



Carpentry

Student Workbook

OXFORD

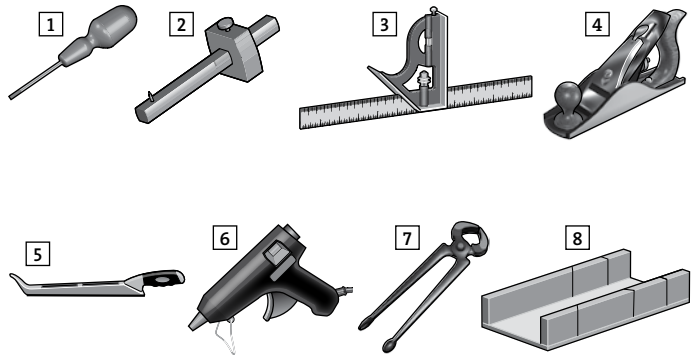
Contents

Unit 1	Page 1
Unit 2	2
Unit 3	3
Unit 4	4
Unit 5	5
Unit 6	6
Unit 7	7
Unit 8	8
Unit 9	9
Unit 10	10
Unit 11	11
Unit 12	12
Unit 13	13
Unit 14	14
Unit 15	15
Unit 16	16
Unit 17	17
Unit 18	18
Answer Key	19

1

1 Label the tools with the words listed below.

combination square smoothing plane
rasp planer glue gun bradawl
mitre box marking gauge pincers



- 1 _____ 5 _____
2 _____ 6 _____
3 _____ 7 _____
4 _____ 8 _____

2 Match the tools (1–4) with the descriptions (a–d).

- | | |
|---------------|--|
| 1 claw hammer | a used to cut into the angle of a dovetail |
| 2 hand saw | b used for cutting timber |
| 3 plane | c used for driving nails into timber |
| 4 chisel | d used for smoothing rough wood |

3 Find ten words relating to tools.

The words read from left to right (→) and top to bottom (↓).

hammer chisel clamp square
routers copingsaw plane level
protractor tape

a	s	p	d	j	l	h	y	u	p
c	a	l	m	c	l	a	m	p	r
s	t	a	p	e	f	m	o	u	o
e	v	n	w	q	a	m	s	d	t
x	l	e	v	e	l	e	m	n	r
u	o	e	w	r	t	r	z	q	a
c	o	p	i	n	g	s	a	w	c
s	t	r	s	q	u	a	r	e	t
r	o	u	t	e	r	l	k	m	o
x	c	h	i	s	e	l	d	f	r

4 Make Present Perfect sentences and questions.

- You finish hammering it?

- You and Frank done it?

- I not fix it yet.

- Why they not finish that work?

- Where you see it?

- I not done it yet.

- Where you be?

- What she say about it?

2

- 1 Find eight words relating to construction.**
The words read from left to right (→)
and top to bottom (↓).

flush counter sink
chalk bolster dado
panel studwall

a	p	a	n	e	l	s	u	d	f
j	h	s	d	e	g	i	y	a	l
e	r	w	h	y	b	n	v	d	u
k	l	c	h	a	l	k	s	o	s
s	t	u	d	w	a	l	l	t	h
b	o	k	b	o	l	s	t	e	r
c	o	u	n	t	e	r	s	t	e
p	c	a	u	l	k	i	n	g	i
l	i	k	e	n	t	h	e	i	r
e	s	c	u	t	c	h	e	o	n

- 2 Read the text and answer the questions.**

When wood is planed along its grain you should get thin shavings as you push the plane iron forwards, leaving a smooth surface. The direction of the grain can be worked out by looking at the edge or the side of the piece of wood. You will see wood fibres running out to the surface that is being planed. Where the wood fibres meet the surface, they will look pointed. The way the point is facing shows the direction of the grain.

- 1 What do the shavings look like if you are planing along the grain?

- 2 Where do you look to see the direction of the wood fibres?

- 3 What shows the direction of the grain?

- 3 Match the terms (1–4) with the definitions (a–d).**

- | | |
|-------------|--|
| 1 adhesive | a cut running across the grain of timber |
| 2 cross cut | b timber stacked and dried naturally by exposure |
| 3 calliper | c substance used to stick two materials together |
| 4 air dried | d measuring or marking tool |

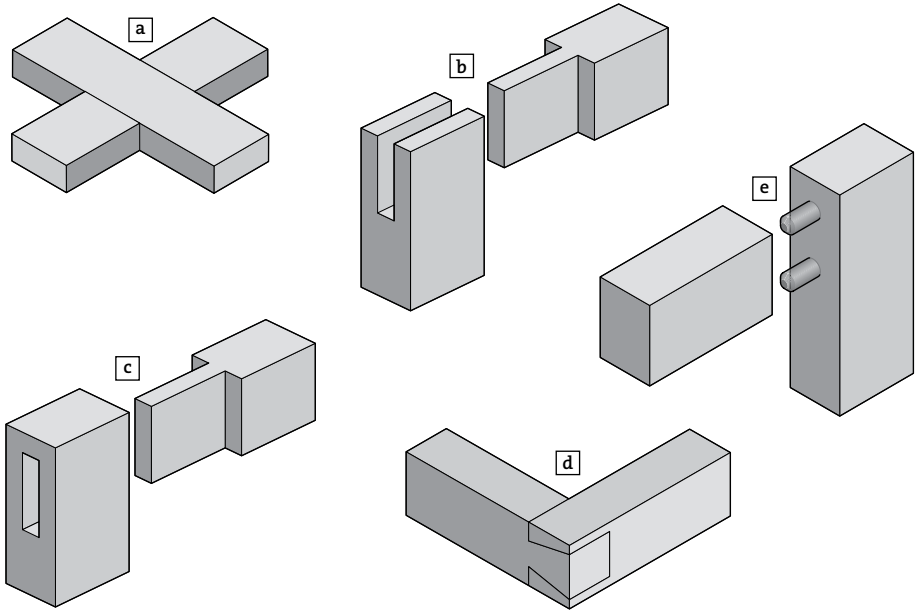
- 4 Choose the correct form of the verbs to complete the sentences.**

- 1 I do not have to *wearing* / *wear* a tie for work.
- 2 My tool box is too heavy to *carry* / *carrying*.
- 3 Please may I *borrowing* / *borrow* your hammer?
- 4 What time did you *start* / *starting* work?
- 5 I have *broken* / *broke* my saw.

