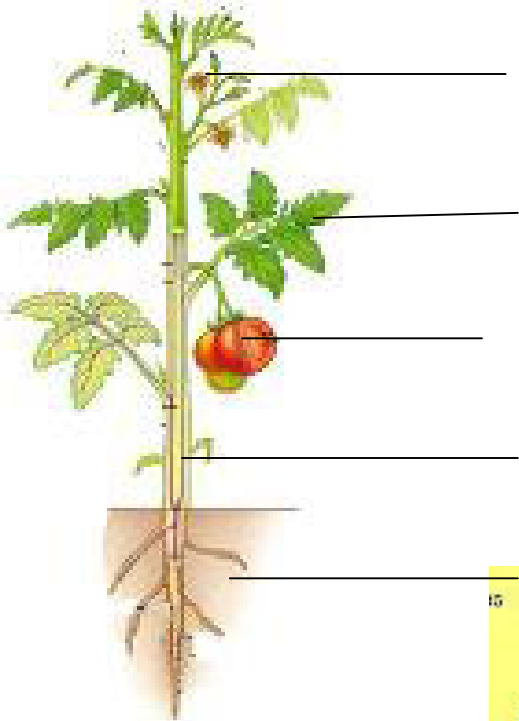


NAME _____
 5th Grade – SOL SCIENCE
 REVIEW - **PLANTS**

Name the parts of this plant:
 (FLOWER, FRUIT, LEAF, ROOT, STEM)



NAME THE PLANT PART

- 1) I often have bright colors, but my real job is to make seeds.

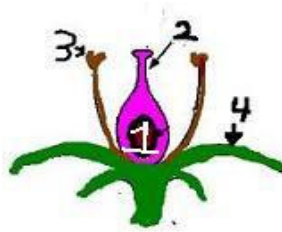
- 2) I carry water from the roots to the leaves.

- 3) I collect energy from the sun to make food for the plant.

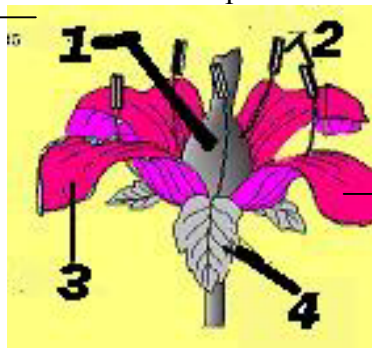
- 4) I taste good, but my job is to protect the seeds.

- 5) I anchor the plant in place, and I absorb water and minerals from the soil.

- 6) Someday a new plant will grow from me.



- 7) #1 is where the ____ develop.
 - a. flower
 - b. seeds and fruit
 - c. leaves
- 8) #2 is the _____.
 - a. pistil
 - b. sepal
 - c. stamen
- 9) #3 is the _____.
 - a. pistil
 - b. stamen
 - c. sepal
- 10) #4 is the _____.
 - a. pistil
 - b. stamen
 - c. sepal



Label the parts 1-4
 #1 _____
 #2 _____
 #3 _____
 #4 _____

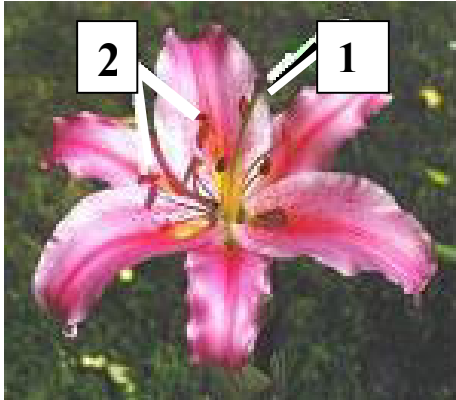
Fill in the blank with the flower part.
 (PISTIL, STAMEN, PETAL, SEPAL, OVARY)

11) A large center stalk - the female part of the flower: _____

- 12) The tall, thin stalks with knobbed tips. They hold grains of pollen on their tips. _____
- 13) Brightly colored and sweet-smelling leaf-like part of the flower. _____
- 14) Small leaf-like part at the base of the flower. _____
- 15) Ball-shaped part at the base of the pistil which holds the seeds.

- 16) The function of the flower:
 - a. to look and smell good to attract pollinators
 - b. reproduction
 - c. both
- 17) The male part of the flower:
 - a. stamen
 - b. leaf
 - c. root
 - d. pollen
- 18) The tip of the stamen is called the anther. It holds:
 - a. dust
 - b. pollen
 - c. seed
- 19) The pistil is the ____ part of the flower.
 - a. female
 - b. male
- 20) The base of the pistil where seeds develop:
 - a. ovary
 - b. root
 - c. trunk

- 21) The ovary holds tiny ovules which develop into:
- kittens
 - seeds
 - pollen



#1 above is in the center of the flower. It is the (female/male) part of the flower called the _____.

#2 above – Several _____ surround the pistil. They are the _____ (male / female) part of the flower.

- 22) The first stage of the plant's reproductive process is:
- migration
 - saturation
 - pollination

- 23) Pollen grains can be carried by:
- wind
 - insects
 - birds
 - all of the above

- 24) Some flowers have both male and female parts and can pollinate themselves.
- true
 - false

- 25) The tip of the pistil is called the stigma. It is sticky and _____ sticks to it.
- pollen
 - dust

- 26) When pollen grains land on the pistil, they are carried by a long pollen tube to the :
- ovary
 - flower
 - root

- 27) When the pollen grains meet the ovules (eggs), _____ may take place.
- fertilization
 - hibernation
 - pollination

- 28) After fertilization, the ovules develop into:
- seeds
 - apples
 - cucumbers

- 29) Some flowers have male and female parts and can therefore fertilize themselves. Most plants need pollen from another flower. Pollen grains are transported from flower to flower:
- in the wind
 - by insects, especially bees
 - by birds
 - all of the above

- 30) NUMBER THE FOLLOWING SENTENCES IN ORDER:
- _____ Pollen grains are carried by wind, insects, birds etc.
- _____ Pollen cells meet with the ovule (egg).
- _____ Pollen forms on the stamen
- _____ The ovule (egg) is fertilized
- _____ A seed forms from the fertilized ovule
- _____ Pollination takes place when pollen lands on the tip of

the pistil of a different flower (or sometimes the same flower) _____ A pollen tube grows down to the ovary.

