

**EVALUATING
ACADEMIC READINESS
FOR APPRENTICESHIP TRAINING**
Revised for
ACCESS TO APPRENTICESHIP

**COMMUNICATIONS SKILLS
UNDERSATNDING SEQUENCE**

**AN ACADEMIC SKILLS MANUAL
for
The Horticulture Trades**

This trade group includes the following trades:

Arborist and
Horticulturist

*Workplace Support Services Branch
Ontario Ministry of Training, Colleges and Universities*

Revised 2011

In preparing these Academic Skills Manuals we have used passages, diagrams and questions similar to those an apprentice might find in a text, guide or trade manual.

The information in them is not intended to instruct you in your trade. Trade related material is used only to demonstrate how understanding an academic skill will help you find and use the information you need.

COMMUNICATIONS SKILLS

UNDERSATNDING SEQUENCE

*An academic skill required for the study of the
Horticulture Trades*

INTRODUCTION

In the trades, it's essential to follow directions in the right order to successfully complete a job. The skills that enable you to read technical material and then follow directions accurately are essential for successful completion of a job. Most trade material is written in a step by step order called sequence so that you acquire information in a logical manner. This is especially important when you are learning the steps in a procedure.

Sequence refers to an ordered arrangement in which one step is followed by another. A sequence can be the step by step description of how to complete a repair or it can be a description of the parts and uses of a power tool. Each piece of information (or step) is part of the whole thing. The steps work together, but you need to understand and follow each step on its own.

In this skill sheet, we will look at trade material to:

- ◆ Examine the order of information,
- ◆ Identify and follow steps in a sequence, and,
- ◆ Identify and follow sequence in diagrams.

PART I

EXAMINING THE ORDER

When we are learning something, we usually ask a lot of questions.

Example: Someone in your trade is talking about *stress values*. If you've never heard the term, you'll probably ask: What's that? What do I need to know about it?

Whatever the reasons for our questions, they tend to follow a logical sequence or order. We usually start with basic questions and then ask questions which demand more detailed or difficult answers. The questions should cover most of what we need to know: What is it? How does it work? How do I use it? How do I do this?

Technical material

Technical reading material is set up in a logical order. In many cases, the reason why you need the information comes first. In other words, technical writing often starts by answering the question: What do I need this for? The answer gives you the function, use or purpose of something as it relates to your trade. and so it is the first information you will see.

Look for information to appear in this or a similar sequence:

- ◆ Why do I need this? (purpose)
- ◆ What is it? (definition and description)
- ◆ How does it work or what is the correct procedure?

The correct procedure or information about “how to do something” often comes last. You get description, explanation and underlying principles so the procedure will make sense as you follow it.

Read it through first

When you read information that contains instructions on how to do a job, read it through to the end *before* starting the job. When you are aware of the order of each step, you can understand how each fits into the whole procedure. Reading through all of the instructions first should become a part of assessing and preparing for any job.

Some passages don't set up the steps so that you can clearly see the sequence. In this case, look for clues. Notice if there are letters and indicators such as commas to separate the points. Look for words such as *first, then, next*.

Passage 1, *Cleaning Air Cleaners*, illustrates how this might work. In a sense, there are two different kinds of sequence illustrated by this passage: the sequence in which the information is presented and the sequence of steps used in a specific procedure.

Notice the way sequence is used and how the information helps you answer the questions listed above.

Passage 1

Cleaning Air Cleaners

Engines consume vast amounts of air that pass through their air cleaners. These filters, particularly those used in lawn equipment, work to constantly trap dust and dry grass materials. This collection of debris can restrict airflow, thus making it necessary to clean the filter frequently (approximately after every twenty-five hours of operation).

The following are steps involved in cleaning an oil-wetted type filter which uses a spongy plastic, saturated with oil. This type of filter is common to most lawn mowers.