1 Match the terms (1–5) with the types of joint (a–e).

- 1 dowel
- 2 mortise and tenon
- 3 halving
- 4 bridle
- 5 dovetail

- a _____
- b _____
- c _____
- d _____
- e _____



2 Put the instructions in the correct order.

- a Choose wood
- b Let glue dry
- c Cut each end of the wood
- d Release the clamps
- e Glue the face of each end of the wood
- f Sand each end of the wood
- g Clamp the wood together
- h Pin the corners together
- i Lightly sand the finished project
- j Make sure all corners are good fits

1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____ 9 ____ 10 ____

3 Read the sentences (1–5) and decide if they are true (T) or false (F).

- 1 End pieces of a mitred joint are cut at 90 degrees. ____
- 2 Wood cut for a butt joint has to be cut square. ____
- 3 When a screw is used in a joint across the grain the length should be twice the thickness of the top piece of wood. ____
- 4 Screws driven into the end grain should be three times the thickness of the top pieces of wood. ____
- 5 Blunting the nail tip with a hammer first will help prevent it from splitting the wood. ____

4 Find ten words relating to carpentry. The words read from left to right (→) and top to bottom (↓).

mortise mitre tenon groove
comb dovetail tongue lap
box butt

m	o	r	t	i	s	e	i	s	e
i	i	y	e	e	r	o	c	p	t
t	w	l	n	k	j	j	o	o	o
r	q	b	o	x	e	d	m	a	n
e	g	h	n	s	s	d	b	a	g
h	e	r	z	b	u	t	t	t	u
g	r	o	o	v	e	x	g	h	e
a	s	d	f	f	d	s	a	w	q
d	o	v	e	t	a	i	l	i	h
m	n	o	t	r	e	l	a	p	e

1 Complete the sentences with the words listed below.

hold countersink wood split nails ideal

- 1 Flat head nails are _____ for rough carpentry work.
- 2 Oval or bullet head nails tend to _____ wood.
- 3 Masonry _____ will not go into brickwork.
- 4 Hardboard pins have special heads that _____.
- 5 Flat head nails do not split _____.
- 6 Glazing brads are used to _____ glass in place.

2 Complete the text with the words listed below.

wood square thickness pieces hammer mitred

End pieces of a _____¹ joint are cut at 45 degrees. _____² cut for a butt joint has to be cut _____³. When a screw is used in a joint across the grain the length should be twice the _____⁴ of the top piece of wood. Screws driven into the end grain should be three times the thickness of the top _____⁵ of wood. Blunting the nail tip with a _____⁶ first will help prevent it from splitting the wood.

3 Read the text and answer the questions.

Saw blades are consumables which means they have a limited life and have to be replaced when they are blunt. Circular saw blades cut by using teeth on the edge of a thin blade. They produce a narrow cut and leave a good surface finish. The cut can leave burrs on the cut edge of the wood. Circular saw blades are nearly always Tungsten Carbide Tipped (TCT), others are High Speed Steel (HSS).

- 1 What material are most circular saw blades made from?

- 2 What is HSS?

- 3 Where are the burrs found after wood has been cut?

- 4 What does consumable mean?

- 5 What thickness is the cut made from a circular saw blade?

4 Complete the sentences with the words listed below.

wood veneer plain wood warping glued grain

- 1 Plywood is made from sheets of _____.
- 2 Plywood is used instead of _____.
- 3 Plywood is resistant to _____.
- 4 Plywood layers are _____ together.
- 5 The layers have their _____ at right angles.

1 Read the text and answer the questions.

Prefabrication is a mass production technique. It involves preparing completely finished items in a factory. They are then ready for installation on the building site. Timber houses can be prepared in sections. Floor sections and roofs can be made in the same way. Doors can be hung to frames, complete with their fixtures and fittings.

1 What is prefabrication?

2 Give 4 examples of prefabrication.

3 Where is prefabrication carried out?

4 Where are prefabricated items used?

2 Match the terms (1–5) with the descriptions (a–e).

- | | |
|--------------|---|
| 1 header | a bottom member in a wall |
| 2 sole plate | b material used to cover a timber partition |
| 3 member | c structural timber in a building |
| 4 stud | d vertical member in a wall |
| 5 cladding | e top member in a wall |

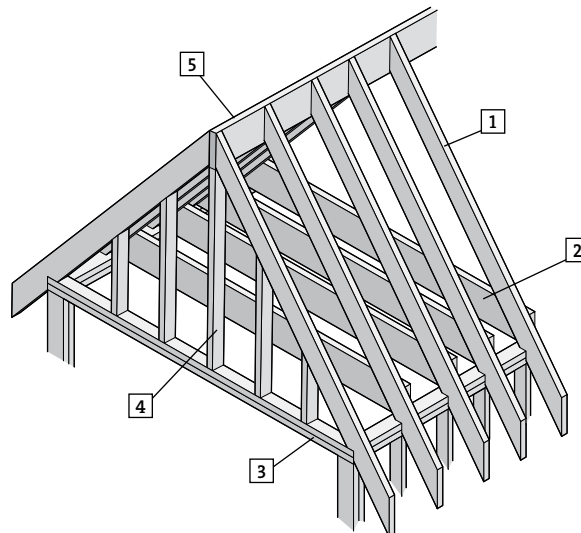
3 Read the sentences and underline the unnecessary articles.

- 1 We need a more help on the roof.
- 2 I have seen the truck full of the wood.
- 3 He has been doing this job for the ten years.
- 4 There is a more timber to be unloaded.

4 Label the diagram of a roof being built using the words listed below.

gable wall studs rafter ceiling joist ridge double plate

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____



6

1 Complete the health and safety precautions with the words listed below.

filters ventilation collection extraction vacuum compressed

- 1 Use dust _____ systems.
- 2 Make sure appropriate _____ and exhaust controls are in place for machinery that generates sawdust.
- 3 Use hand tools fitted with a _____ bag.
- 4 Maintain and clean the _____ of dust extraction systems regularly.
- 5 Use wet wiping or a _____ fitted with a HEPA filter to clean up sawdust.
- 6 Do not use _____ air to clean down equipment or clothing.

2 Match the beginnings of sentences (1–6) with the endings (a–f).

- | | |
|--|-------------------------------|
| 1 The electric cable was split so I | a cuts accidents and injuries |
| 2 Routine maintenance of machines | b the head was worn |
| 3 Dust from the woodworking | c damaged the drill |
| 4 The drill bit was blunt so | d had it replaced |
| 5 I removed the screw because | e I fitted a new one |
| 6 We replaced the plane because it could not | f be mended |

3 Make Present Perfect sentences and questions.

- 1 you finish jointing?

- 2 we do the sanding.

- 3 you and Robert gloss it?

- 4 we not varnish it.

