.

18. The attraction that every mass exerts on every other mass due to gravity.

20. The gravitational pull exerted by the Sun on objects within the Solar System.

21. The work done per unit mass to bring an object to a point in a gravitational field.

22. The motion of an object solely under the influence of gravitational force.

23. The force exerted on an object due to differences in gravitational pull across its length.