First remove the filter cover and then remove the foam element from the base. Once removed, the element must be washed thoroughly in liquid detergent and water. (Refer to Figure 1-1). Next, wrap the foam in a cloth and squeeze it dry. Saturate the foam with engine oil and then squeeze out any excess oil. Replace the foam and then the filter cover. (**NOTE:** Some engines use a pleated paper air filter cartridge. See chapter 8 for directions on this and for other filter types).

Why do I need the information?

The information in paragraph one explains the purpose of frequent cleaning of air cleaners. The opening or introduction spells this out for you. In the first paragraph, you learn, in order, the following about air cleaners:

- a vast amount of air passes through them;
- filters on lawn equipment trap dust and dry grass materials;
- this can restrict airflow;
- it's necessary to clean filters frequently;
- they should be cleaned after every twenty-five hours of use.

This information is placed in the introduction to let you know why you should pay attention to the details that follow. It answers the question “Why should I learn this?” and it gives you a purpose for your reading.

What is it?

Paragraph two sets up the answer to “What is it?” The paragraph prepares you to follow “how to” directions. Reread it to see how this works. You find:

- the name of the particular filter you will be given steps for cleaning – an **oil-wetted type filter**;
- what the filter is made of , and
- that this type of filter is common to most lawnmowers.

You now know where this passage is going. It is leading in a logical way to answer, “How do I do it?” This is the next step in understanding.

How do I do it?

Once you know what something is, you then get to the “hands on” stage. Look at paragraph three to see how it guides you in precise steps. It tells you:

- to remove the filter cover;
- to remove the foam element;
- how to wash the element thoroughly;
- to see the (omitted) diagram as a guide;
- how to dry the foam;
- how to oil it properly;
- to replace the cover; and
- where to get details on cleaning different types of filters (chapter 8).

Sequence of learning

As you read **Passage 1**, you should start to see the general order. It is organized so the learning moves from general information to more specific details. You also see how the practical steps are laid out in a sequence so that the first step comes before the second and so on. As you become aware of the order, you see how all the steps fit together. This leads to an understanding of the whole process.

As you read, think of other questions that may arise. Look for the answers as you go. Observe how information is organized to answer your questions. If it is organized in sequence, you will

find the material easier to understand and act on. Use this system to your advantage. Give yourself enough time to carefully read technical material, noticing how it moves from step to step.

The first information you learn in your trade will become a base that you can later build on. *Because learning expands on what you have previously learned, you need to make sure you understand what you have read before you go on to new material.* You also need to recognize when information is related to something you learned earlier. The best way to understand how individual parts are related to the whole is to first learn the material one step at a time and then think about how all the parts fit together in the correct order.

PART II

IDENTIFYING AND FOLLOWING STEPS IN A SEQUENCE

In this section, we will look at identifying and following the steps in a process or procedure. An awareness of the correct sequence of steps used in completing a project is necessary to achieve a satisfactory result.

Getting it right

At first, you may not see the reason for the sequence in a set of directions. Always follow the directions exactly as stated. The steps serve a purpose even if you don't know what it is. When you become expert with a process, you can decide if it is appropriate to make adjustments. Even after you become skilled, new products will come on the market with new procedures. You'll need to keep reading and learning to keep current.

Example: Imagine using any order that strikes your fancy to complete a job. What results would you expect if a someone laid paving stones before the base was tamped or you drilled six holes and then read "*no more than four are recommended*"?

Read **Passage 2** for a straightforward example of sequence. You can clearly identify and follow the sequence, acting on each step.

Passage 2

Battery Charger

A battery charger converts 120 volts AC into 13 to 15 volts DC for recharging drained batteries.

Connect as below:

Connect red to positive and black to negative. The red lead on the charger goes to the positive terminal of the battery. The black lead goes to ground or the negative battery terminal.

After connecting the charger, adjust its settings as needed (12 volt battery, fast or slow charge, etc.). If a battery is low, it is best to slow charge the battery for several hours. A fast charge for a few minutes will not restore the battery charge properly.