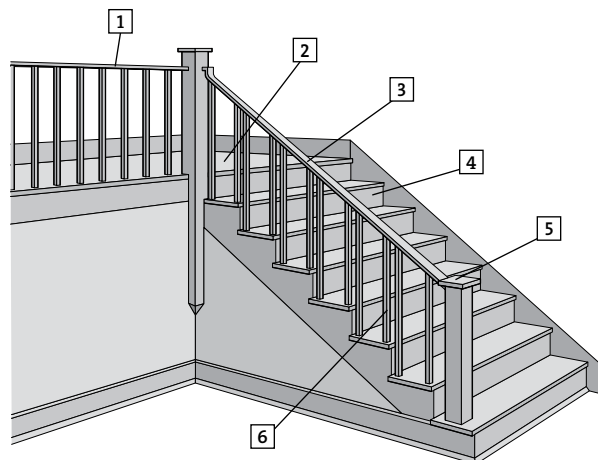
- 5 they build the carcass?

- 6 they not finish the sanding.

4 Label the diagram with the words listed below.

banister landing closed stringer
newel post guard handrail

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____



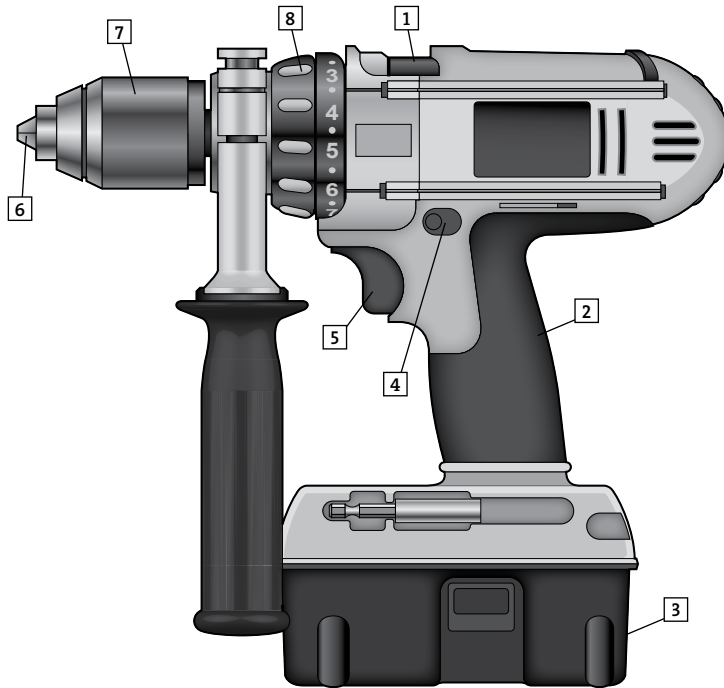
1 Find ten words relating to carpentry.
The words read from left to right (→)
and top to bottom (↓).

architrave cantilever beading
crossgrain dormer dowel
finial jamb rebate rail

c	a	n	t	i	l	e	v	e	r
a	j	a	m	b	r	e	f	r	b
x	o	r	e	p	e	s	i	c	e
d	d	h	g	w	b	d	n	l	a
r	e	p	r	g	a	o	i	j	d
d	o	w	e	l	t	r	a	m	i
b	v	s	a	e	e	m	l	t	n
r	a	i	l	r	a	e	l	e	g
a	r	c	h	i	t	r	a	v	e
c	r	o	s	s	g	r	a	i	n

2 Label the diagram of a cordless drill with the words listed below.

keyless chuck
trigger
handle
chuck jaws
clutch
battery
forward/reverse switch
speed switch



- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____

3 Match the terms (1–5) with the definitions (a–e).

- | | |
|-------------------|---|
| 1 newel post | a strong post at the top or bottom of a staircase supporting the handrail |
| 2 banister | b set of bars and a handrail bordering the stairs or the open side of a landing |
| 3 closed stringer | c top part of a guard for gripping when climbing or descending a staircase |
| 4 handrail | d diagonal piece of notched wood supporting steps and risers and enclosing their ends |
| 5 guard | e small piece of wood supporting the handrail and providing safety |

4 Complete the text with the words listed below.

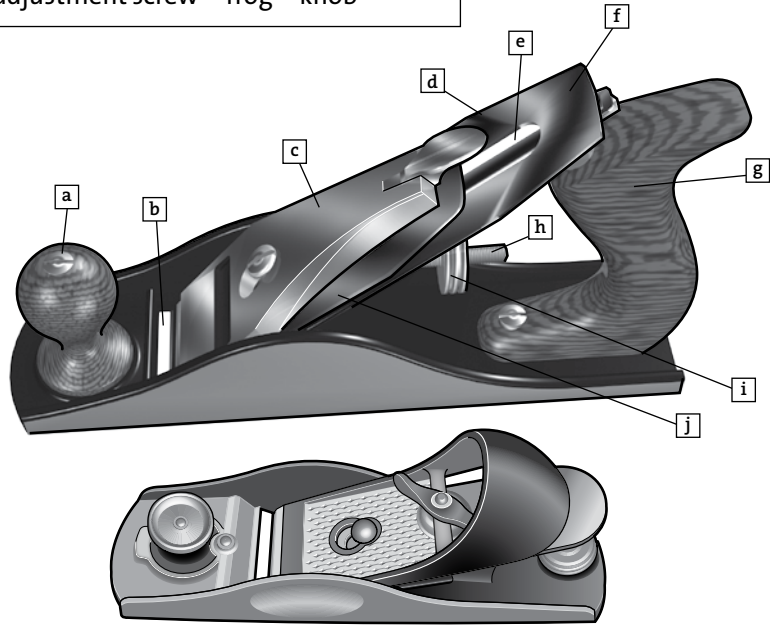
floorboards struts metal support suspended joist

A _____¹ is a bearing timber to which _____² are fixed. The bearing timber creates a _____³ floor. To stop the bearing timbers from twisting or tilting _____⁴ can be fixed to stiffen the floor. A _____⁵ shoe is secured to the ends of the bearing timbers to _____⁶ them.

