

Training others

This sheet provides practical ideas to help teach other volunteers and young people how to use axes and saws. Training might take place informally on camp, or more formally as part of a skills workshop or training course.

Objectives

By the end of this session, participants will be able to:

1. Identify the main parts of an axe and a saw
2. State the safety rules for using axes and saws
3. Demonstrate the safe use of a hand axe to cut small logs.

4. Demonstrate the safe use of a hand axe to split small timber rounds
5. Demonstrate the safe use of a bow saw to cut small logs.

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Equipment

- Hand axes or hatchets, bow saws
- Different types of wood for cutting and chopping, including dry wood and green sticks. Also source types of wood common to the local area
- Resources for running training activities as required.

Lesson 1: What's in a name? Axes and saws (20 minutes)

Introduce...

What? Introduce the tools to the group. Use this as an opportunity to assess prior knowledge and ensure the group understands what the tools are for.

How? Use open questioning – e.g. 'Name 10 things you could use this item for?'

Demonstrate...

What? Show the group the tools and very briefly demonstrate what they do.

How? Pass the tools around so the group can study and explore them (set some rules!) You can then give a quick demonstration – e.g. split a piece of wood to grab the group's attention.

Explain...

What? Explain the different parts of the tools, what each part does and how it might vary from one example to another. This will help the group understand what you're talking about later on.

How? Ensure that key words are prewritten on post-it notes. Explain what each word means in turn, and ask the group to place the post-it on the tool in the place they think matches your explanation.

Apply...

What? This is an opportunity to embed learning from earlier in the session.

How? Use an active game. This could be anything from a relay race to label a diagram, to creating a 30 second instructional video on the parts of an axe/saw.

Summarise...

What? This is your chance to check understanding of the session so far, and to reinforce the key learning points.

How? In pairs, ask the group come up with quick-fire questions about the session – then take turns in the hot seat to answer each other's questions.

Lesson 2: Safety first (20 minutes)

Introduce...

What? Tools can be dangerous if used incorrectly, so it is important to have clear safety rules when using any sort of tool.

How? Ask the group to think about an activity they are already familiar with and consider the rules that apply to it (e.g. a popular Scouting game). This will help them to link the rules to the dangers of the activity. Alternatively, for participants who have a good knowledge of risk assessments, swap dangers for hazards, and rules for control measures.

Demonstrate...

What? Consider the potential hazards of using axes and saws.

How? This could be achieved through role play, using props or miming the unsafe use of tools, or by watching a video. The group should then produce a list of potential hazards.

Explain...

What? How each of the hazards can be controlled by sticking to clear rules.

How? Use some of the hazards the group came up with before to create a set of sensible rules. Model this first with some of the more obvious hazards (e.g. not using tools in the dark!), then ask the group to create the rest of the rules including the concept of a safety area.

Apply...

What? Use an activity to reinforce the safety considerations for using tools.

How? Ask the group to set up a safety area and put their rules into practice where possible (e.g. putting on boots etc). For less tangible rules, such as not using an axe when tired, they could create a rules board to be displayed at the entrance to the safety area.

Summarise...

What? Check how much the group has understood by revisiting the rules they created.

How? Perform a role play to show someone using an axe/saw incorrectly and ask the group to stop you each time you break a rule. Then get them to explain why they have stopped you.

Lesson 3: It cuts two ways: cutting across the grain (30 minutes)

Introduce...

What? That axes can be used to cut small diameter pieces of wood to shorter lengths, in order to make them more manageable around the camp.

How? Use a selection of props (e.g. long and short logs) to show the group why it might be necessary to use an axe to cut up firewood.

Demonstrate...

What? How to use an axe to cut a long piece of wood into two pieces.

How? Good demonstrations allow people to learn visually, without vocal distractions, by clearly showing the different steps involved. Using slow, deliberate movements, cut the log in half. If needed, over-emphasize your movements to ensure they are clear.

Explain...

What? Now that the group has seen the skill in action, repeat it with a verbal explanation of how it is performed.

How? Repeat the demonstration you gave before, but this time, explain what you're doing at each stage of the process. Avoid telling participants what not to do – it might be the only thing they remember! Instead, save this information for coaching individuals later on.

Apply...

What? Give the group an opportunity to practise the skill you have just taught.

How? Split the group into threes and allow them to practice cutting a piece of wood in half. One member of the team will be using the tool. One will be coaching them to help them follow the demonstration you gave, and the third will be in charge of making sure none of the safety rules are broken. The trio rotates as necessary. As this section progresses you can move around the groups offering tips and advice. Ensure you are always in a position where you can supervise those using tools – make sure you can see all the participants.

Summarise...

What? How an axe can be used to cut logs and its limitations.

How? Ask the group to tell the story of using an axe to cut wood – from entering the safety area to leaving it again. Each member will give one line of the story before moving on to the next person. This can also be played in teams, where one team can 'buzz' out the other if they make a mistake, and take over the story themselves.

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Lesson 4: Going with the grain: splitting (30 minutes)

Following a similar structure to the previous lesson, explain how an axe is used to split small 'rounds' or pre-cut sections of wood. A good training activity for this skill is to ask the group to split the wood until the entire log can be passed through a letter box. Marking

the split line with chalk can also help participants to aim at the correct place. When demonstrating this skill, make sure that you also cover how to free a stuck axe from the round, as this is a common problem for beginners.

Lesson 5: We came, we saw, we sawed some more (30 minutes)

Again, use a similar structure as the previous lessons to teach the group how a saw is used to cut timber into shorter lengths. Key points for this lesson include the size of the timber being cut, using the full length of the blade to cut, and the difference between green wood and dead wood saws (which have blades with raker teeth).

When teaching beginners to use a bow saw, ensure they pass their hand through the bow to hold the wood – that way, if the saw jumps out of the kerf (groove) only the back (blunt side) of the blade can make contact. Once the blade is fully in the timber, the user moves their hand to cover the kerf with their thumb. Again, if the user slips, this will prevent the blade jumping out of the kerf and cutting them.

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Lesson 6: Putting it all together (30 minutes)

A great way to finish any practical session (or series of sessions) is to introduce some sort of challenge for the group to complete that uses all the skills they have learned. Remember that all good challenges have a reward at the end!

The challenge could be very specific, or more open. For example, you could ask groups to take a fallen

tree branch and turn it into 10 wooden house bricks, using a hand axe to limb the fallen pieces, a saw to cut rounds and a hand axe to split them into the correct size/shape. Alternatively, ask them to create a sculpture that demonstrates their skills with each of the three techniques.

Taking it further...

You could create lessons to cover some of the following topics:

- Using a felling axe
- Using an axe to carve wood
- Sharpening and maintaining an axe/saw
- Using a bucksaw
- Using an axe and saw to fell a tree.