The first paragraph answers *what is it, what's it used for* kinds of questions. Although the steps are not numbered, paragraph two gives you the "how to" steps:

1. connect red to . . . black to . . .
2. red lead on charger goes to . . .
3. black lead goes to . . .
4. after connecting charger, adjust . . .
5. if battery is low, it is best to . . .

The last sentence states why a fast charge does not work as well as a slow charge. By reading and following these steps, you should be able to correctly charge a battery.

Did I miss something?

Passage 3 below is an example of what we mean by building on what has already been taught. An earlier chapter or section has provided answers to these questions:

- What is it?
- Why do I do this?

The passage assumes you have read the previous material. For this reason, you may not understand all the information perfectly. You will be able to recognize the sequence of steps used for starting a tap but some details about the technique and materials may not be clear.

Read the passage and answer the questions which follow. Each question asks about sequence (order). Start at the beginning and read methodically to the end. **Answers to questions are at the end of this skills manual.**

Passage 3 **Sharpening a Chainsaw**

To begin, find the shortest cutter. Mark the length on a piece of paper and compare it with the others. Mark the shortest with a pencil so you can find it later.

After tightening the chain to its proper tension (see manufacturer's specifications), sharpen the shortest cutter first, and the others to match. Hold the file at a 35° angle using the marks on the holder (see figure 4). File from the inside to the outside of each cutter, lifting the file on the return stroke. Use only moderate pressure and file just until it is sharp (three or four strokes should be enough). Once all of the cutters are sharpened on one side, turn the saw around and do the other side.

Next, place the jointer tool over the depth gauge of the shortest cutter. With a flat file, file off any portion that projects above the joiner. Lastly, remove the jointer and round off the leading edge of the depth gauge as it was before you filed off the top.

Once finished, wipe the chain bar with a clean rag. Then wipe the bar with an oily rag and lightly coat the chain with oil. This will provide protection against rust.

Questions:

1. Which is the correct sequence of activities for sharpening a chainsaw?
 - a) Mark the length of the shortest cutter, file at 35 degree angle, adjust tension.
 - b) Locate the shortest cutter, place the jointer tool over the depth gauge, file any missed points
 - c) Tighten chain, file from inside to outside of each cutter, file all cutters to match.

2. When would you apply the jointer tool?
 - a) after the last filing of any part missed
 - b) prior to filing the other side of the saw
 - c) once all of the cutters have been sharpened
3. You should sharpen the shortest cutter prior to tightening the chain to its proper tension.

T F
4. You can be sure that the cutters are the appropriate sharpness once you have filed them 3 or 4 times each.

T F

Look back to question 1 above. You are asked to choose the correct sequence of activities. Notice that “sequence of activities” refers to what comes first, second, third or fourth *in that group* of activities. It doesn’t necessarily mean first, second, or third step in the whole project. It also doesn’t mean that *all the steps* are included in the question. On the job, you may be asked to follow a procedure which comes *in the middle* or *towards the end* of the task. You will still follow activities in sequence, but you may begin a job halfway through the project.

Numbered Steps

It is usually easier to follow a sequence when the steps are numbered. Numbering steps also helps you identify areas that seemed clear when you read the sequence, but aren’t so clear when you come to do the job. You can figure out where you are getting lost.

If the sequence isn’t numbered, as in **Passages 2 and 3**, you can break the information into steps to see the order and note any steps that you don’t understand. Or when a procedure is long and only the general steps are numbered, you may want to break the numbered instructions into smaller units to separate each step.

Example: You could number the steps in Passage 3 as follows:

1. find shortest cut,
2. mark length on paper,
3. compare it with the others,
4. mark shortest with pencil,
5. tighten the chain to its proper tension
6. sharpen the shortest cutter first, and make the others match it
7. hold the file at 35° using the marks on the holder
8. file from outside to inside,
9. etc...