1 These are two different woodworking planes, but they both have similar parts. Label the parts with the words listed below.

iron lever cap mouth chipbreaker tote lateral adjustment lever
depth adjustment knob depth adjustment screw frog knob

- a _____
- b _____
- c _____
- d _____
- e _____
- f _____
- g _____
- h _____
- i _____
- j _____



2 Write the correct spelling of the words.

- 1 chissel _____
- 4 sicular saw _____
- 2 hamer _____
- 5 grynder _____
- 3 plain _____
- 6 latthes _____

3 Complete the sentences by choosing the correct option.

- 1 Only use woodworking machines that you have been _____ to use properly.
a training b train c trained
- 2 Always read the owners' manual _____.
a carefully b care c careful
- 3 Make sure you _____ instructions before attempting to use any tool.
a understood b understand c understanding
- 4 Always _____ safety glasses or goggles.
a wearing b where c wear

4 Find 12 words relating to carpentry.
The words read from left to right (→)
and top to bottom (↓).

handle mouth sole cutter
pitch iron regulator body
crosspin toe screw spring

h	a	n	d	l	e	r	c	c	c
t	o	e	d	e	r	e	j	r	u
s	b	o	d	y	s	g	d	o	t
m	v	i	b	n	p	u	s	s	t
o	q	r	a	m	r	l	s	s	e
u	r	o	e	e	i	a	j	p	r
t	e	n	f	d	n	t	o	i	p
h	s	c	r	e	g	o	s	n	s
s	c	r	e	w	t	r	e	e	r
p	i	t	c	h	e	s	o	l	e

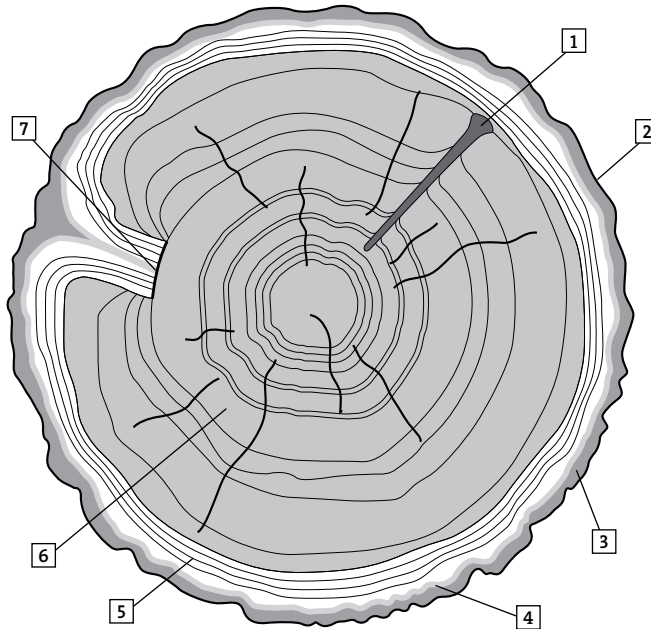
1 Match the terms (1–4) with the definitions (a–d).

- | | |
|---------------|--|
| 1 bark | a central part of the trunk that contains nutrients |
| 2 annual ring | b tree's external protective layer |
| 3 heartwood | c each of the concentric circles representing the layer of wood produced in one year |
| 4 pith | d hard, dark-coloured wood layer made of dead sapwood |

2 Label the diagram of the growth rings of a tree with the words listed below.

- inner bark
cambium
heartwood
old wound
old branch stub
sapwood
outer bark

- 1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____



3 Read the statements (1–5) and decide if they are true (T) or false (F).

- 1 Wood conducts electricity. ____
- 2 Wood quickly absorbs water. ____
- 3 Wood is a good thermal insulator. ____
- 4 Wood that has dried out too quickly will crack. ____
- 5 Wood is hard to use as a decorative material. ____

4 Read the following text and answer the questions.

Mahogany is indigenous to South and Central America and Africa. There are several different grades and species. Mahogany from Africa is said to be of lower quality, but the wood from America or the Caribbean is the hardest, strongest and best quality. Mahogany has poorly defined growth rings. It is reddish brown and is excellent for carving, and finishes well.

- 1 Where is mahogany indigenous?

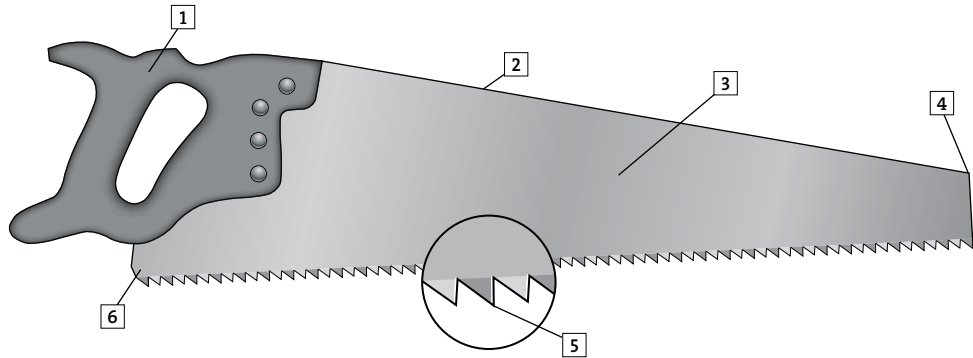
- 2 Where does the best quality mahogany come from?

- 3 What are two qualities of the best mahogany?

1 Label the parts of a handsaw with the words listed below.

heel blade tooth toe handle back

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____



2 Match the terms (1–6) with the definitions (a–f).

- | | |
|----------|---|
| 1 tooth | a rear end of a blade, partially or completely encased in a handle |
| 2 handle | b plastic or wooden part used to grip the saw |
| 3 heel | c front end of a blade, usually narrower than the heel |
| 4 toe | d toothless edge of a blade |
| 5 back | e long and rigid but slightly flexible and designed for following a straight line |
| 6 blade | f small point forming the cutting part of the blade |

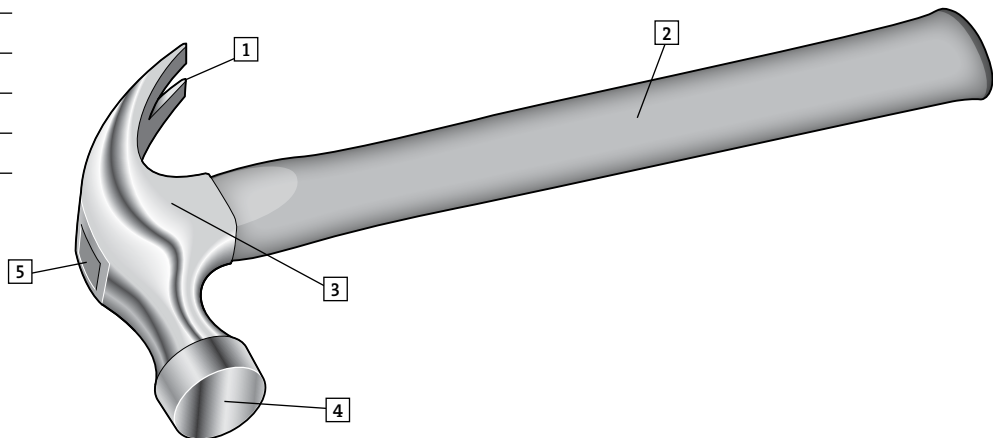
3 Match the types of wood (1–5) with their characteristics (a–e).

