

<b>1</b>	A) process where plants use energy from sunlight to make food from CO <sub>2</sub> and H <sub>2</sub> O
<b>2</b>	B) green pigment in chloroplasts that captures energy from sunlight
<b>3</b>	C) organelles in plant cell that contain chlorophyll
<b>4</b>	D) sturdy outside shell of a plant cell that is made mostly of fiber
<b>5</b>	E) organism that makes its own food
<b>6</b>	F) stage in a plant life cycle when spores are made
<b>7</b>	G) stage in a plant life cycle where male gametophytes produce sperm and female gametophytes produce egg
<b>8</b>	H) plant that has special tissues for moving food or water (xylem and phloem)
<b>9</b>	I) plant that has no special tissues for moving food or water. They move by diffusion only. Examples: moss, liverwort, hornwort
<b>10</b>	J) non flowering plant that makes seeds
<b>11</b>	K) flowering plant that makes seeds
<b>12</b>	L) root-like structure in nonvascular plants
<b>13</b>	M) underground stem that can produce new plants in new locations
<b>14</b>	N) seed making plant that does not have fruit or flowers
<b>15</b>	O) seed making plants that have fruit and flowers
<b>16</b>	P) angiosperm that has one cotyledon, leaves with parallel veins, scattered vascular tissue, and flower petals in 3s.
<b>17</b>	Q) angiosperm that has two cotyledons, leaves with branching veins, vascular tissue in a ring, and flower petals in 4s or 5s.
<b>18</b>	R) when a substance moves (seeps) from an area of high concentration to an area of low concentration