Reading about and numbering the steps helps you identify areas that seemed clear when you read the sequence, but aren’t so clear when you come to do the job. Besides needing to know all the steps in sharpening the chain, you also need to find and use the manufacturer’s instructions for correct chain tension. Reading through and identifying the steps helps you recognize the need for more information and if you want to avoid problems, you will find the manual and the

information so that you do not damage the chain. Reading carefully and identifying the steps helps you think through and prepare for each task involved in a job

You may not be asked to sharpen a chainsaw at this stage. But you do need to accurately follow a written sequence of information to grasp the whole procedure that is being explained. You should also identify when you need more detailed instruction than what's in the reading in order to perform a job accurately and to find the cause of problems.

You do need to know how to accurately read and follow a sequence of information and identify when you need more, detailed instruction. With this knowledge, you are on the way to learning how to perform a job accurately and how to identify when you need to ask for help.

Before we go - a word about numbering

You will see many directions with numbered steps. Usually numbering indicates the steps in a sequence and their order. Number one (1.) indicates the first step, number two (2.) indicates the second step and so on. In some cases, numbering does not indicate a sequence.

Example:

1. Maintain fire extinguishers to safety standards and place where they will be used.
2. Follow Construction Safety Association of Ontario guidelines.
3. Follow safety guides when working with flammable materials.

As you can see, these numbers do not indicate order. Here they act as a checklist. The tasks on the checklist must all be done, but they are not sequential.

Make it easy for yourself

You know how to number steps in a procedure to make the correct sequence clear. You can also divide information into individual points. This will help you see where the pieces of information belong.

Example: You are reading about preparing a handsaw and workpiece where the information is presented in a long paragraph, you might break it into the points:

- To prepare a handsaw and workpiece:
- First, choose the correct blade for the job.
 - Then make sure the blade is mounted properly.
 - Next, adjust the tension.
 - Lastly, secure the workpiece.

You can also mentally separate information into a sequence or point form. You will find this useful when you are figuring out how to organize the steps of a project. By taking the time to put things in order before you start working, you will have a clear picture of where you are going and how to get there.

Questions and relationships

Information is organized in a specific order for a reason. As you read, think about questions related to sequence. Stating the questions and then looking for answers can be a useful way to test your understanding when you are studying for homework or doing a job. The questions below relate to **Passages 1, 2 and 3**. They will also apply when you study other technical material.

1. Which activity or step is first, second, third?
2. Which step starts the process; which concludes the process?
3. What happens **before** or **after** a certain step?
4. What happens if I skip a step ?
5. Where do I turn if I can't ...?

The questions ask you to look at and understand the order in which things happen in a project. They also lead you to look at the relationship of one step to another in order to understand the whole picture so you can apply the information appropriately.

A different order

Earlier we suggested that you start reading new material at the beginning and move forward in a logical sequence to the end. However, once you've carefully read through from start to finish, you may want to look at the information in a different order. When you understand how steps are connected, you can move backwards or forwards in a diagram or passage without getting confused. This is particularly true when you are looking for exact details or when you need to find the causes of or solutions to a problem.

Example: You may want to know why the the cutters weren't sharp enough. To answer the question, you need to find out what caused the problem. You may have to start in the middle of the passage and work backwards to find the cause. You may search through another manual to find answers. You are still aware of sequence of steps but you are jumping around to find precise information about a missed or poorly performed step.

Application: Taking over in the middle

Consider a situation where you take over from your instructor or co-worker to complete a job.

Example: You are asked to complete a layout that someone else has started. You have to find out what was already done and what you are expected to do to finish the job.

You go to the instructions. Look them over carefully to check that you understand what you have to do. Find the drawing, check it, and pick it up from there. When you understand the sequence of steps that must be carried out, you can begin at any point in a project. You know where you must start, where you are going, and what you need to do. Looking over the whole process and reading through the steps gives you the ability to accomplish your task.

When you have to step into the middle of project, ask yourself the following questions:

What am I expected to do?
How do I do this?
What's already done?
Where do I start?

And so it goes

Example: Before you use a new pesticide you need to clean your sprayer. This means putting on the proper protection to avoid contact. Cleaning involves washing the outside, removal of hard deposits and the removal and cleaning of all screens and nozzle tips. Once finished, you need to mix detergent water solution and flush out the tank. If it is used as an oil pesticide carrier, you need to use a solvent instead of a detergent. Then you replace the screens and nozzle tips and fill the tank with 1/3 water and one of three products.

