

# Swan 212 Study Guide (revision 1.0) Name \_\_\_\_\_ Date \_\_\_\_\_

Fill out a training sheet for 3hr credit after completion. Credit: 3hr fire, 3hr essentials, 3hr wildfire

## INTRO

The number one priority is the \_\_\_\_\_ of the operator and those near you.

According the injury chart most injuries are received on the \_\_\_\_\_ leg.

Peer \_\_\_\_\_ is a factor that sometimes leads us to make poor decisions.

Am I \_\_\_\_\_ enough to turn down an assignment or ask for help?

## PPE

You must be wearing a \_\_\_\_\_ hat, \_\_\_\_\_ protection to cover your eyes from sawdust, and \_\_\_\_\_ plugs or muffs to protect your hearing from potential long term damage.

It is acceptable to be wearing short sleeve shirt so long and you have on gloves. T / F

Bunker pants will function just as well as chaps to prevent against leg injury. T / F

Chaps are made up of pads of \_\_\_\_\_ fibers.

Chaps should be the correct size. They should come \_\_\_\_\_ inches past the boot top.

Three things to look for while inspecting chaps are:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

When chaps are dirty they can be placed into a front-loading washing machine. T / F

Remove chaps from service when they have a cut longer than \_\_\_\_\_ in the top layer of Kevlar.

## Saw Parts

What form must be filled out if you do not know how to fix a saw? \_\_\_\_\_

You should start the saw without the chain brake engaged. T / F

The chainbrake (will/will not) prevent kickback.

The depth gauge, or \_\_\_\_\_ determines the depth of the cut.

The \_\_\_\_\_ link guides the chain through the bar.

DO NOT use \_\_\_\_\_ air to blow out the air filter.

You must have on \_\_\_\_\_ when sharpening a chain.

You can find the file size number on the bar near the \_\_\_\_\_.

Label the saw parts

### Parts of a Chain Saw

The image contains two technical diagrams of a chainsaw. The left diagram shows a side profile of the saw with callouts 1 through 17. The right diagram shows a front view of the saw with callouts 9 through 25. Below the diagrams is a list of numbers for labeling.

1	9
2	10
3	11
4	12
5	13
6	14
7	15
8	16
	17
	18
	19
	20
	21
	22
	23
	24
	25

### Operating the Saw

What is wrong with this picture? (list as many as possible)



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And this picture?



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As long as the saw is cool it can be started on the tailgate of a truck T / F

All Swannanoa chainsaws use fuel mix at what ratio? \_\_\_\_\_

You can start the saw by using either the \_\_\_\_\_ method or the \_\_\_\_\_ method.

If you use the standing method to start the saw do not \_\_\_\_\_ start it.

The act of keeping your \_\_\_\_\_ around the handle is the best way to prevent kickback.

Describe kickback : \_\_\_\_\_  
\_\_\_\_\_.

If you cannot see the \_\_\_\_\_ of the saw readjust your position so that you can.

Describe pushback : \_\_\_\_\_  
\_\_\_\_\_.

Describe pull-in: \_\_\_\_\_  
\_\_\_\_\_.

What are the four types of bind?

- 1.
- 2.
- 3.
- 4.

\_\_\_\_\_ is when the log is being "pulled apart."

\_\_\_\_\_ is when the log is being "pushed together."

Which side is USUALLY the best side to stand on when bucking? \_\_\_\_\_

Dig in the saws bumper spikes or \_\_\_\_\_ when bucking.

Always have \_\_\_\_\_ zones and \_\_\_\_\_ routes when cutting or bucking.

-One tip to prevent pull -in while limbing and brushing is to keep the saw at high \_\_\_\_\_.

The number one responsibility of the sawyer during line construction is \_\_\_\_\_.

OSHA says the minimum safe cutting area is greater than \_\_\_\_\_ tree lengths.

What is a pongee stick? \_\_\_\_\_.

Make sure any \_\_\_\_\_ are secured before you cut them so they do not pose any hazards to your crew.

Secure or mark with \_\_\_\_\_ any hazards that you come across or create in the process.

Make sure LC\_\_ \_\_ is in place when building fireline downhill.

What other non-fire operations may a saw team/sawyer be used for?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

When cutting on ice or snow make sure you have good \_\_\_\_\_ and a clear escape route before cutting.

When power lines are involved no cutting will be done until the lines are de-\_\_\_\_\_ by the power company.



What is wrong with this picture?

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## FALLING (PART 2)

Why is it important to know about trees?

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Large stands of pine trees close together may be very \_\_\_\_\_ and prone to “\_\_\_\_\_”-making”.

Leaves of mountain-laurel are reported to burn at \_\_\_\_\_ intensity; burning shrubs can produce flame lengths of \_\_\_\_\_ feet (30 m).

The combustible nature of mountain-laurel is suspected to be due to the \_\_\_\_\_ or wax content of the leaves.

Cutting line through a Laurel slick is preferable to cutting through pine. T / F

Sycamore is one of the hardwoods that are under attack from \_\_\_\_\_ fungi. This causes the leaves to lose their \_\_\_\_\_ (1) and die. The branches become infected with cankers (2) and the tree becomes weakened after a few cycles of this and will become more intolerant to fire and wind.

The Woolly \_\_\_\_\_ is killing Hemlock trees throughout North Carolina which causes more standing dead trees (snags).

What is the equation used in determining risk? \_\_\_\_\_

A Hazard tree is \_\_\_\_\_ tree (regardless of size) that is hazardous to people or property because of:

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A group of branches is sometimes called a \_\_\_\_\_ broom.

Be watchful of burning roots, exposed roots and “\_\_\_\_\_ faces” – a name for openings in the tree caused by fire.

The two types of lean are defined as \_\_\_\_\_ lean and \_\_\_\_\_ lean.

\_\_\_\_\_ lean often poses a greater hazard because the tree is weakened and will have loose roots.

As each tree is evaluated the sawyer needs to determine if it is a “\_\_\_/\_\_\_ GO” situation.

What are the eight steps to prepare to cut a tree?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

The first cut is called a \_\_\_\_\_ cut.

The second cut is called the \_\_\_\_\_ cut.

Place the dogs at the bottom corner of your gunning cut and cut at a 45 degree angle. These two cuts (gunning and slope cuts) MUST line up. If they do not line up you create what is called a \_\_\_\_\_. This will cause the tree to either \_\_\_\_\_ chair or swing in an unpredictable direction as it begins to fall.

The third cut is called the \_\_\_\_\_ cut

The back cut should be at least \_\_\_ inches above – but not more than \_\_\_ inches above the gunning cut on the opposite side.

Remember your escape route is \_\_\_ degrees back from either direction you are dropping the tree.

The stump \_\_\_\_\_ prevents the tree from coming back at you.

Once you have cut your back cut it is safe to start over T/F

It is okay to ask for help with a hung tree. T/F

What are the three steps to dropping a hung tree?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

How many wedges are ideal on the average sized tree? \_\_\_\_\_

What two tools can be used to determine the lean of a tree? \_\_\_\_\_

What five items need to be identified on a Job Hazard Anylsis?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_