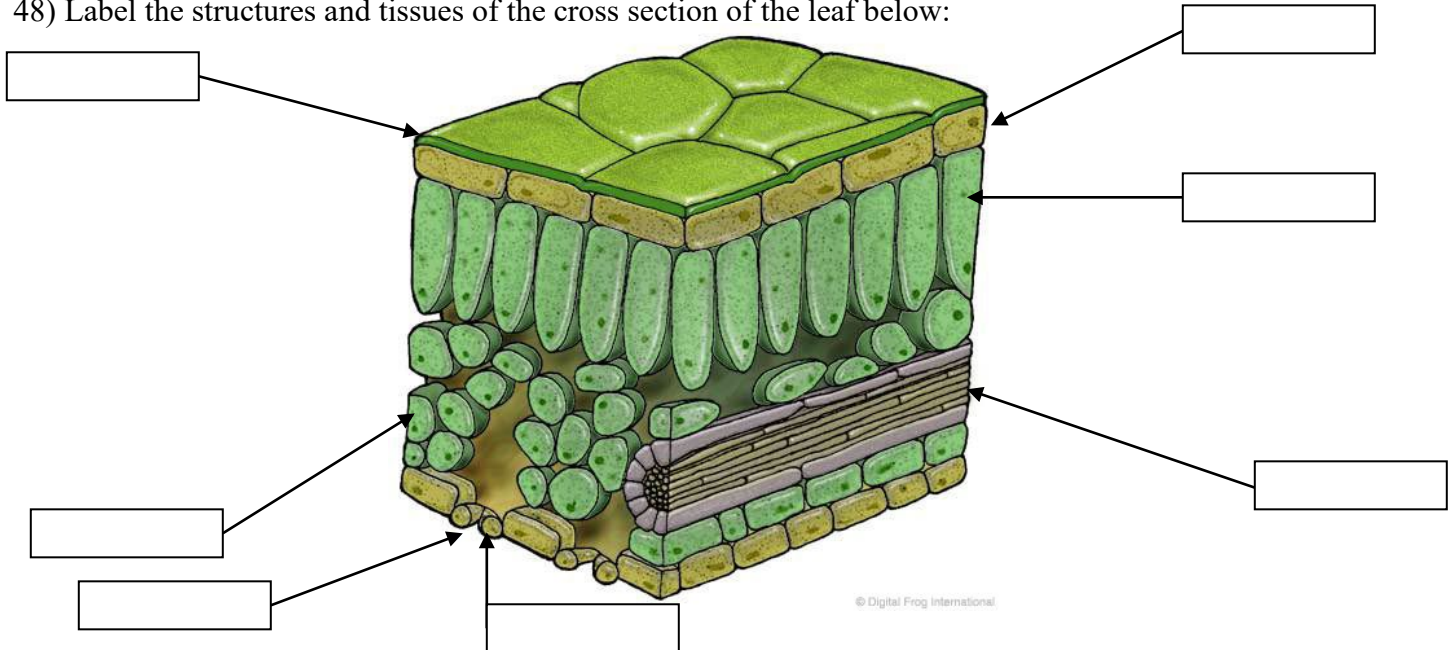
**ROOTS, STEMS, AND LEAVES**

<b>19</b>	A) soft and flexible stem
<b>20</b>	B) rigid stem
<b>21</b>	C) one main root (usually dicots and gymnosperms)
<b>22</b>	D) branched roots (usually monocots)
<b>23</b>	E) protects the tip of a root and secretes a slimy substance making it easier for the root to move through soil
<b>24</b>	F) vascular tissue that transports food molecules
<b>25</b>	G) vascular tissue that transports water and minerals
<b>26</b>	H) outside layer of cells on a plant
<b>27</b>	I) densely packed layer of cells in the leaf with many chloroplasts
<b>28</b>	J) lightly packed layer of cells in the leaf that allow gases to move about
<b>29</b>	K) waxy coating on the surface of plants to keep them from drying out
<b>30</b>	L) opening in the bottom of a leaf that lets gases in and out
<b>31</b>	M) Cells that open and close the stomata (openings)

**FLOWERS AND SEEDS**

- |           |   |
|-----------|---|
| <u>32</u> | A) leaves at the base of a flower that protect it when it is still a bud      |
| <u>33</u> | B) colored flat portion of a flower that attracts pollinators                 |
| <u>34</u> | C) female reproductive structure in a flower                                  |
| <u>35</u> | D) the top sticky part (of the female structure)                              |
| <u>36</u> | E) the stalk-like middle part (of the female structure)                       |
| <u>37</u> | F) the bottom part (of the female structure) that holds eggs                  |
| <u>38</u> | G) contains the egg   |
| <u>39</u> | H) male reproductive structure in a flower                                    |
| <u>40</u> | I) the top part (of the male structure) with pollen in it                     |
| <u>41</u> | J) the stalk-like middle part (of the male structure)                         |
| <u>42</u> | K) granule made by a flower that contains sperm                               |
| <u>43</u> | L) the point in time where pollen gets stuck to the stigma                    |
| <u>44</u> | M) The point in time where the sperm (pollen) meets egg (ovule) in the flower |
| <u>45</u> | N) stored food in a seed that is used by the young plant                      |
| <u>46</u> | O) protective coating of a seed   |
| <u>47</u> | P) baby plant   |

48) Label the structures and tissues of the cross section of the leaf below:



a) Which layer secretes a waxy substance to prevent water loss? What is this waxy substance called?

b) Which layer is the site of photosynthesis? \_\_\_\_\_

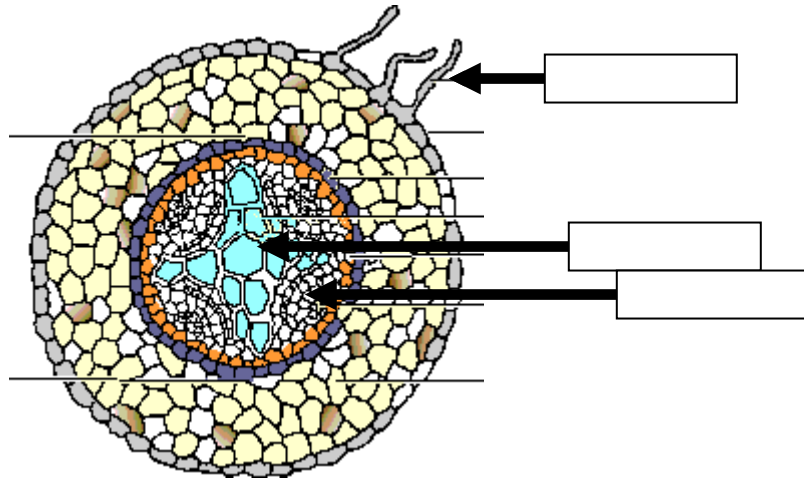
c) Which layer is the site of air exchange? \_\_\_\_\_

d) What structure can be opened or closed to control air exchange and water loss? \_\_\_\_\_

e) What structure allows food to move down the plant and water and minerals to move up the plant?