- 31) After fertilization, the ovule (egg) becomes a seed, and the ovary, which holds the ovule becomes a:
- stem
 - leaf
 - fruit

- 32) The fruit protects the:
- egg
 - seed
 - plant

- 33) In certain plants called conifers, seeds form inside _____ instead of fruit.
- shells
 - cones
 - cases

- 34) A pine tree protects its seeds with:
- fruit
 - cones

- 35) Plants make their own:
- energy
 - food
 - nutrients

- 36) In order to make their own food, plants need:
- human help
 - a nice spot in the garden
 - energy from the sun

- 37) In order to make their own food, plants need the sun's energy. Plant's also need: (choose 2)
- plant food
 - soil
 - water
 - carbon dioxide from the air.

- 38) Plants make their own food through a process called:
- photo analysis
 - photosynthesis
 - reproduction
- 39) Water is absorbed from the soil by the plant's:
- leaves
 - roots
 - vines
- 40) The carbon dioxide needed for photosynthesis is found in the :
- water
 - air
 - soil
- 41) Plants take in carbon dioxide from the air through tiny openings called stomata which can be found on:
- the underside of the leaves
 - the flower
 - the stem
- 42) A plant's green pigment is:
- chlorozone
 - chlorophyll
 - chlorine
- 43) A plant uses chlorophyll to convert energy from:
- sunlight
 - water
- 44) During photosynthesis, plants make:
- food
 - sugar
 - glucose
 - all are correct.
- Glucose is the name of the simple sugar that plants make.
- 45) Plants use this gas in photosynthesis:
- oxygen
 - carbon dioxide
 - nitrogen
- 46) Oxygen is:
- inhaled by the plant
 - released into the air through the stomata
 - exhaled
- 47) People need plants because:
- we get energy by eating them
 - they give us the oxygen we breathe
 - both
- 48) COMPLETE THIS FORMULA
Photosynthesis =
- _____ +
_____ +
_____ +

- 49) Which is NOT needed for photosynthesis?
- water
 - soil
 - air
 - sunlight
 - chlorophyll
- 50) What makes plants green?
- chlorophyll
 - green parents
 - envy
- 51) Scott's parents gave him a houseplant, which he decided to keep in his room. Scott kept the curtains closed in his room. What do you think happened to the plant?
- It died from lack of water
 - It died from lack of sunlight.
- 52) Sarah put fish and aquatic (water) plants in her aquarium. Why was it a good idea to put plants in the fish tank?
- The fish could eat the plants
 - The plants made the tank more attractive and the fish happier.
 - The plants give off the oxygen needed by the fish. The fish give off the carbon dioxide needed by the plants.
- 53) Could we exist without plants?
- Yes, except vegetarians.
 - No. Plants are the first link in every food chain. Without them, nothing else can exist.
- 54) Do all plants reproduce with seeds?
- Yes
 - No, ferns and mosses don't. They use spores for reproduction.
- 55) Mosses and ferns reproduce using:
- seeds
 - spores
 - they don't reproduce

56) Mosses and ferns produce food through _____ like other green plants.

- a. cooking
- b. photosynthesis
- c. growing

57) Unlike many green plants, mosses do not have:

- a. roots
- b. leaves
- c. stems
- d. stems, leaves or roots

58) Food and water travel slowly through mosses:

- a. from cell to cell
- b. through the stem and leaves.

59) Many plants absorb water through their roots and transport the water up their _____ to the rest of the plant.

- a. leaves
- b. flowers
- c. stems

60) The stems in most plants have tubes to transport water and nutrients. These plants are called:

- a. vascular plants
- b. nonvascular plants

61) Trees and most flowering plants are:

- a. vascular plants
- b. nonvascular plants

62) Mosses are:

- a. vascular plants
- b. nonvascular plants

63) Nonvascular plants don't grow tall because they don't have stems to transport:

- a. water & nutrients
- b. sugar
- c. soil



64) This house is covered with moss, a type of:

- a. vascular plant
- b. nonvascular plant



65) This is an enlarged picture of a liverwort. It is only about one inch tall.

Liverworts are:

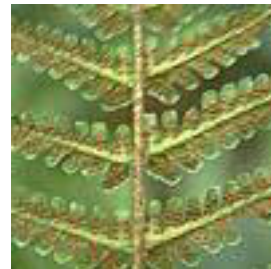
- a. vascular plants
- b. nonvascular plants

66) Ferns are vascular plants, but, like mosses, they also use _____ to reproduce.

- a. spores
- b. seeds

67) Ferns have _____ like most other green plants.

- a. leaves
- b. stems
- c. roots
- d. all of the above



68) Tiny brown dots, containing hundreds of _____ line the underside of the fern leaf.

- a. insects
- b. spores

69) How are ferns and mosses different from other plants?

- a. they don't use photosynthesis to make food
- b. they use spores instead of seeds for reproduction

70) Some plants die in the winter, and others:

- a. migrate
- b. become dormant

71) Dormancy allows many plants to survive through the winter and grow year after year. It is like hibernation for plants. When plants are dormant, they are alive, but:

- a. often don't need sunlight
- b. may seem to disappear even though the roots remain alive underground
- c. don't produce or need food
- d. all of the above