Answer key

1 Check-up

1 Basics

1
1 I'm, is
2 Where, What
3 Are, I'm, What's

2
1 Stand up.
2 Write your name.
3 Turn right.
4 Close your book.
5 Sit down.
6 Raise your hand.
7 Come in.

3

Tools	Electricals	Fixings
chisel	adapter	bolts
saw	antenna	nuts
screwdriver	cable	screws
spanner	plug	washers

2 Letters and numbers

1
Rossi Air
Alex Greyson
Aerospace Technician
Tel: (0044) (0)1962 804927
Email: alexg40@rossi.co.uk

2
Surname: Johnstone
First name: Anne
Company: Weyco
Email address: aj309@plas.com

3
1 gallon
2 euro
3 kilogram
4 amp
5 inch
6 foot
7 kilometre
8 angle/degree
9 gram
10 Celsius
11 positive
12 metre
13 kilowatt
14 volt
15 kilometres per hour
16 revolutions per minute
17 watt
18 litre
19 pound
20 negative

4
1 Kilometres: 120 000 km
2 Engine temperature: 90 °Celsius
3 Petrol tank: 55 litres
4 Engine speed: up to 6000 rpm
5 Top speed: 185 kph
6 Price: 15 950 euros

3 Dates and times

1
4th fourth
12th twelfth
23rd twenty-third
7th seventh
30th thirtieth
22nd twenty-second
5th fifth
29th twenty-ninth
8th eighth
31st thirty-first
6th sixth
20th twentieth

2
1 January the thirty-first is a Friday, so February the eighth is a Saturday.
2 March the twenty-ninth is a Wednesday, so April the second is a Sunday.
3 May the twenty-ninth is a Tuesday, so June the third is a Sunday.
4 July the thirtieth is a Thursday, so August the fourth is a Tuesday.
5 September the twenty-eighth is a Monday, so October the seventh is a Wednesday.
6 November the twenty-seventh is a Thursday, so December the sixth is a Saturday.

3
A: When's the meeting?
B: It's on Monday.
A: Is that Monday 12th?
B: Yes. That's right.
A: Do you know what time?
B: It's at 10 o'clock.
A: OK. See you then. Bye.
B: Bye.

4 Word list

Sample answers

1 425 grams 22 kilograms
2 23 °Celsius
3 23 metres 6 foot/feet 12 inches
4 79 kilometres
5 110 kilometres per hour
6 3500 revolutions per minute
7 45 litres
8 6000 euros
9 Two hundred and twenty-five volts

2 Parts (1)

1 Naming

1
1 That's the wheel of a racing car.
2 That's the axle of a mountain bike.
3 That's the nose of a plane.
4 That's the number plate of a motorbike.
5 That's the tail of a rocket.
6 That's the deck of a boat.

2
1 That isn't a hammer. That's a screwdriver.
2 Those aren't screws. Those are nails.
3 This isn't a chisel. This is a spanner.
4 These aren't washers. These are nuts.
5 This isn't a nail. This is a staple.
6 These aren't nuts. These are bolts.
7 That isn't a staple. That's a screw.
8 Those aren't nuts. Those are washers.

2 Assembling

1
1 Raise the car with the jack.
2 Loosen all the nuts with the box spanner.

3 Take off all the nuts.
4 Take the wheel off the axle.
5 Put the spare wheel on the axle.
6 Put on all the nuts.
7 Tighten all the nuts with the box spanner.
8 Lower the car.

2
Shopkeeper: Hello.
Customer: Hello. I need some nails, please.
Shopkeeper: Some nails. What size do you need?
Customer: 30 mil, please.
Shopkeeper: 30 mil. How many nails do you need?
Customer: I need 80, please.