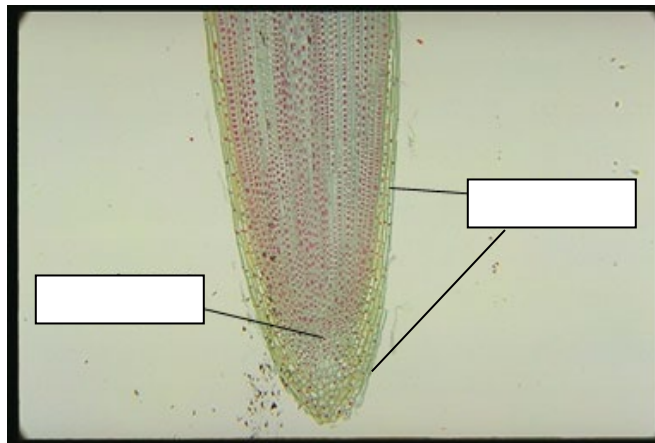
\_\_\_\_\_

49) Label the structures and tissues of the cross section of the root below:



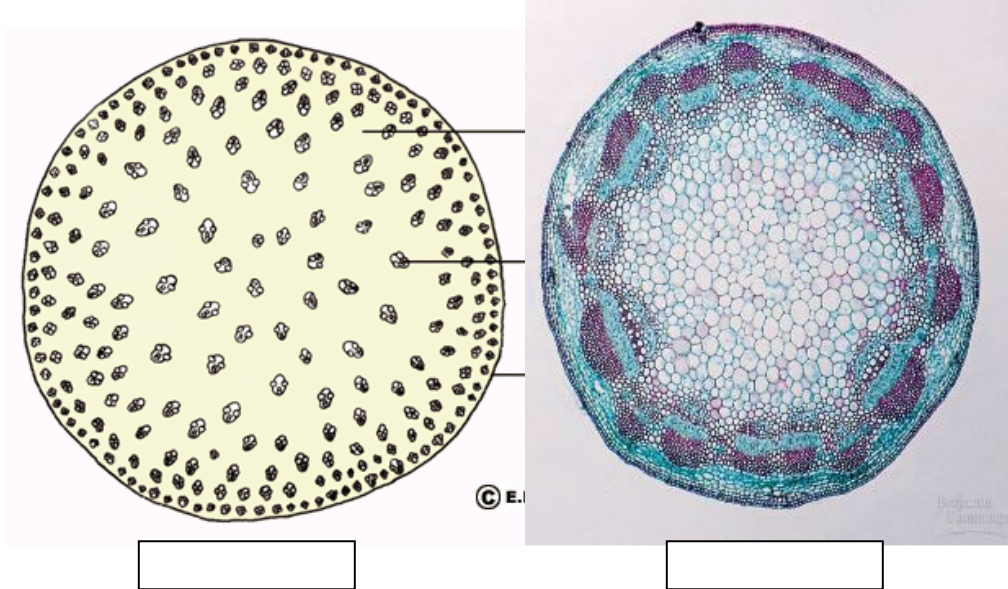
- Which structure allows water and minerals to flow up the plant? \_\_\_\_\_
- Which structure allows food to flow through the root? \_\_\_\_\_
- Which layer increases the absorption surface area of roots? \_\_\_\_\_

50) Label the structures and tissues of the lateral section of the root below:

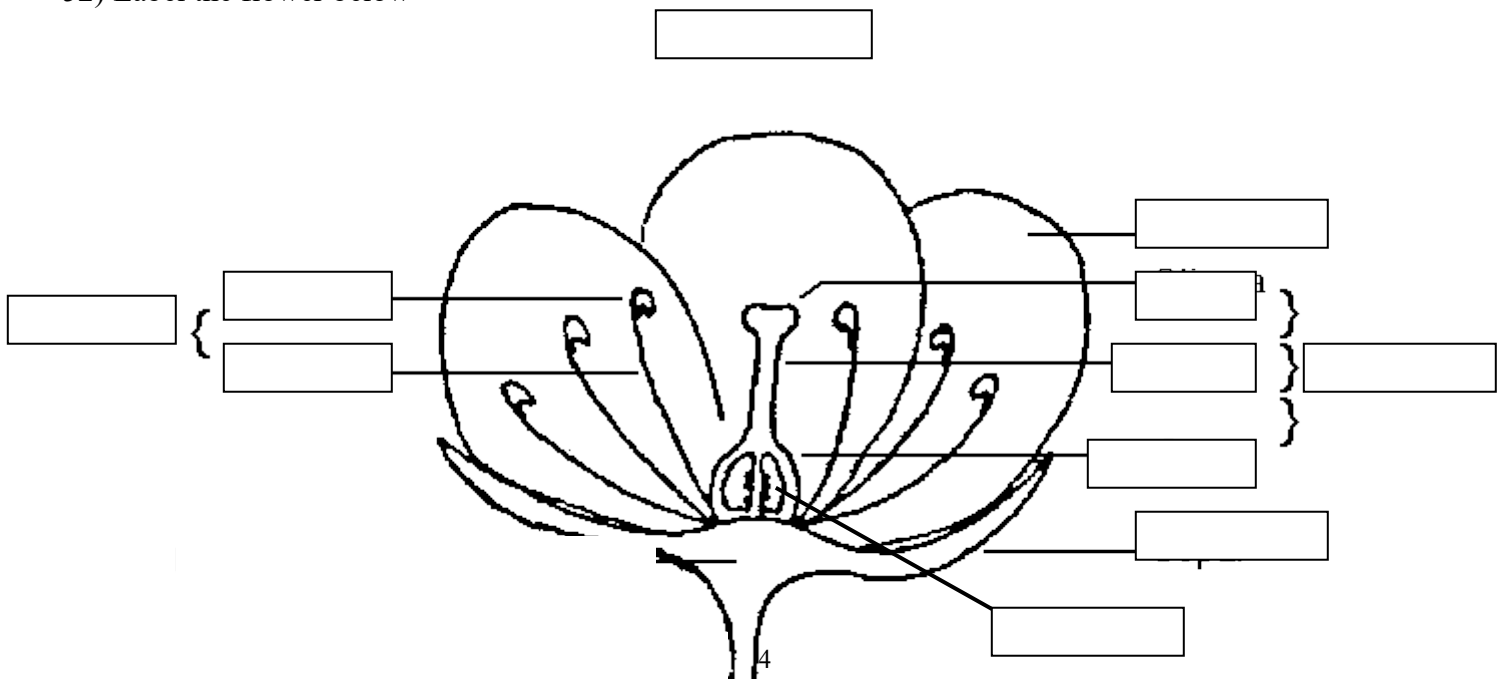


- Which tissue protects the root tip and secretes a slime to help the root tip grow through the soil?  
\_\_\_\_\_
- Which tissue is the site of major cell division? \_\_\_\_\_

51) Label the following stem cross sections as woody, monocot, or dicot.

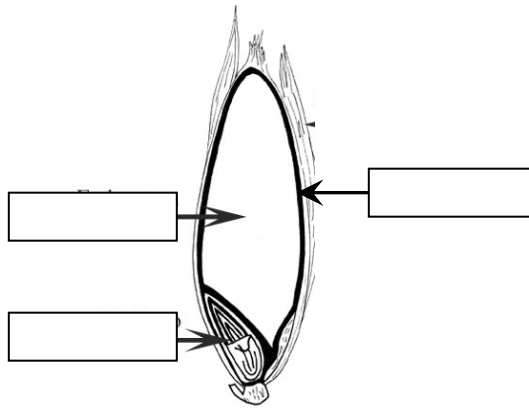


52) Label the flower below



- a) Which structure contains the eggs/ovules? \_\_\_\_\_
- b) Which structure is the male reproductive structure in a flower? \_\_\_\_\_
- c) Which structure is the female reproductive structure in a flower? \_\_\_\_\_
- d) Which structure attracts pollinators? \_\_\_\_\_
- e) Which structure protects the flower when it is still a bud? \_\_\_\_\_
- f) Which structure is sticky and catches the pollen? \_\_\_\_\_
- g) Which structure contains the pollen? \_\_\_\_\_

6) Label the seed cross section below:



- a) Which structure is the baby plant? \_\_\_\_\_
- b) Which structure feeds the baby plant until it can reach the surface and begin to photosynthesize?  
\_\_\_\_\_
- c) Which structure protects the seed, even through the digestive tract of animals?  
\_\_\_\_\_

7) How is a gymnosperm different than an angiosperm AND give at least two examples of each?

\_\_\_\_\_

8) How is a monocot different than a dicot AND give at least two examples of each?

\_\_\_\_\_

9) How is a vascular plant different than a non vascular plant AND give at least two examples of each?

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