

Key

Trees and Forests

Unit Review & Study Guide

1. Create a food chain using the following:

- Coyote
- Willow (tree)
- Sun
- Snowshoe hare

Sun → Willow → Hare → Coyote

2. List facts about deciduous trees.

→ broad leaves
→ change colour
& fall off in the
fall

→ fruit

→ cannot withstand extreme
temperatures

3. List facts about coniferous trees.

→ needle leaves
→ keep needles
through winter

→ can withstand extreme
temperatures

→ cones

4. Which part of the tree loses the most water? What is this process called?

Leaves → Photosynthesis
→ Transpiration

5. Why do leaves lose more water than needles?

→ More surface area → more area
for water vapour to leave the leaf/needle

6. List each organism as either: producer, consumer or decomposer

- Ant consumer
- Grass producer
- Mushroom decomposer
- Earthworm decomposer
- Leaf producer

7. Trees are important for a variety of reasons. Label each statement as:

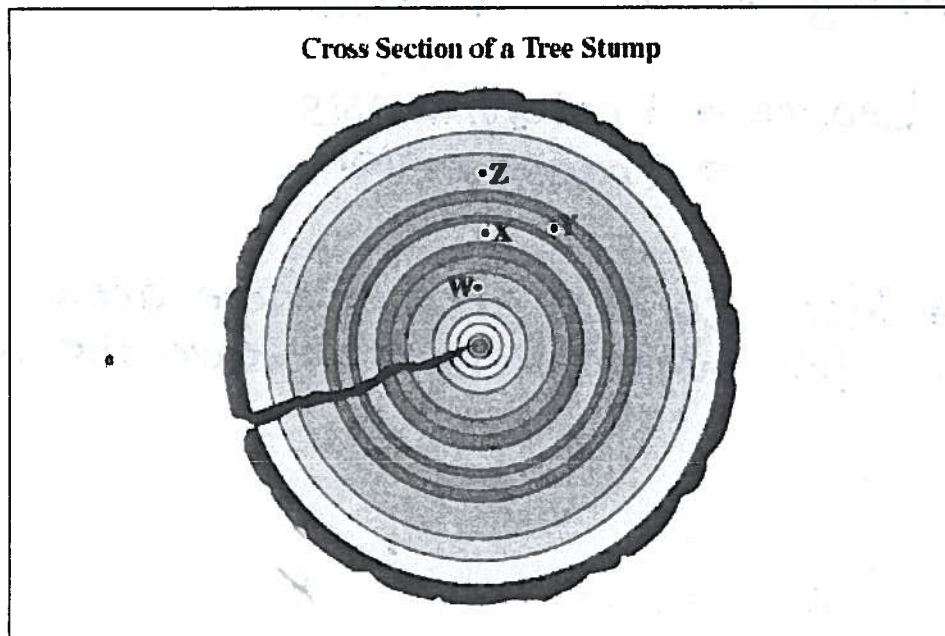
- Raw Material
- Habitat
- Life Support
- Recreation

- a) Trees can be used to produce lumber, wood chips, and paper. **Raw Material**
- b) Trees convert carbon dioxide to oxygen. **Life Support**
- c) Trees provide animals with food and shelter. **Habitat**
- d) Trees provide a location for biking, camping and other activities **Recreation**

8. What do environmental groups try to do for forests?

- protect and conserve the environment
from harm

9. Look at the following tree cookie. Discuss what could have happened to the tree at each letter.



X - decent growing year

Y - not as good of growing year

Z - excellent growing year - lots of moisture & nutrients

W - healthy - good growing year
- lots of moisture + nutrients

10. Define each of the following and give an example of each type of organism.

- Decomposer - break down dead plant & animal matter
mushroom - fungi
- Omnivore - consumes plants & animals - humans
- Carnivore - consumes only meat - coyote
- Producer - plants that make their own food - tree