- | | |
|------------|--------------------------------------|
| 1 Mahogany | a dark, reddish brown hardwood |
| 2 Walnut | b fine texture and strong |
| 3 Rosewood | c reddens in sunlight |
| 4 Cherry | d good bending qualities and durable |
| 5 Oak | e fine grained and reddish in colour |

4 Label the diagram of a claw hammer with the words listed below.

cheek claw eye handle face

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

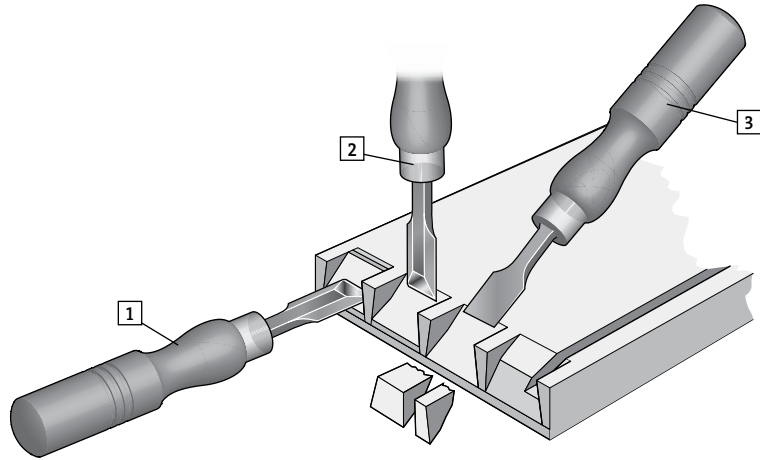


11

1 Label the items 1, 2 and 3 on the diagram of a dovetail joint with the phrases listed below.

- Marking the horizontal cut
- The preliminary roughing out of the joint
- Vertical chiseling

1 _____
 2 _____
 3 _____



2 Complete the text with the words listed below.

lowering versatile surface workshop motor cuts vibration adjusting

The table saw is the most _____¹ machine in any workshop. A good table saw becomes the centrepiece of the _____², as the woodworker uses it to rip, square, mitre, groove, shape, and join pieces. Every table saw should have a smooth, heavy work _____³, a handle for raising and _____⁴ the saw blade, a separate handle for _____⁵ the angle of the blade and connections for dust collection. The saw should have a strong _____⁶ that starts smoothly with little _____⁷ and enough horsepower to make deep _____⁸ through harder woods.

3 Complete the sentences by choosing the correct option.

- Do not _____ sawdust or cuttings by hand.
 a removal b removing c remove
- Do not leave machines _____.
 a unattended b unintended c attended
- Do not wear _____ clothing when operating machinery.
 a loose b lose c loosing
- Spills should be _____ up immediately.
 a cleanly b cleaned c clean

4 Complete the table with the tasks listed below.

shaping timber making frames cutting boards assembling doors making fitted furniture
 constructing staircases partition walling erecting roofs installing door frames

Machinery	Bench	First Fix
shaping timber		

1 Rearrange the letters to make names of carpentry power tools.

1 giswaj _____ 2 luiiccra was _____ 3 timre was _____

2 Read the text and answer the questions.

Arthur Arnot invented the first electric drill in 1889. The first electric saw was made in 1921 by fixing a motor and a circular blade to a machete. The American engineer Art Emmons made the first portable belt sander in 1926. To begin with power tools were expensive, unreliable and bulky but Black and Decker introduced the pistol grip and trigger to their drills in 1917. Cordless tools did not appear until 1959. Again Black & Decker produced a battery powered tool that could be used in space.

- 1 What was wrong with early power tools?

- 2 What nationality was the man who invented the portable belt sander?

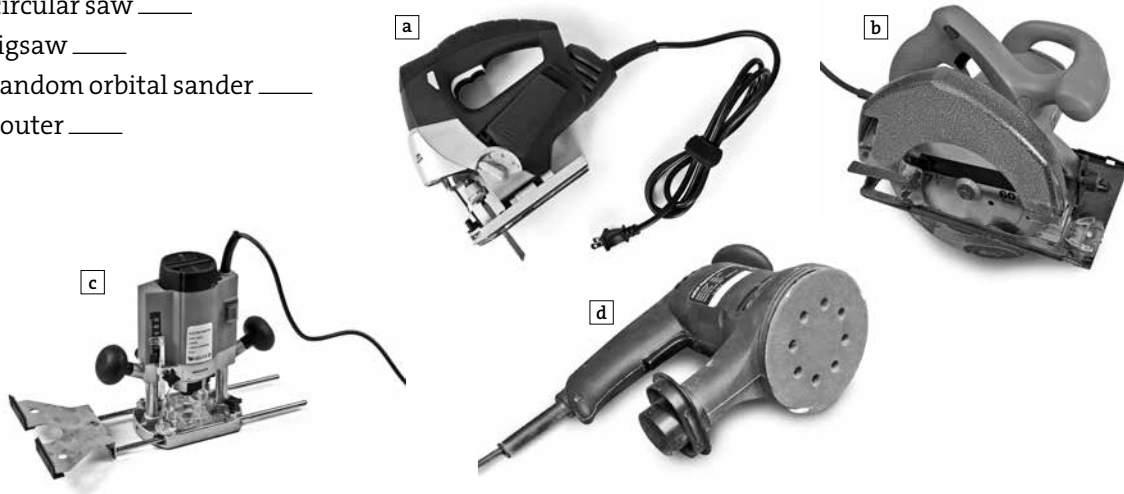
- 3 Which company designed the pistol grip and trigger for drills?

- 4 Which was invented first, the electric saw, the electric drill or the belt sander?

- 5 What was the name of the man who invented the first electric drill?

3 Match the names of power tools (1–4) with the pictures (a–d).

- 1 circular saw _____
- 2 jigsaw _____
- 3 random orbital sander _____
- 4 router _____



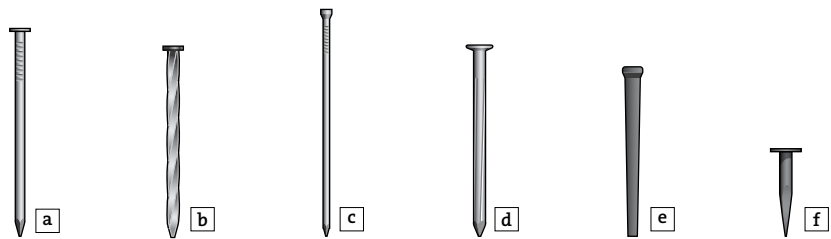
4 Find ten words relating to carpentry tools. The words read from left to right (→) and top to bottom (↓).

