

Name: _____ Class Period: _____

KEY

Review for 7th Science 1st Semester Exam 18-19

Directions:

- 1) Use your binder notes and textbook to complete the REVIEW.
- 2) Study ALL items on the REVIEW for your semester exam.

List the body parts that the safety equipment or technique protects.

1. Goggles - Eyes
2. Gloves - Skin
3. Wafting - Nose
4. No Eating - Gastrointestinal Tract / Stomach
5. Proper Ventilation - Lungs

Answer the questions.

6. An eyewash station is used primarily for which purpose?

to rinse chemicals that may splash into your eyes

7. What can be used to extinguish a fire?

Fire extinguisher, Fire blanket, or the floor (Stop, drop + Roll)

List the items the instrument would measure.

8. Graduated Cylinder - Liquids
9. Meter Stick - Length or Distance (cm)
10. Triple beam balance - Mass

Answer the questions.

11. In an experiment, what is the variable that you can change?

Independent Variable

12. In an experiment, what is the variable being measured?

Dependent Variable

13. In an experiment, what is the variable that stays the same through the entire experiment?

Constant / Control

14. Scientists use their prior knowledge and experience to:

form a hypothesis

15. What can be used to analyze data?

Tables, charts, or graphs

16. Define Observations:

Bits of information you gather with your senses

17. What is Turgor Pressure?

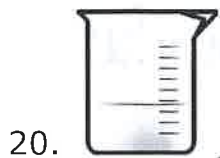
Force of water molecules against the cell wall that allows plants to stand up straight.

18. What is a watershed? the area of land where all of the water that is under it or drains off of it goes to the same place

19. What is the difference between surface and ground water?

Groundwater is located in large aquifers and must be pumped out. Surface is found in lakes, rivers, and streams and is run-off.

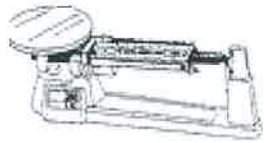
Label each piece of laboratory equipment.



20. Beaker



21. Erlenmeyer Flask



22. Triple Beam Balance

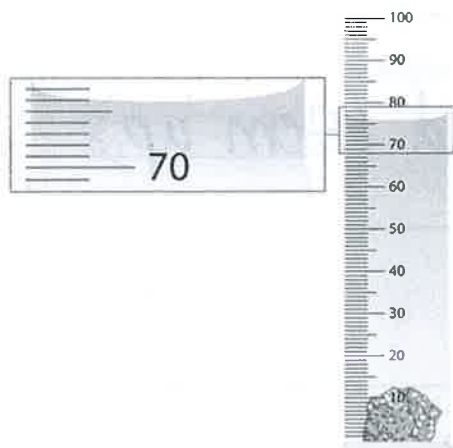


23. Graduated Cylinder

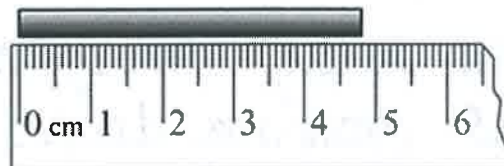


24. Florence Flask

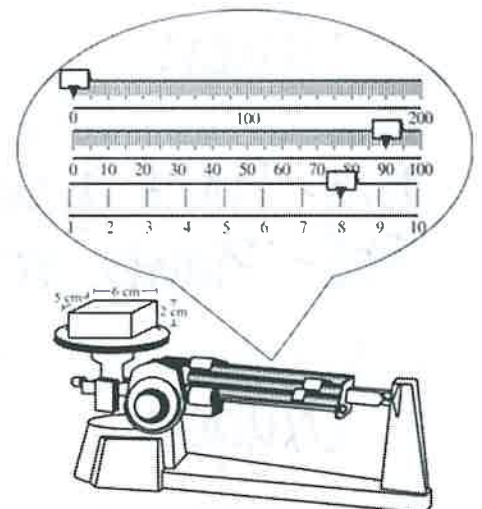
Know how to read correct measurements on equipment.



25. 76 ml



26. 4.8 cm



27. 188g

KNOW HOW TO CONVERT CENTIMETERS TO MILLIMETERS:

28. 20cm = 200 mm

29. 5cm = 50 mm

30. 56cm = 560 mm

add a "0"

Answer the questions.

31. What is a tropism?

A plant's response to an external stimulus

32. What is the definition of the prefix GEO?

Earth

33. What is the definition of the prefix HYDRO?

Water

34. What is the definition of the prefix PHOTO?

Light

35. What is the definition of the prefix THIGMO?

Touch

36. Give an example of negative geotropism and positive geotropism?

Neg- Plant growing away from ground (stem up)
Pos- Plants roots growing down

37. What gas do plants release as a result of photosynthesis?

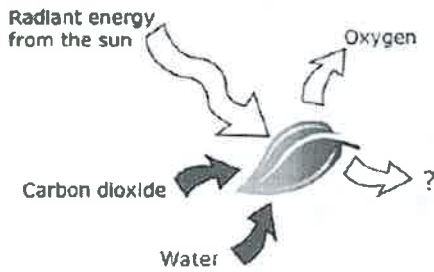
Oxygen

38. What energy transformation occurs during photosynthesis?

Radiant energy into chemical energy

39. Glucose helps maintain life on our planet by storing what type of energy?

chemical energy



40. The diagram above provided illustrates the process of photosynthesis, including the substances used by and produced by plants. What is the identity of the chemical represented by the question mark in the diagram?

Glucose

Identify: Producers, Consumers, Herbivores, & Carnivores in a Food Chain or Web.

