

Week 2 BLOCK COURSE 2

Resources you will need for this week...

- » Sheet metal for the soldering practice exercise - enough for each trainee to manufacture the parts bins
- » Soldering iron, solder and flux for each trainee
- » 12mm rod, 300mm long for each trainee. Oxyacetylene plants, hand tools, anvils
- » Three work stations – bent pin / copper pipe offcuts and joints
- » Filler rod, mild steel sheet (100mm x 50mm) for each trainee, 20mm pipe
- » Examples of gas pressures/regulators, meters, manometers, types of burners, rating plates.

	Monday	Tuesday	Wednesday	Thursday	Friday
MORNING	<p>CLASSROOM Introduce... and supervise theory assessments:</p> <ul style="list-style-type: none"> • 2138 • 21883 <p>Introduce... the outcomes and expectations for Week 2</p> <p>Teach...</p> <ul style="list-style-type: none"> • The trade science around cold water theory: potability and source • How building and compliance documents fit into the legislative framework including G12 Water supplies, G13 Foul Water 	<p>CLASSROOM Teach... the theory of</p> <ul style="list-style-type: none"> • Welding safety • Welding types <p>WORKSHOP Demonstrate... how to manufacture</p> <ul style="list-style-type: none"> • A bent pin • Copper pipe fittings and joints • Folding and making parts bins 	<p>WELDING WORKSHOP Remind... trainees of safety aspects.</p> <p>Demonstrate... each technique.</p> <ul style="list-style-type: none"> • Oxy acetylene • Gas fusion sheet • Sheet Butt • Sheet Fillet • Sheet Lap • Pipe Butt • Pipe Fillet <p>Trainee Practice... They need to produce three of each weld for sheet and one weld for pipe.</p>	<p>WELDING WORKSHOP Demonstrate...</p> <ul style="list-style-type: none"> • Oxy acetylene / Bronze Sheet welding <p>Trainees practice...</p> <ul style="list-style-type: none"> • Oxy acetylene / Bronze Sheet • Sheet Fillet • Sheet Lap • Pipe Fillet <p>→ This is a partial assessment for Oxy acetylene / bronze sheet welding.</p>	<p>CLASSROOM Teach... the theory of</p> <ul style="list-style-type: none"> • Excavation and trenching • Safety in excavations and shafts • Hazardous substances and environments • Notifiable works • Line, level and gradient • (L+N fractions, decimals, %, Ratio)

Monday

CLASSROOM

Teach...

- The theory of metals and their properties.
- The different metals, their properties, ductility, uses etc.

Trainee practice...

Drawing parts bins exercise – drawing a given shape and then working out a cutting and folding sequence.

WORKSHOP

Demonstrate...

Soldering and spot welding including the related safety aspects.

Trainee practice...

Soldering and spot welding.

→ This is a partial assessment for

Tuesday

WORKSHOP

Trainee practice...

Trainees move between work stations to manufacture

- A bent pin
- Copper pipe fittings and joints
- Parts bins

Wednesday

CLASSROOM

Introduce...

Trainees move between work stations to manufacture

- A bent pin
- Copper pipe fittings and joints
- Parts bins

Show the Gas 101 DVD if a copy is available.

Teach...

Teach the theory of

- Gas characteristics
- Gas properties and combustion
- Heat / water vapour
- Carbon monoxide
- Flammability ranges
- Air gas ratio's
- Heat and heat values
- Fuel – air – ignition
- Complete and incomplete combustion

Thursday

WORKSHOP

Introduce...

demonstrate and discuss

- Combustion
- Gas pressures / regulators
- Meters
- Manometers
- Types of burners
- Rating plates

CLASSROOM

Teach...

Teach the theory of

- Ventilation requirements for combustion
- Gas legislation and compliance

Friday

WORKSHOP

Trainee practice...

Trainees complete the manufacture of

- A bent pin
- Copper pipe fittings and joints
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CLASSROOM

Sum up...

the key points of the week. Set the scene for what will be covered in Week 2 and what assessments to study for.

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