3 Ordering

1
1 Name: Vladyslaw Szczecin
Phone number: 00 48 920 4916

2 Name: Abdel Mohammed Mabrouk
Phone number: 00 20 537 1498

2

1	2
Date: 14th February	Date: January 30th
Time: 11.45	Time: 2.30
Caller: Jon Bradleigh	Caller: Olof Hansson
Phone number: 01962 4377	Phone number: 01720 3399

3
Surname: Webster, S
Address: 14 Selly Park, Birmingham
Postal code: B29
Tel: 0121 414 0433
Order: four large red helmets, six small blue pads

4 Word list

1 wheel, hammer, spanner, assemble, loosen, pull, small, yellow

2 Tools: hammer, lever, screwdriver, spanner
Things: bolt, nail, nut, screw, staple, washer

3
Before skateboarding
Put on the helmet.
Push it down onto your head.
Tighten the helmet strap.
Put on the pads.
Tighten the pads.

After skateboarding
Loosen the pads and take them off.
Loosen the helmet strap and take off the helmet.

Review Unit A

Section 1

1
1 Are, I'm, That's
2 do, I'm
3 Is, he's

2
1 February 1st, 2011
2 March 9th, 2011
3 January 22nd, 2011
4 November 12th, 2011
5 July 8th, 2011
6 October 9th, 2011

3
1 Monday, May the first
2 Thursday, May the fourth
3 Sunday, May the seventh
4 Wednesday, May the tenth
5 Saturday, May the thirteenth
6 Tuesday, May the sixteenth
7 Friday, May the nineteenth
8 Monday, May the twenty-second

Section 2

1
1 bolts
2 washers
3 screws
4 nuts
5 nails
6 axles
7 skateboards

2
A: What's this tool called?
B: It's a hammer.
A: Is it for screws?
B: No. It's for nails.
A: What's this tool called?
B: It's a screwdriver.
A: Is it for nails?
B: No. It's for screws.

3
A: Hello. I need to order some business cards.
B: How many do you need?
A: 200, please.
B: What size cards do you need?
A: 85 millimetres by 55 millimetres.
B: What's your name?
A: Stevens, with a V. Initials HC.
B: What's your address and postal code?
A: 14 Hayfield Road, Bristol. BR7 4JK
B: What's your phone number?
A: 0117 893462.
B: What's your email address?
A: It's harry.stevens@ojs.com
B: When do you want them?
A: Friday, please.

3 Parts (2)

1 Tools

1
1 scissors
2 screw
3 ruler
4 hammer
5 wrench
6 blade
7 pliers
8 chisel
9 cover
10 can opener
11 spanner
12 screwdriver

2
1 screwdriver
2 hammer
3 pair of scissors
4 spanner
5 pair of pliers
6 saw

3
1 Does, doesn't, Does, does, have, has
2 Do, don't, Do, do, have, has

2 Functions

1
1 generator
2 compass
3 battery
4 adapter
5 antenna
6 electricity
7 temperature
8 handle
9 thermometer
10 dynamo

2
1 turn
2 turns
3 charges
4 shine
5 listen
6 produces
7 charge

3 Locations

1
8 adapters
5 headphones
9 printers
6 amplifiers
2 keyboards
4 scanners
3 DVD players
7 mouse pads
1 speakers
The products are in alphabetical order from top to bottom and from left to right.

2
batteries 1
torch 3
radio 5
multi-tool 7
pliers 9
wrench 11
scissors 12

4 Word list

1 Chisels cut wood.
2 Hammers drive in nails.
3 Pliers grip wire.
4 Rulers measure everything.
5 Saws cut metal.
6 Scissors cut paper.
7 Screwdrivers loosen screws.
8 Wrenches tighten nuts.

4 Movement

1 Directions

1
A vertical take-off (Picture 2)
A short take-off (Picture 1)
vertically up (C), horizontal (A, D), diagonally up (B)

2
1 straight up
2 forwards
3 to the right
4 up and down
5 sideways
6 straight down

3
1 pivots
2 directions
3 ankle
4 degrees
5 move
6 rotate
7 hip
8 angles
9 knee
10 sideways

2 Instructions

1
1 thirty kilometres per hour
2 five hundred revolutions per minute
3 fifteen metres per second
4 sixty-five miles per hour
5 eight kilometres per second

2
1 300 m/s
2 19 000 rpm
3 18 kph
4 83 mph
5 248 kph
6 201 kph
7 574 kph
8 86 kph
9 1979 mph