jigsaw circular table mitre
stapler rip drill nailer
sander planer

j	i	g	s	a	w	w	a	s	m
s	t	r	i	n	g	e	d	s	i
t	n	d	d	r	i	l	l	i	t
a	a	r	u	i	n	j	w	q	r
p	i	e	p	l	a	n	e	r	e
l	l	c	v	b	n	k	l	o	i
e	e	c	i	r	c	u	l	a	r
r	r	s	a	r	b	v	e	q	i
x	z	s	a	n	d	e	r	b	p
t	a	b	l	e	e	l	b	a	y

1 Match the types of nail (1–6) with the pictures (a–f).

- 1 spiral nail _____
- 2 cut nail _____
- 3 masonry nail _____
- 4 common nail _____
- 5 tack _____
- 6 finishing nail _____



2 Match the types of nail (1–6) with the descriptions (a–f).

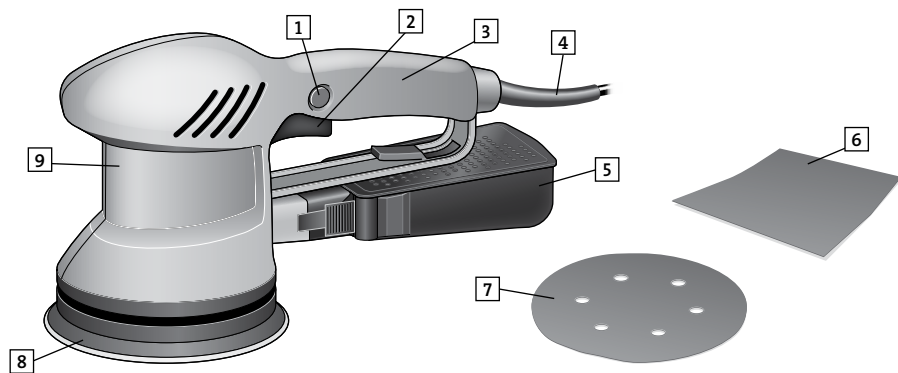
- 1 spiral nail
- 2 cut nail
- 3 masonry nail
- 4 common nail
- 5 tack
- 6 finishing nail

- a the head, scarcely wider than the shank, can easily be hammered in and concealed; it is ideal for finishing work and mouldings
- b made of hardened steel, it can be hammered into masonry without breaking or bending
- c the flat shank and head do not harm fibres; it is used especially for laying wood flooring
- d sturdy wide-headed nail, used for general woodwork and carpentry
- e turns like a screw as it is hammered in; it reduces cracking and is hard to pull out
- f small wide-headed nail often used to affix carpets, fabric and other thin materials

3 Label the diagram of a random orbit sander with the words listed below.

housing sandpaper trigger handle lock-on button
power cord dust canister sanding disc sanding pad

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____



4 Complete the sentences by choosing the correct option.

- 1 I need _____ why the lathe is not working.
a finding out b to find out c find out
- 2 This drill is wearing _____; perhaps it needs replacing.
a on b off c out
- 3 I can _____ burning; we should turn it off straightaway.
a smelt b smelling c smell
- 4 When are you _____ service my machine?
a gone to b go to c going to

1 Complete the text with the words listed below.

rafters assembled beams trusses construction

Rafters and _____¹ support the roof. Though both rafters and trusses are triangular in shape, the trusses have more triangle webs inside the principle frame. _____² consist of sloping outer _____³ which provide support. As the trusses come with a web of triangles inside the main frame, they provide more support than the rafters. Trusses and rafters are both _____⁴ ahead of being installed onto the roof. Trusses are assembled in a factory using pre-engineered structures and joints. Rafters are assembled at the _____⁵ site.

2 Match the terms (1–4) with the definitions (a–d).

- | | |
|------------------------------|---|
| 1 rafter | a main support in a floor |
| 2 joist | b easy fit boards providing a strong joint |
| 3 tongue and groove flooring | c main support in a roof |
| 4 section size | d length, breadth and thickness of a material |

3 Read the text and answer the questions.

The ceiling beam, or ceiling joist, has two prime functions. The first is to tie the walls of a structure or a room together, completing a box configuration. The second is to support the ceiling of the structure, or room. Ceiling joist framing is undertaken after the walls are erected.

Ceiling joists are a number of horizontal beams, running parallel from one wall to the opposite wall of the structure. The beams are attached to the top of the wall at what's known as the wall plate. A ceiling joist at the top floor of a structure may also support a flat roof, as well as the ceiling. If the roof of the structure is sloped, or pitched, each ceiling joist support is attached to a roof rafter, the angled roof support beams.

1 What are the two functions of ceiling joists?

2 When is ceiling joist framing undertaken?

3 Where do the ceiling joists run to?

4 What are the joists attached to?

4 Complete the sentences with the words listed below.

distance level rise top slants highest

1 A horizontal line is one _____ with the building foundations.

2 Total rise is the vertical _____ from the wall plate to the _____ of the ridge.

3 Pitch is the amount that a roof _____ and the ratio of _____ to the span of a roof.

4 The ridge is the _____ horizontal roof member.

1 Match the beginnings of the words (1–8) with the endings (a–h) to form nouns.

- | | |
|------------|--------|
| 1 compress | a ee |
| 2 corro | b ian |
| 3 equip | c ics |
| 4 fric | d sion |
| 5 logist | e ment |
| 6 supervis | f or |
| 7 technic | g or |
| 8 train | h tion |

2 Read the text and answer the questions.

Oak is often used in fine carpentry. It is hard, strong, and when finished properly looks beautiful. Oak can be difficult to work with because of its heavy graining. Tools have to be very sharp when working with oak, as it can chip or split easily. The wood can also burn when using power tools like a router. Using the router on the correct speed can help prevent this problem.

- Why is oak sometimes difficult to work with?

- Why do tools have to be sharp when working with oak?

- What would happen to the oak if a router was used on too fast a speed?

3 Read the statements (1–5) and decide if they are true (T) or false (F).

- Pine has an uneven texture. ____
- Redwood is naturally resistant to decay. ____
- Pine resists shrinkage, swelling and warping. ____
- Cedar is a reddish wood. ____
- Cedar has a sweet smell. ____

4 Match the words (1–8) with the definitions (a–h).

- | | |
|--------------|---|
| 1 compressor | a someone who is learning how to do something |
| 2 corrosion | b the things you need to do a job |
| 3 equipment | c a machine for squeezing gas into a smaller volume |
| 4 friction | d the person who checks other people's work |
| 5 logistics | e the force of two things rubbing together |
| 6 supervisor | f someone who has skills in a technical area |
| 7 technician | g the science of organizing the flow of supplies and people |
| 8 trainee | h the damage caused by oxidization |

1 Read the text and answer the questions.

Sandpapers are graded as Coarse (40–60 grit), Medium (80–120), Fine (150–180), Very Fine (220–240), Extra Fine (280–320) and Super Fine (360 and above). You should sand with progressively finer sandpaper to remove any scratches left by the previous paper. Good sanding leaves a smooth finish.

