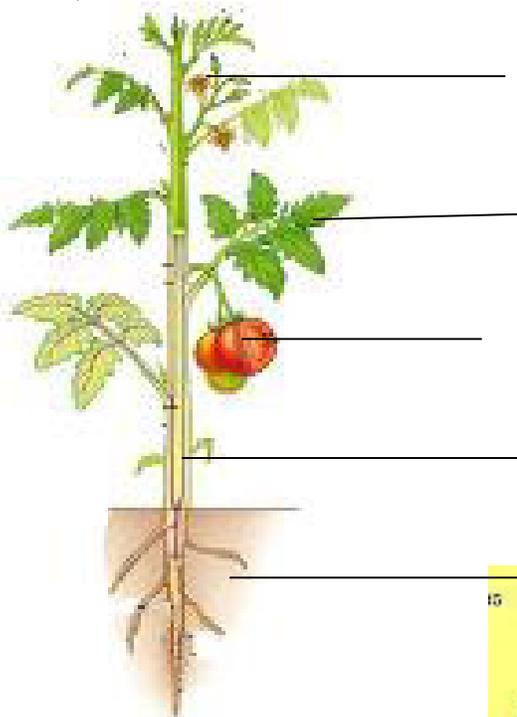


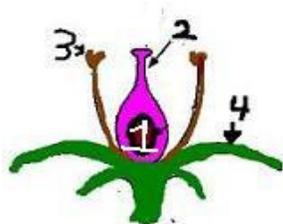
NAME _____
 5th Grade – SOL SCIENCE
 REVIEW - **PLANTS**

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

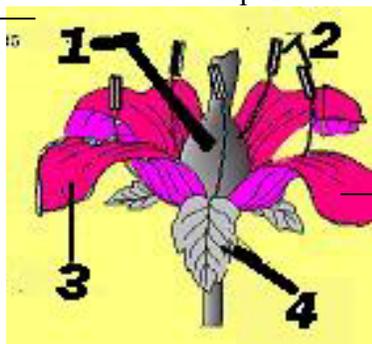


NAME THE PLANT PART

- 1) I often have bright colors, but my real job is to make seeds.
 _____ **flower** _____
- 2) I carry water from the roots to the leaves.
 _____ **stem** _____
- 3) I collect energy from the sun to make food for the plant.
 _____ **leaf** _____
- 4) I taste good, but my job is to protect the seeds.
 _____ **fruit** _____
- 5) I anchor the plant in place, and I absorb water and minerals from the soil. _____ **root** _____
- 6) Someday a new plant will grow from me.
 _____ **seed** _____



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

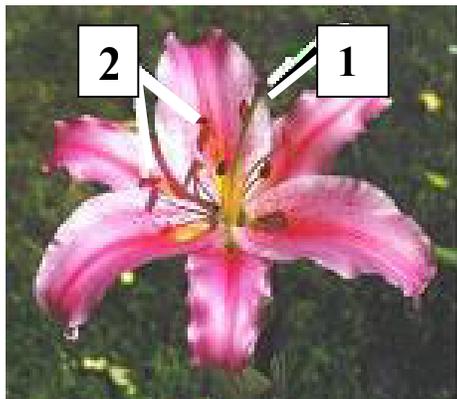


- Label the parts 1-4
- #1 **pistil** _____
- #2 **stamen** _____
- #3 **petal** _____
- #4 **sepal** _____

Fill in the blank with the flower part.

- (PISTIL, STAMEN, PETAL, SEPAL, OVARY)
- 11) A large center stalk, the female part of the flower: _____ **pistil** _____
 - 12) The tall, thin stalks with knobbed tips. They hold

- 13) Brightly colored and sweet-smelling leaf-like part of the flower.
 _____ **petals** _____
- 14) Small leaf-like part at the base of the flower.
 _____ **sepals** _____
- 15) Ball-shaped part at the base of the pistil which holds the seeds.
 _____ **ovary** _____
- 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:
 - a. kittens
 - b. *seeds
 - c. pollen



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

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

22) The first stage of the reproductive process for plants is:

- a. migration
- b. saturation
- c. ***pollination**

23) Pollen grains can be carried by:

- a. wind
- b. insects
- c. birds
- d. ***all of the above**

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

- a. ***true**
- b. false

25) The tip of the pistil is called the stigma. It is sticky so _____ will stick to it.

- a. ***pollen**
- b. dust

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

- a. ***ovary**
- b. flower
- c. root

27) When the pollen meet with the ovules (eggs), _____ may take place.

- a. ***fertilization**
- b. hibernation
- c. pollination

28) After fertilization, the ovules develop into:

- a. ***seeds**
- b. apples
- c. cucumbers

29) Some flowers have make and female parts and can therefore fertilize themselves. Most plants need pollen from another flower. Pollen grains are transported from flower to flower:

- a. in the wind
- b. by insects, especially bees
- c. by birds
- d. ***all of the above**

30) NUMBER THE FOLLOWING SENTENCES IN ORDER:

 2 Pollen grains are carried by wind, insects, birds etc.

 5 Pollen cells meet with the ovule (egg).

 1 Pollen forms on the stamen

 6 The ovule (egg) is fertilized

 7 A seed forms from the fertilized ovule

 3 Pollination takes place when pollen lands on the tip of the pistil of a different flower (or sometimes the same flower)

 4 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:

- a. stem
- b. leaf
- c. ***fruit**

32) The fruit protects the:

- a. egg
- b. ***seed**
- c. plant

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

- a. shells
- b. ***cones**
- c. cases

34) A pine tree protects its seeds with:

- a. fruit
- b. ***cones**

35) Plants make their own:

- a. energy
- b. ***food**
- c. nutrients

36) In order to make their own food, plants need:

- a. human help
- b. a nice spot in the garden
- c. ***energy from the sun**

37) In order to make their own food, plants need the sun's energy, and they also need: (choose 2)

- a. plant food
- b. soil
- c. ***water**
- d. ***carbon dioxide from the air.**

- 38) The process plants use to make their own food:
- photo analysis
 - *photosynthesis
 - reproduction
- 39) Water is absorbed from the soil by the plant's:
- leaves
 - *roots
 - vines
- 40) Carbon dioxide is found in the :
- water
 - *air
 - soil
- 41) Plants take in carbon dioxide from the air through tiny openings called stomata located on:
- *the underside of the leaves
 - the flower
 - the stem
- 42) A plant's green pigment:
- chlorozone
 - *chlorophyll
 - chlorine
- 43) Chlorophyll helps the plant use 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 =
- Chlorophyll _____ +
Sunlight _____ +
Water _____ +
Carbon Dioxide _____
- 49) What 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 because it didn't have enough water
 - *It died because it didn't have sunlight.
- 52) Sarah set up her aquarium with some fish and aquatic (water) plants. 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 gave off the oxygen needed by the fish, and the fish gave 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 by _____, like other green plants.
- cooking
 - *photosynthesis
 - growing

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

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

58) In mosses, food and water travel slowly:

- 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:

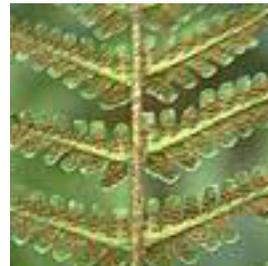
- a. vascular plants
- b. *nonvascular plants

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