And so it goes. You find yourself with new conditions to manage that require new steps.

Example: You are required to apply a herbicide as a preventative. You have this information on the determining the application of the herbicide: (Look for words that suggest a choice: **if, when, or.**)

Apply 5 to 8 kg of herbicide in 600 to 1000 L of water per hectare to provide proper coverage. When used on established ornamentals where organic mulch is present, a higher rate is needed. Consult Table 1-1 for correct mixtures.

You can see that you have to take a few steps in sequence before tackling the application. Do you know if there is organic mulch present? If not, determine this. Do you know the rate of herbicide to water? If not, find out.

And so it goes. You may find that you can skip steps if they don't apply, but you have to know if the step applies or not.

What does this have to do with sequence? Even before you start a task, you need to pay attention to the sequences of preparing for the job. When you are doing a job, each step depends on the step before it. If the first (second, third or any other) step is left out, performed too quickly or inaccurately, you will not get the desired results. The finished product depends on the successful outcome of each step.

Sequence in Trade Mathematics

Bedmas

You have to follow the required steps in the proper order to complete any project you are assigned. When you are doing math problems, you also have to work in the correct order. If you accurately complete each step in a problem but if the order is wrong, the answer will be wrong. The proper order of basic math operations is called ***bedmas***.

Bedmas (brackets, exponents, division, multiplication, addition, subtraction) prescribes the order in which you have to do these operations to get the right answer. whether it is determining welding speed or figuring out mathematically how much sheet metal is required for a project.

PART III ***SEQUENCE IN DIAGRAMS***

In technical manuals and texts, many passages are accompanied by a diagram. A diagram can illustrate the sequence of steps in a welding procedure. It can show something you can't see, such as the wiring in a space you need to work on. It can show the point when something happens

Passages with diagrams

It is important to understand diagrams that accompany writing. The passage and the diagram are designed to be used together but you may examine them separately at first to find out what each has to teach you.

When you read diagrams, your eyes will move between the writing and the diagram – like watching a hockey puck on the rink. Focus on one section until you understand it, and then move to another, repeating this process until you understand the whole.

Passage 4 and Figure 1 below are taken from instructions on soil sampling. Together they should make the directions (and the sequence) clearer to the reader.

Passage 4

Sampling Procedure

For each sampling area, follow these steps:

Gather many topsoil subsamples from random spots in the field. Samples are to be taken no closer than 100 to 3000 feet (depending upon the recommendations from the laboratory) and not from odd areas like dirt roads, barns, or fencerows. Also to be avoided are dead furrows, fertilizer spills, and other spots with unusual conditions. Large areas need 15 subsamples, smaller areas need fewer.

Refer to figure 1.