11. What will happen to our air if we cut down lots of forests?

- a significant increase in carbon dioxide
and decrease in oxygen in the air

12. Do coniferous or deciduous trees provide shade ALL YEAR long? Why?

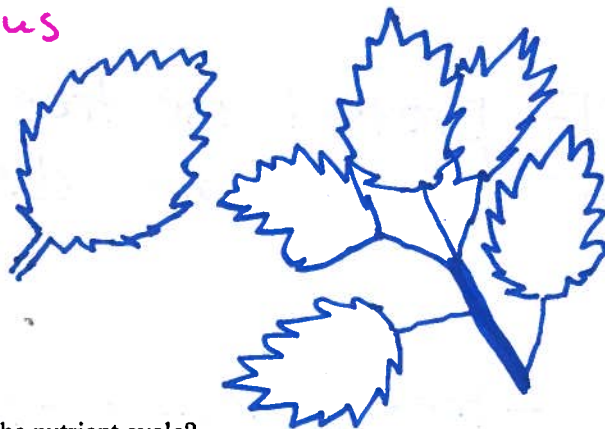
Coniferous provide shade all year long and
Deciduous lose leaves in fall and do not.

13. Label each tree as deciduous or coniferous.

- Elm - deciduous
- Spruce - coniferous
- Birch - deciduous
- Pine - coniferous
- Poplar - deciduous

14. Draw this leaf:

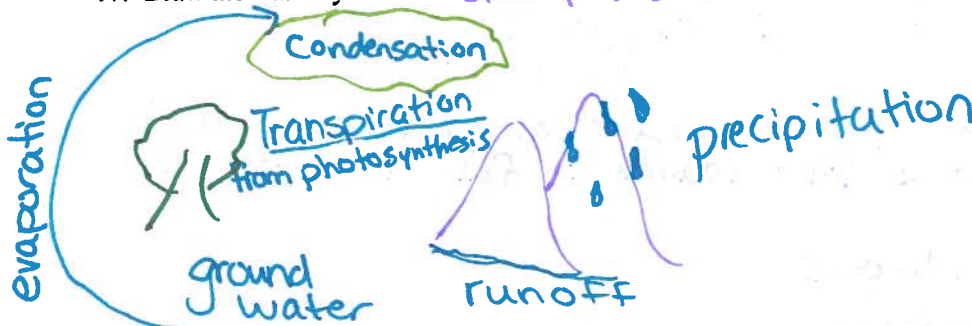
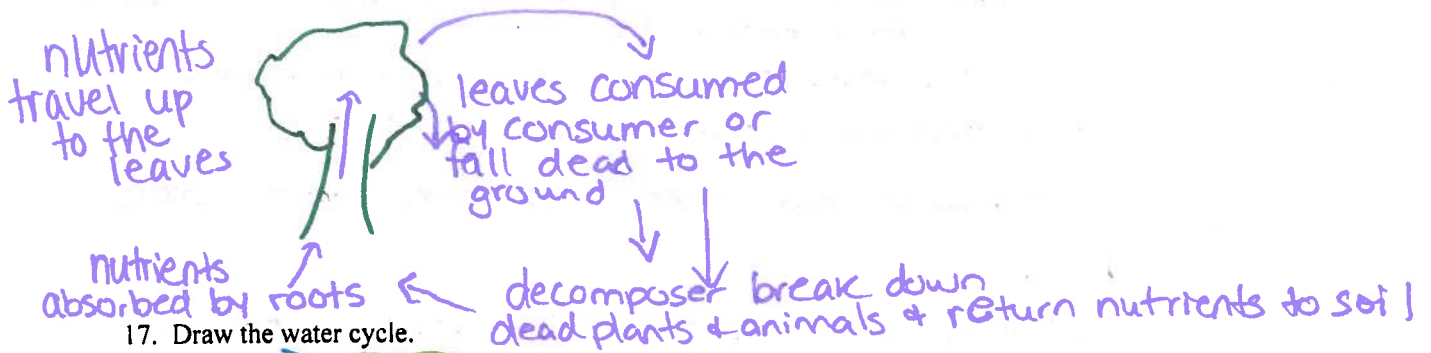
Type - Simple
Shape - Ovate
Margin - Course-toothed
Arrangement - Alternate



15. What is the role of a decomposer in the nutrient cycle?

- to break down dead plant and animal matter and return it to the soil
- to keep the cycle going by putting nutrients into the soil so they can be absorbed by the roots again

16. Draw the nutrient cycle.



Leaves

19. What is the importance of bark?

To protect the tree from invasion of insects and disease.

20. What can humans do to enhance a forest?

- tree planting - National & Provincial Parks
- conservation - Laws & Regulations

21. What are the differences between plants and trees?

plants - no trunk
- annual & perennial
- no woody material

tree - trunk
- perennial
- woody self supporting trunk