3
Instruction manual (,)
Transmitter (,)
Truck (,)
Antenna for transmitter (,)
Antenna for truck (,)
2 9 V batteries (only one)

4
1 sends
2 receives
3 use
4 control
5 turns
6 Press
7 moves

3 Actions

1
1 G
2 H
3 B
4 A
5 C
6 F
7 D
8 E

2
1 When you pull the gear lever to 'R', the car reverses.
2 When you pull the gear lever to 'D', the car moves forwards.
3 When you press the accelerator, the car goes faster.
4 When you press the brake pedal a little, the car goes slower.
5 When you turn the steering wheel to the right, the car turns right.
6 When you turn the steering wheel to the left, the car turns left.
7 When you press the brake pedal, the car stops.

3
C Drive forwards slowly. Stop.
D Reverse and turn the steering wheel to the left.
B Reverse a little more and turn the steering wheel to the right. Stop.
A Drive forwards a little and turn the steering wheel to the left.

4 Word list

1
accelerator, antenna (for the radio), brake, handle (for a door), lever, parking brake, pedal, steering wheel, switch (for the lights)

2
accelerate / slow down
ascend / descend
pull / push
forwards / backwards
up / down
to the left / to the right

3
Helicopters can accelerate, ascend, descend, reverse, rotate, slow down, turn round.

Review Unit B

Section 1

1
1 The screen is in the centre. (,)
2 The keyboard is in the centre, <u>below</u> the screen.
3 The TV is to the <u>left</u> of the screen.
4 The VCR is on the left, below the TV. (,)
5 Speaker 1 is on the <u>left</u>.
6 Speaker 2 is on the <u>right</u>.
7 The mouse is at the <u>bottom</u>, to the <u>right</u> of the keyboard.
8 The DVD drive is <u>above</u> the mouse, to the <u>right</u> of the screen.

2

football	planes	the news
bikes	science	cars
boats	skateboards	space

1 Football is at the top, on the left.
2 Planes are at the top, in the centre.
3 The news is at the top, on the right.
4 Bikes are on the middle line, on the left.
5 Science is on the middle line, in the centre.
6 Cars are on the middle line, on the right.
7 Boats are at the bottom, on the left.
8 Skateboards are at the bottom, in the centre.
9 Space is at the bottom, on the right.

3
1 battery, hammer, spanner, wrench
2 a pair of overalls, a pair of pincers, a pair of pliers, a pair of scissors

Section 2

1
1 D: forwards and backwards
2 C: rotate
3 A: descend, diagonal or horizontal
4 B: up and down

2
1 Can you find the user manual?
No, I can't find it.
2 How does the truck work?
It receives signals from the transmitter.
3 Where do I put the battery?
You put it in the transmitter.
4 Where does the antenna go?
It goes on top of the truck.
5 How do I steer the truck?
You press one of the control buttons.
6 Are there two batteries in the box?
No, there is only one.
7 Do we need a second battery?
Yes, we need it for the truck.

3
D Start the engine. Tie the rope on the left of the boat to Point A.
B Turn the steering wheel to the left. Push the engine lever forwards; this moves the boat slowly forwards and to the left.
C Pull the engine lever to the centre position. Loosen the rope. Take off the rope from Point A.
A Turn the steering wheel to the centre position. Pull the lever backwards; this puts the engine into reverse. Reverse slowly.

5 Flow

1 Heating system

1

sink / rise	out of / into	enter / leave
above / below	cold / hot	outlet / inlet
bottom / top	cool / heat	push / pull

2
1 A fridge cools water.
2 Cold water sinks to the bottom of a water tank.
3 The outlet pipe for hot water is above the pump.
4 Water leaves the tank through the outlet pipe.
5 Pull the shower head out of the pipe.