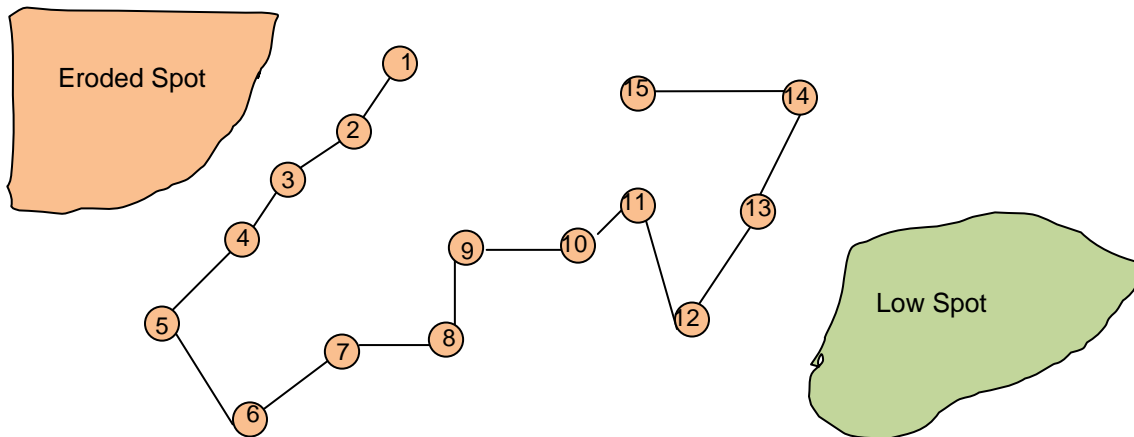


FIGURE 1: This is a possible sampling sequence. When taking soil samples from an area, up to 15 samples should be taken at random locations. Samples are not taken from low spots or other unusual areas.

The diagram relates to the information about the correct sequence of soil sampling. The numbers indicate an order or correct sequence. To be sure you've got it, the diagram also includes a bit of text to further explain. If you were unclear about avoiding "odd areas" as the passage suggests, the diagram should clear it up for you. It gives a picture to go with the words. As you read, observe **when** to look at the diagram, and **what** to look for. Ask yourself, "What part of the diagram does the sentence or step refer to?"

Focusing on sequence helps you become aware of how a passage or diagram is organized. It helps you see the order of steps in a procedure. Apply the suggestions below when you are reading a passage that includes a diagram. This way, you get the most information from the passage.

1. Read the whole passage.
2. Look at the diagram.
3. Look back to note how the passage and diagram are organized.
4. Match the diagram to information in the passage.
5. Go through any step by step directions, looking at both the passage and diagram to see how the steps described in each are related.

It gives a picture to go with the words. As you read, observe **when** to look at the diagram, and **what** to look for. Ask yourself, "What part of the diagram does the sentence or step refer to?"

Read **Passage 5**, about chlorinesterase and how it is affected by toxic insecticides. Notice how sequence is used in the passage to explain a difficult concept. Even though there is vocabulary we may not know, we can understand the effects of this chemical by carefully following the sequence of information. The questions which follow ask you to find the correct answers in a sequence: **Answers are at the end of this skills manual.**

Passage 5
Cholinesterase

The most acutely toxic insecticides used by licensed applicators are in the organophosphate and carbamate groups. These products impede activity of the enzyme acetyl cholinesterase. Over exposure to these pesticides may lead to a significant decline in the activity of this enzyme and acute poisoning. It is important to understand the role of cholinesterase in the normal function of nerve cells.

As a nerve impulse travels from the brain to initiate the movement of a muscle, it passes through a number of nerve junctions. At each junction, a chemical called acetyl choline is released. This carries the nerve impulse across the gap between nerve cells. When acetyl choline reaches the next nerve cell, the impulse continues down to the next nerve. The acetyl choline is then quickly destroyed by the enzyme cholinesterase.

If cholinesterase is not working, the acetyl choline will not be broken down. Thus, nerve impulses will be continually sent down to the nerve. The result is a variety of poisoning symptoms. Mild poisoning takes the form of headache, fatigue, and dizziness, while severe poisoning results in nausea, trembling, convulsions, respiratory failure and even death.

Questions:

1. The following is a list of steps taken from the passage.

1. Nerve impulse travels from the brain.
2. Acetyl choline carries impulse across gap between nerve cells.
3. Acetyl choline is released.
4. The impulse continues down to next nerve.
5. Acetyl choline is not destroyed.
6. Nerve impulses continue to be sent.
7. Poisoning results.

Which of the above items would you switch in order to put the list in the correct sequence?

- a) switch #2 and #3
- b) switch #4 and #5

2. Poisoning can result if the acetyl choline is destroyed by the enzyme cholinesterase.

T F

3. Nerve impulses pass through nerve junctions before muscle movement will occur.

T F

Evaluating to make the right choice

Paragraph two shows, in a clear sequence, how cholinesterase works in nerve function.

Paragraph three uses sequence to show how toxic insecticides affect that function. The passage adds information about the process.