- 1 Which grade of sandpaper should be used first?

- 2 Which grade of sandpaper should be used last?

- 3 What is the purpose of using progressively finer sandpaper?

2 Complete the table with the adjectives from the nouns (1–5).

Noun	Adjective
1 width	
2 height	
3 length	
4 depth	
5 weight	

3 Complete the sentences by choosing the correct option.

- 1 Let us _____ down the surface first.
a sand b sanding c sandy
- 2 We can _____ a veneer to get the ideal finish.
a application b apply c applying
- 3 After the repair is made we can find a _____ veneer so the repair will not be visible.
a match b matching c matched
- 4 Toners like lacquer are _____ finishes.
a clearly b clearing c clear

4 Match the words (1–5) with their opposites (a–e).

- | | |
|------------------------|----------------|
| 1 organized | a dirty |
| 2 clean | b disorganized |
| 3 clear (instructions) | c cluttered |
| 4 clear (workbench) | d unsafe |
| 5 safe | e unclear |

1 Match the definitions (1–6) with the phrasal verbs listed below.

chase up carry out catch up get on with fall behind hold up

- 1 lose time on a schedule _____
- 2 perform a task _____
- 3 cause a delay _____
- 4 contact somebody in order to remind them to do something _____
- 5 spend extra time doing something because you haven't done it earlier _____
- 6 make progress _____

2 Make Present Perfect sentences and questions.

- 1 you finish measuring?

- 2 we do the sawing

- 3 you and Ahmed paint it?

- 4 we not paint it

- 5 they build the base?

- 6 they not finish the base

- 7 they check the inside?

- 8 Simon check inside

3 Put the words in the correct order to make questions.

- 1 come can I in ?

- 2 me you can pass hammer that ?

- 3 this you me help carry can timber ?

- 4 hard take my off I can hat ?

4 Match the words (1–7) with the abbreviations listed below.

cm g kg km m mm t

- | | |
|---------------------|---------------------|
| 1 grams _____ | 5 centimetres _____ |
| 2 kilos _____ | 6 metres _____ |
| 3 tonnes _____ | 7 kilometres _____ |
| 4 millimetres _____ | |

1 Write sentences with the Past Continuous and the Past Simple form of the verbs in brackets.

- 1 _____ (learn) to use the jigsaw when I _____ (cut my hand).
- 2 When I _____ (fall), I _____ (climb) a ladder.
- 3 They _____ (weld) when the fire _____ (start).
- 4 _____ (you use) the computer when the power _____ (go off)?
- 5 He _____ (not use) the safety guard when he _____ (cut) his finger.
- 6 When we _____ (eat) lunch, the oxygen bottle _____ (explode).

2 Underline the correct word.

- 1 This old machine isn't *safe* / *safety*.
- 2 He's an *Italy* / *Italian* engineer.
- 3 Can I use your *calculate* / *calculator* please?
- 4 There are *hazards* / *hazardous* in my job.
- 5 This company is a good *employ* / *employer*.

3 Complete the table.

Verb	Noun
to _____ ¹	adaptation
to _____ ²	approval
to assemble	_____ ³
to conceive	_____ ⁴
to _____ ⁵	design
to develop	_____ ⁶
to produce	_____ ⁷
to _____ ⁸	specification

4 Match the words (1–5) with the definitions (a–e).

- | | |
|----------------------|---|
| 1 a safety procedure | a harm done to a person's body |
| 2 a risk assessment | b a way of doing things to prevent accidents |
| 3 a technique | c a report about possible dangers |
| 4 an injury | d a particular way of doing something, especially one in which you have to learn special skills |
| 5 an incident | e something that happens: an event, a fire, a collision, an accident |

Answer Key

UNIT 1

- 1 1 bradawl 5 rasp planer
 2 marking gauge 6 glue gun
 3 combination square 7 pincers
 4 smoothing plane 8 mitre box

- 2 1 c 2 b 3 d 4 a

3

		p			h			p	
		l		c	l	a	m	p	r
		t	a	p	e	m			o
		n				m			t
		l	e	v	e	l	e		r
						r			a
c	o	p	i	n	g	s	a	w	c
			s	q	u	a	r	e	t
r	o	u	t	e	r				o
c	h	i	s	e	l				r

- 4 1 Have you finished hammering it?
 2 Have you and Frank done it?
 3 I have not fixed it yet.
 4 Why haven't they finished that work?
 5 Where have you seen it?
 6 I have not done it yet.
 7 Where have you been?
 8 What has she said about it?

UNIT 2

1

	p	a	n	e	l	s		d	f
						i		a	l
						n		d	u
		c	h	a	l	k		o	s
s	t	u	d	w	a	l	l		h
			b	o	l	s	t	e	r
c	o	u	n	t	e	r			

- 2 1 They are thin
 2 On the edge or side of the piece of wood
 3 The way the point is facing
- 3 1 c 2 a 3 d 4 b
- 4 1 wear 4 start
 2 carry 5 broken
 3 borrow

UNIT 3

- 1 1 e 2 c 3 a 4 b 5 d
 2 1 a 2 c 3 f 4 e 5 g 6 j 7 h 8 b 9 d 10 i
 3 1 T 2 T 3 T 4 T 5 T

4

m	o	r	t	i	s	e			
i			e				c		t
t			n				o		o
r	b	o	x				m		n
e			n				b		g
				b	u	t	t		u
g	r	o	o	v	e				e
d	o	v	e	t	a	i	l		
						l	a	p	

UNIT 4

- 1 1 ideal 4 countersink
 2 split 5 wood
 3 nails 6 hold
- 2 1 mitred 4 thickness
 2 Wood 5 pieces
 3 square 6 hammer
- 3 1 Tungsten Carbide Tipped (TCT)
 2 High Speed Steel
 3 On the cut edge of the wood
 4 It has to be replaced as it wears out
 5 Narrow
- 4 1 wood veneer
 2 plain wood
 3 warping
 4 glued
 5 grain

UNIT 5

- 1 1 A mass production technique
 2 Timber houses, floors, roofs and doors
 3 In a factory
 4 On a building site
- 2 1 e 2 a 3 c 4 d 5 b
- 3 1 a 3 the
 2 (second) the 4 a
- 4 1 rafter 4 gable wall studs
 2 ceiling joist 5 ridge
 3 double plate