3

1 above	5 out of	9 leaves
2 below	6 flows	10 to
3 pushes	7 through	
4 into	8 rises	

2 Electrical circuit

1

1 lamp	5 electrical current
2 solar panel	6 controller
3 battery	7 cable
4 switch	

2
1 If the river is high, and the workshop is open, the current flows from the generator into the workshop.
2 If the river is high, and the workshop is closed, the current flows from the generator into the batteries.
3 If the river is low, and the workshop is open, the current flows from the batteries into the workshop.
4 If the river is low, and the workshop is closed, the current does not flow.
5 If the batteries are full, the current does not flow from the generator into the batteries.
6 If the batteries are empty, the current does not flow from the batteries into the workshop.

3
1c, 2b, 3b, 4c, 5b

3 Cooling system

1
1 minus two degrees Fahrenheit
2 twenty-one degrees Celsius
3 seventy-five degrees Fahrenheit
4 minus eight degrees Celsius
5 twenty-four degrees Celsius
6 thirty-three degrees Celsius

2

1 The water pump	6 Cool water
2 Two hoses	7 The fan
3 The thermostat	8 Cool water
4 Hot water	9 The engine
5 The fan	

3
1 From the spring, water flows to a reservoir at the top of the hill.
2 From the reservoir, water passes through a pipe to the field.
3 The pipe goes into a field of fruit trees.
4 Water leaves the pipe through small holes.
5 The water then flows around the fruit trees.
6 A little water flows out of the bottom of the field.
7 This water enters a tank at the bottom of the hill.

4 Word list

1

1	enters	3	heats	5	sinks
2	flows	4	rises	6	leaves

2 1d, 2a, 3e, 4b, 5c

6 Materials

1 Materials testing

1

1 You can bend metal, but you can't bend wood.
2 You can heat air and you can heat water.
3 You can melt plastic, but you can't melt wood.
4 You can scratch glass and you can scratch metal.
5 You can stretch nylon, but you can't stretch glass.
6 You can break glass and you can break wood.
7 You can cut wood and you can cut metal.
8 You can compress air, but you can't compress glass.

2

1	are testing	5	is running
2	is sitting	6	is stretching
3	is tightening	7	is touching
4	is starting	8	Is the dummy's face striking

3

1 A: Are you pushing the handles?
B: No, I'm rowing.
2 A: Is he walking?
B: No, he's running.
3 A: Is she bending the wall bars?
B: No, she's climbing the wall bars.
4 A: Are you pulling the bar down?
B: No, I'm pushing the bar up.
5 A: Is he pushing the bar?
B: No, he's picking the bar up.
6 A: Is she bending her legs?
B: No, she's stretching her legs.

2 Materials and their properties

1 plastic, composite, fibreglass, titanium, concrete, ceramic, graphite, aluminium, steel, nylon, rubber, polystyrene, polycarbonate, diamond

2

1 A ceramic cup is heat-resistant and hard.
2 A concrete floor is rigid and tough.
3 A rubber tyre is flexible and strong.
4 A fibreglass window frame is heat-resistant and rigid.
5 A nylon rope is flexible and strong.
6 The graphite in the middle of a pencil is light and soft.
7 A polycarbonate road sign is rigid and strong.
8 A polystyrene coffee cup is brittle and light.

3

1 The nose cone is made of aluminium.
2 The wheels are made of aluminium alloy.
3 The tyres are made of rubber composite.
4 The frame is made of composite.
5 The inside is made of fibreglass.
6 The seats are made of plastic.
7 The engine is made of aluminium alloy.
8 The wings are made of aluminium alloy.

3 Buying

1

Product name: Backpack
Product no: 19/124
Quantity: one
Colour: green
Size: large
Material: polyester
Price: $125

2

1 jclarke@i-way.co.uk
2 alex2@anti-gm.org
3 s_hagen@renault.fr

3

1 bbc.co.uk/newsline
2 live-radio.net
3 sci-toys.com/prod/51

4

1 What's your surname, please?
2 Could you spell that, please?
3 What's your phone number, please?
4 What's your email address, please?
5 Could you repeat that, please?
6 How many helmets do you need?
7 What colour would you like?
8 And how do you want to pay?