When answering questions about sequence, whether in written material or in diagrams, go back through the passage. Find the appropriate place and read each step. You may have to trace the steps with your finger while your eyes move back and forth between diagram and passage. You might have to read the section several times to make sure you have the correct match. In some

cases, there may be steps that are almost the same. But, “almost the same” usually won’t get you correct results.

CONCLUSION

Sequencing is an essential system for organizing information and procedures. When information is presented in a logical sequence, it is easier to understand. Make sure you read all the steps in a set of instructions before you act on them. You can then follow them in the correct sequence, completing a job correctly and safely.

Keep in mind:

- ◆ Information builds on what you have previously learned. Just as you would build a strong house foundation, *make sure your trade foundation is strong.*
- ◆ If a passage of information is building on past learning and you don’t understand a definition, term or principle, you might have missed something that was already taught. *Find where this information is. Then go back and reread it.*
- ◆ You might read steps which clearly outline correct procedure but the precise measurements, techniques or length of time are not laid out. *Know when and where to find this information.*

When you understand the steps or pieces, you can understand the relationship to other steps or pieces; this leads to an understanding of the whole process.

Summary

1. **Ask questions** that guide you through understanding step by step instructions or descriptions.
2. **Technical material is organized so that you can understand it.** It will walk you through a process or principle step by step. Give yourself time. Read carefully.
3. **Information is built up from what you learn.** Follow procedures and understand them to build a strong foundation.
4. **Understand how steps relate to each other:** what is first, second, third; what comes before or after.
5. **Match the steps in a passage to a diagram** and vice versa. Then match everything to the job you are doing.
6. **A sequence of information can explain a principle** such as **why** steel expands and shrinks and can show you **how** this applies to your trade.
7. **Evaluate steps when necessary to make the right choice.** The result of the finished product depends on carrying out each step at the right time.
8. **Follow steps accurately** to ensure error-free and safe work habits.

ANSWER PAGE

PART II Passage 3, Sharpening a Chainsaw

1. Which is the correct sequence of activities for sharpening a chainsaw?
b) locate the shortest cutter, place the jointer tool over the depth gauge, file any missed points

This is a straightforward order of activity question. Although some steps may be omitted, b) is the correct answer.

3. When would you apply the jointer tool?
c) once all of the cutters have been sharpened

This is a *before /after* type of question and the information is found in the last sentence of the second paragraph and the first sentence of the third paragraph. The instructions are to complete one side of the saw, turn it over and sharpen the other side, and then proceed with the application of the jointer tool.

4. You should sharpen the shortest cutter prior to tightening the chain to its proper tension.
F The reverse is true and can be found in the first sentence of paragraph 2. Pay attention to how the sentence is worded and to order.
5. You can be sure that the cutters are the appropriate sharpness once you have filed them 3 or 4 times each.
F This is a situation where you may have to add a step to a sequence you've already been given. The passage states that 3 or 4 times should be enough, however, if it isn't, you'll have to continue with more strokes until the correct sharpness is achieved. This may require help from a teacher or looking in a manual.

PART IV Passage 5, Chlorinesterase

1. Which of the above items would you switch in order to put the list in the correct sequence?
a) switch #2 and #3

This is stated within the passage. Although there are some steps missing in the overall sequence, the acetyl choline has to be released before it can carry the impulses.

2. Poisoning can result if the acetyl choline is destroyed by the enzyme cholinesterase.
F The wording of the sequence is very important here. The last sentence in the second paragraph tells us that the acetyl choline is destroyed by cholinesterase. The next paragraph continues, telling us that *if* the cholinesterase *is not* working, the acetyl choline *will not* be destroyed and impulses would still be sent. The result would be *a variety of poisoning*. The answer is false, because the opposite is true.

3. Nerve impulses pass through nerve junctions before muscle movement will occur.

T The first sentence in paragraph two provides the answer, but the order is not so black and white. When we look at it closely, we can see that nerve impulses travel through nerve junctions in order to “initiate” movement. Again, pay close attention to the wording. *Initiate* means to start or begin. This sequence of information is clear, and the answer is true.