41. Define Producer:

provides the primary source of energy for all other organisms (able to make its own food)

42. Define Consumer:

gains energy by eating other living things

43. Define Herbivore:

Animals that eat only plants or plant products

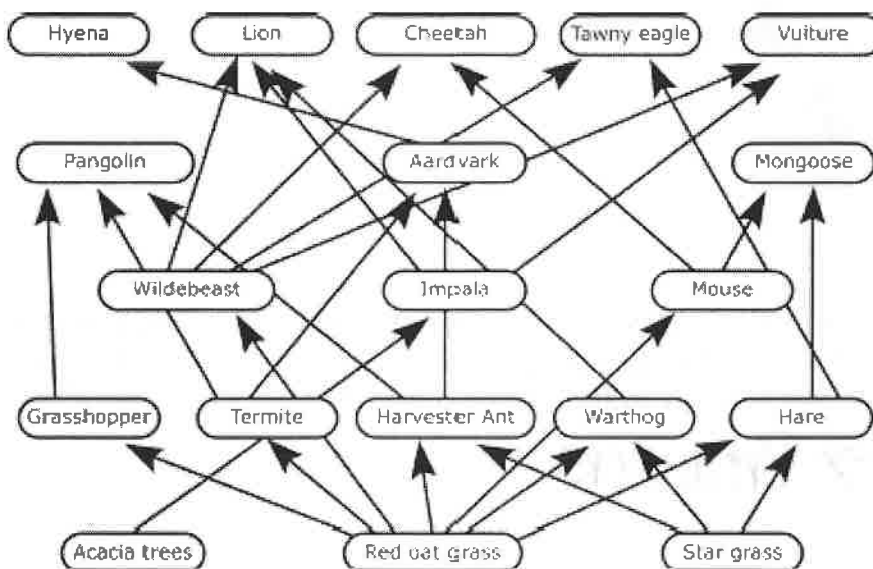
44. Define Carnivore:

Animals that eat other animals

45. What is the difference between a primary, secondary, and tertiary consumer?

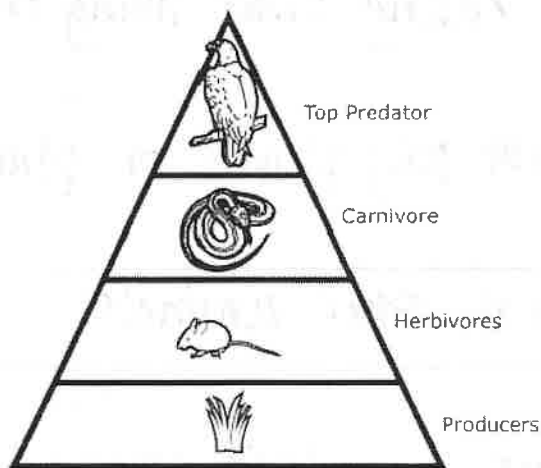
A primary consumer gets their energy by feeding on producers in the food chain, secondary consumers get their energy by feeding on primary consumers (herbivores) and tertiary consumers get their energy by feeding on secondary consumers.

Identify and Know: the paths that energy would flow through an ecosystem diagram. An example of an ecosystem diagram is below.



46. A diagram below is provided. Which portion of the diagram represents the level with the most available energy?

Producers



47. The table below provides information on the function of different digestive structures. Which of the digestive structures in the table can cause a chemical change to occur?

Stomach

| Digestive Structure | Digestive Function |
|---------------------|---|
| Teeth | Breaks down food into smaller pieces |
| Tongue | Helps shape the food into a ball to be passed from the mouth to the esophagus |
| Esophagus | Transports food from the mouth to the stomach |
| Stomach | Acid breaks down food particles into nutrients the body can absorb |

48. What is a chemical change?

It involves a change in the identity or chemical composition of a substance.

49. List examples of chemical changes during digestion?

Protein is broken down into amino acids in stomach + saliva breaks down starches in mouth.

50. What is a physical change?

It involves changes to the form of a substance, but not its chemical identity.

51. List examples of physical changes during digestion?

Teeth chewing food, food squeezed into a different shape when passing through esophagus.

52. What are indicators a new substance has been formed?

Gas production, solid formation, sometimes color/temp change.

53. Animals can move as a result of what energy conversion?

Chemical → Mechanical Energy

54. What happens to the energy obtained by an organism when it consumes food?

It is transformed into other forms of energy

55. Mammals maintain their body temperature as a result of what energy conversion?

Chemical Energy → Thermal Energy

56. When a plant performs photosynthesis, the radiant energy of the Sun is stored as what type of energy?

Chemical energy

Describe the types of energy.

57. Radiant: Energy from the Sun

58. Chemical: Energy stored in the bonds of molecules

59. Mechanical: Energy of motion or position

60. Electrical: Energy carried by the flow of an electrical current

Define the following definitions:

61. Erosion-

the process by which water, ice, wind + gravity remove and transport sediments from one place to another.

62. Deposition -

process by which gravity, water, wind + ice deposit weathered and relocate sediments.

63. Weathering -

the mechanical or chemical processes that break down rock into smaller pieces.

64. Sediments -

Earth material that is broken down by processes of weathering.

65. What are two agents of erosion?

1. water, gravity

2. wind, ice

66. What is the difference between Chemical and Mechanical Weathering?

Mechanical is breaking big rocks into smaller ones by water, wind, gravity or ice. Chemical is when rock is chemically weathered; example oxidation

67. How is a delta formed? When the river reaches a lake or ocean and the water slows down carrying sediments.

68. How is a canyon formed? by long time erosion of water

69. What causes sand dunes? formed by wind, usually along a beach or desert

70. What ecoregion is mostly affected by hurricanes and flooding?

Gulf Coast Region

71. How are caves formed and what type of rock would you find there? they are

formed by dissolution of limestone rock from water

