










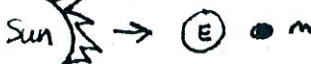

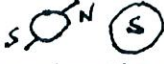
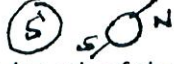
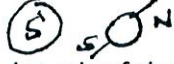
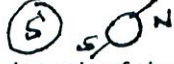
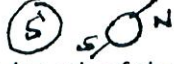


STUDY GUIDE-CHAP 7-EARTH, SUN, MOON INTERACTIONS

GRADE _____

1. FORCE A push or a pull 
2. GRAVITY The force of attraction between objects 
3. INERTIA The term which describes that objects in motion tend to stay in motion and objects at rest tend to stay at rest (unless another opposite force acts upon the object)
4. MASS A measure of the amount of matter in an object 
5. WEIGHT A measure of the force of gravity
6. ROTATE When an object spins on its axis 
7. REVOLVE When an object moves around another object or orbits another object 
8. DAY & NIGHT This is caused due to the earth rotating on its axis 
9. SEASONS These are caused by the tilt of the planet as it orbits the sun 
10. PHASES OF MOON These are caused because you see different portions of the lit side of the moon as it moves around the earth 
11. TIDES These are caused because the moon's gravity pulls on the water and the earth 
12. SOLAR ECLIPSE These happen when the moon casts a shadow on the earth; it only happens when it is new moon 
13. LUNAR ECLIPSE These happen when the earth casts a shadow on the moon; this happens only during full moon 
14. FULL MOON This phase of the moon occurs when the earth is between the sun and the moon 
15. NEW MOON This phase of the moon occurs when the moon is between the sun and the earth 
16. SUMMER Happens in the northern hemisphere when the northern hemisphere is tilted toward the sun 
17. WINTER Happens in the northern hemisphere when the northern hemisphere is tilted away from the sun 
18. EQUINOX Happens in the spring and the fall when the length of the day and night are equal 
19. SUMMER SOLSTICE Happens on June 21 in the northern hemisphere when we have the longest day and shortest night 
20. WINTER SOLSTICE Happens on December 21 in the northern hemisphere when we have the shortest day and longest night 

Name _____

Law of Universal Gravitation / Newton's Law of Gravitation

21. Universal Gravitation States that all objects in the universe are attracted to one another
22. UMBRA The name given to the darkest and smallest part of the shadow in a total lunar or solar eclipse See diagram below
23. PENUMBRA The name given to the lighter and larger part of the shadow in a partial lunar or solar eclipse see diagram below
24. ELLIPSE The name of a "not perfect circle" or somewhat flattened or oval like circle; planets orbit in this kind of orbit See moon phase diagram below
25. POUNDS The unit weight is measured in
26. GRAMS The unit that mass is measured in
27. NEWTONS The unit that gravity is measured in
28. TRIPLE BEAM BALANCE The instrument used to measure mass
29. SCALE The instrument used to measure weight
30. 24 Hours The time it takes for earth to make one rotation (one spin)
31. 365 days The time it takes for the earth to make one revolution (move around sun)
32. 27.3 days The time it takes for the moon to rotate on its axis and revolve around the earth
33. 23.5° The amount of tilt the earth has on its axis
34. URANUS The planet that has a 98 degrees tilt and spins or rotates nearly on its side; has very distinct seasons as a result
35. VENUS The planet that has no tilt and therefore no seasons

WORD BANK—USE EACH WORD ONE TIME

VENUS, URANUS, 23.5 DEGREES, 27.3 DAYS, 24 HOURS, 365 DAYS, SCALE, TRIPLE BEAM BALANCE, GRAMS, NEWTONS, POUNDS, NEWTON'S LAW OF GRAVITATION, UMBRA, PENUMBRA, ELLIPSE, GRAVITY, WINTER SOLSTICE, SUMMER SOLSTICE, FORCE, EQUINOX, WINTER, SUMMER, NEW MOON, DAY & NIGHT, FULL MOON, INERTIA, REVOLUTION, WEIGHT, MASS, ROTATION, LUNAR ECLIPSE, SOLAR ECLIPSE, TIDES, SEASONS, MOON PHASES