Answer Key

UNIT 6

- 1** 1 extraction 5 vacuum
2 ventilation 6 compressed
3 collection
4 filters
- 2** 1 d 2 a 3 c 4 e 5 b 6 f
- 3** 1 Have you finished jointing?
2 We have done the sanding.
3 Have you and Robert glossed it?
4 We have not varnished it.
5 Have they built the carcass?
6 They have not finished the sanding.
- 4** 1 guard 4 closed stringer
2 landing 5 newel post
3 handrail 6 banister

UNIT 7

1

c	a	n	t	i	l	e	v	e	r
	j	a	m	b	r	f		b	
				e	i			e	
				b	d	n		a	
				a	o	i		d	
d	o	w	e	l	t	r	a		i
				e	m	l		n	
r	a	i	l		e			g	
a	r	c	h	i	t	r	a	v	e
c	r	o	s	s	g	r	a	i	n

- 2** 1 speed switch
2 handle
3 battery
4 forward / reverse switch
5 trigger
6 chuck jaws
7 keyless chuck
8 clutch
- 3** 1 a 2 e 3 d 4 c 5 b
- 4** 1 joist 4 struts
2 floorboards 5 metal
3 suspended 6 support

UNIT 8

- 1** a knob
b mouth
c lever cap
d chipbreaker
e lateral adjustment lever
f frog
g tote
h depth adjustment screw
i depth adjustment knob
j iron
- 2** 1 chisel 4 circular saw
2 hammer 5 grinder
3 plane 6 lathes
- 3** 1 c 2 a 3 b 4 c

4

h	a	n	d	l	e	r		c	c
t	o	e				e		r	u
	b	o	d	y	s	g		o	t
m		i			p	u		s	t
o		r			r	l		s	e
u		o			i	a		p	r
t		n			n	t		i	
h					g	o		n	
s	c	r	e	w		r			
p	i	t	c	h		s	o	l	e

UNIT 9

- 1** 1 b 2 c 3 d 4 a
- 2** 1 old branch stub 5 sapwood
2 outer bark 6 heartwood
3 inner bark 7 old wound
4 cambium
- 3** 1 F 2 F 3 T 4 T 5 F
- 4** 1 South and Central America and Africa
2 Central and South America and the Caribbean
3 Hardness and strength

UNIT 10

- 1** 1 handle 4 toe
2 back 5 tooth
3 blade 6 heel
- 2** 1 f 2 b 3 a 4 c 5 d 6 e
- 3** 1 e 2 b 3 a 4 c 5 d
- 4** 1 handle 4 eye
2 face 5 claw
3 cheek

UNIT 11

- 1** 1 The preliminary roughing out of the joint
2 Vertical chiseling
3 Marking the horizontal cut
- 2** 1 versatile 5 adjusting
2 workshop 6 motor
3 surface 7 vibration
4 lowering 8 cuts
- 3** 1 c 2 a 3 a 4 b

4

Machinery	Bench	First Fix
shaping timber	assembling doors	partition walling
making frames	making fitted furniture	installing door frames
cutting boards	constructing staircases	erecting roofs

UNIT 12

- 1** 1 jigsaw
2 circular saw
3 mitre saw
- 2** 1 They were expensive, unreliable and bulky
2 American
3 Black & Decker
4 electric drill
5 Arthur Arnot
- 3** 1 b 2 a 3 d 4 c

4

j	i	g	s	a	w				m
s									i
t	n		d	r	i	l	l		t
a	a								r
p	i		p	l	a	n	e	r	e
l	l								
e	e	c	i	r	c	u	l	a	r
r	r								i
		s	a	n	d	e	r		p
t	a	b	l	e					

UNIT 13

- 1** 1 b 2 e 3 d 4 a 5 f 6 c
- 2** 1 e 2 c 3 b 4 d 5 f 6 a
- 3** 1 lock-on button 6 sand paper
2 trigger 7 sanding disc
3 handle 8 sanding pad
4 power cord 9 housing
5 dust canister
- 4** 1 b 2 c 3 c 4 c

UNIT 14

- 1** 1 trusses 4 assembled
2 Rafters 5 construction
3 beams
- 2** 1 c 2 a 3 b 4 d
- 3** 1 To tie the walls of a structure together and support the ceiling of a structure
2 Framing is undertaken after the walls are erected
3 The joists run from one wall of a structure to the opposite wall
4 The joists are attached to the top of the wall or 'wall plate'
- 4** 1 level 3 slants / rise
2 distance / top 4 highest

UNIT 15

- 1** 1 f 2 d 3 e 4 h 5 c 6 g 7 b 8 a
- 2** 1 Oak is very heavily grained
2 The wood can chip or split easily if sharp tools are not used
3 The oak would get burn marks if the power tool was used on too fast a speed

- 3** 1 F 2 T 3 T 4 T 5 T
- 4** 1 c 2 h 3 b 4 e 5 g 6 d 7 f 8 a

UNIT 16

- 1** 1 Coarse
2 Super Fine
3 To remove any scratches left by the previous sandpaper
- 2** 1 wide 4 deep
2 high 5 heavy
3 long
- 3** 1 a 2 b 3 b 4 c
- 4** 1 b 2 a 3 e 4 c 5 d

UNIT 17

- 1** 1 fall behind 4 chase up
2 carry out 5 catch up
3 hold up 6 get on with
- 2** 1 Have you finished measuring?
2 We've done the sawing.
3 Have you and Ahmed painted it?
4 We haven't painted it.
5 Have they built the base?
6 They haven't finished the base.
7 Have they checked the inside?
8 Simon has checked inside.
- 3** 1 Can I come in?
2 Can you pass me that hammer?
3 Can you help me carry this timber?
4 Can I take off my hard hat?
- 4** 1 g 2 kg 3 t 4 mm 5 cm 6 m 7 km

UNIT 18

- 1** 1 I was learning to use the jigsaw when I cut my hand.
2 When I fell, I was climbing a ladder.
3 They were welding when the fire started.
4 Were you using the computer when the power went off?
5 He wasn't using the safety guard when he cut his finger.
6 When we were eating lunch, the oxygen bottle exploded.
- 2** 1 safe 4 hazards
2 Italian 5 employer
3 calculator
- 3** 1 adapt 5 design
2 approve 6 development
3 assembly 7 production
4 conception 8 specify
- 4** 1 b 2 c 3 d 4 a 5 e



ACKNOWLEDGEMENTS

The publisher would like to thank the following for the permission to reproduce photographs: Alamy Images pp12 (circular saw / ASP/YPP/INSADCO Photography), (jigsaw / Oleksiy Maksymenko Photography), (sander / Jonathan Ball), (router / Terence Hogben).

Cover image by: OUP (Construction/Photodisc)

Illustrations by: Oxford Designers and Illustrators.

OXFORD
UNIVERSITY PRESS

www.oup.com

A001851