

# C.L.E.M. Worksheet

## Part I

**True or False:** (5 marks)

1. By law, forest companies must make sure that reforestation takes place after harvesting.
2. On average, 100 million seedlings are planted each year.
3. Trees reach the “free to grow stage” or “free growing stage” once they are stronger and taller than the surrounding bushes and shrubs competing against them for sunlight and nutrients.
4. Companies must write a prescription or plan that is approved by government before they can harvest trees.
5. On average, 6 trees are planted for every tree that is cut down.

## Part II

**Circle the best answer:** (4 marks)

1. A feller buncher is a \_\_\_\_\_.  
A) machine that pulls logs down the hill.  
B) machine that chips the logs.  
C) machine that cuts down one or more trees and lays them into piles.
2. A skidder is a machine that \_\_\_\_\_.  
A) picks up a bunch of trees and drags them to a landing  
B) slides down slopes.  
C) plants trees.
3. The processor in the video had an attachment that \_\_\_\_\_.  
A) puts the log onto a logging truck.  
B) picks up the tree and takes the limbs off.  
C) picks up the tree, takes the limbs off and cuts the log to length.
4. A machine that off-loads a logging truck trailer and loads logs on is a \_\_\_\_\_.  
A) tractor  
B) loader  
C) skidder

## Part III

**Fill in the blank by choosing the correct answer from this list.** (16 marks)

heat	gloves	harvester	mountain	helicopter	unacceptable
hardhat	yarder	simulator	chainsaws	safety vest	safety glasses
lumber	forwarder	steel toed boots		water buckets	

1. The cut-to-length harvesting method uses two machines. One is a \_\_\_\_\_ which reaches out with its boom and felling head to cut the tree down and then delimits the tree and cuts the tree into shorter logs which it then lays in neat piles.
2. The other machine used in cut-to-length logging is a \_\_\_\_\_ which picks up the logs and carries them to the road to be loaded on a truck.
3. Machine operators learn how to operate the machinery by practicing on a \_\_\_\_\_ in a safe environment.
4. Hi-Lead logging is a method used on steep hills or \_\_\_\_\_ sides.
5. Hi-Lead logging does not use a feller buncher, instead hand fallers use \_\_\_\_\_ and machines called \_\_\_\_\_ which have long cables to pull or yard the cut tree down the slope.
6. All harvesting methods involve some danger therefore everyone must work safely. The slogan in the woods is “Unsafe is \_\_\_\_\_”.
7. List 5 items of clothing that workers of the forest wear for safety.
8. \_\_\_\_\_ logging is a method of logging used when it is difficult to build logging roads.
9. The logs are taken to a mill where they will be made into wood products like pulp for paper products, plywood, \_\_\_\_\_ and other wood products.
10. Helicopters with \_\_\_\_\_ are used to put out fires.
11. Lodgepole pine cones need \_\_\_\_\_ from fire before they can open and drop seeds.

#### Part IV

Invent a machine of the future that can help to make the logging process easier. Draw your invention and give a short explanation of what it will do. (Remember, the machine must have a purpose.)