4 Word list

1

1 The nose cone is made of fibreglass.
2 The wheels are made of aluminium alloy.
3 The frame is made of cromoly, a steel alloy.
4 The tyres are made of rubber composite.
5 The radiator is made of aluminium.
6 The engine is made of aluminium alloy.
7 The pistons are coated with ceramic.
8 The wings are made of polystyrene and fibreglass.

2

1	strong	3	soft	5	light
2	brittle	4	flexible		

Review Unit C

Section 1

1

1	1	that	2	6	here
	2	here		7	This
	3	are		8	How
	4	thanks		9	about
	5	OK		10	I'm

2

1 bending, climbing, heating, holding, pulling, pushing
2 cutting, dropping, gripping, running, sitting, swimming
3 diving, driving, leaving, moving, rising, striking

3

A: Is everything OK?
B: No. The engine's cooling system isn't working. The temperature of the water is rising.
A: Is the fan blowing air through the radiator?
B: Yes, the fan is fine.

A: Is the pump pushing water round the engine?
B: Yes, the pump is working.
A: Look! That clip on the bottom hose is loose. Water is running out of the hose. So the cold water is not going back to the engine. Tighten the clip.
B: Is the water running out of the hose now?
A: No. Check the temperature.
B: Ah! The temperature is dropping. Good!

Section 2

1 If you warm ice cubes, they melt.
If you pull a rubber band, it stretches.
If you strike a ceramic cup very hard, it breaks.
If you heat water to 100 °Celsius, it boils.
If you cool water, it sinks.
If you heat pieces of wood, they burn.

2

Part	Material	Properties
board	polystyrene, fibreglass	strong, light
mast	polycarbonate	strong, flexible
boom	aluminium, rubber	rigid, strong
sail	nylon, polyester	light, strong
rope	nylon	strong
daggerboard	polycarbonate	rigid
fin	polycarbonate	rigid
pivot	rubber	strong, flexible

7 Specifications

1 Dimensions

1 A: bridge, B: tunnel, C: road, D: cable, E: pylon, F: pier, G: deck, H: span

2
1 The sea has a depth of 270 metres.
2 The river is 25 metres deep.
3 The span is 330 metres long.
4 The pylons have a height of 160 metres.
5 The length of the road is 22 kilometres.
6 The deck has a width of 8 metres.

3
1 Where is this bridge?
It's in China.
2 How long is the inner span?
1490 metres.
3 How high are the pylons?
They're 215 metres high above the water.
4 How wide is the deck?
39.2 metres.
5 How high is the deck above the water?
50 metres.

2 Quantities

1
1 2003
2 40
3 metres
4 reinforced concrete
5 steel
6 aluminium
7 glass
8 area
9 square metres
10 18
11 metres per second
12 circle
13 small
14 wide

2

Item	Kind	Size	Product number	Quantity
Paint	green	10 litre tin	P176GR	4
Cement	white	20 kg bag	C0116W	5
Nails	packet of 50 / 100	24 / 30 mm	N420 / N240	None
Screws	packet of 100	24 mm	S00941	4

3
1 How much paint do you need?
2 What colour paint do you need?
3 What size tin do you need?
4 How much cement do you need?
5 How many bags do you need?
6 Do you have any screws?
7 How many screws do you need?
8 Do you need any nails?

3 Future projects

1

Gotthard Base Tunnel (GBT)	
Location of tunnel	in Switzerland, under the Alps
Possible completion date	2016–2017
Number of tunnels	2
Length of tunnels	57 kilometres
Depth below old tunnel	600 metres
Maximum speed of trains	250 kph
Source of power for trains	electricity
Number of trains per day	200–250

2
1 They're building a new tunnel.
2 There'll be two new tunnels.
3 They'll finish the tunnel in 2017.
4 The trains won't use magnetism.
5 There'll be more than 200 trains per day.

3 The GBT will be the longest railway tunnel in the world. It will connect Italy and Switzerland. Engineers will finish the project in 2017. The new tunnel will be below the old railway tunnel. There will be about 200–250 trains per day. The new trains will use electricity. Some of them will run at 250 kph.

4 Word list

1 length, height, width, depth

2
a bottle of oil
a tube of glue
a bag of cement
a packet of screws
a tin of paint