

**National Certificate in Building, Construction and Allied Trades Skills (BCATS)**  
Teacher Information & Resources

**Demonstrate knowledge of the  
gasfitting industry within a  
BCATS environment**

Unit Standard – 25327

Level 2, Credit 2





## Teaching and assessment tips

**Intent** – The intent of the unit standard is that the learner is able to demonstrate basic knowledge of the carpentry industry including:

- major industry sectors
- industry work processes
- industry clients, supply and inter-trade relationships
- the impact of regulatory and trade bodies on the industry and
- industry jobs and their training requirements.

It is intended that a learner who has an interest in a particular industry can achieve credits for their exploration of that industry by completing the relevant unit.

### **Unit standard Interpretation**

No more than 2 of the Demonstrate Knowledge units that relate to BCATS industries can be incorporated in the qualification.

A worksheet that covers the assessment requirements for this unit standard is included in this document. Also included are model answers for that worksheet.

### **Assessment**



Assessment of this unit standard consists of:

- Completion of the worksheet

# Worksheet US 25327

**Student Name:** \_\_\_\_\_

## Section 1

1. Gasfitting work is defined as the installation of what features of a gas supply system?

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

(d) \_\_\_\_\_

2. Name the 2 points on a gas supply system where gasfitting work technically begins.

\_\_\_\_\_

\_\_\_\_\_

3. Other than the installation of gas pipe networks and fittings, what other tasks are gasfitters responsible for?

\_\_\_\_\_

## Section 2 Work processes

Insert the words to correctly complete the following

4. Gas pipework is usually connected to a gas appliance using a ..... fitting.

5. Gas pipework to be installed above ground may be made of ..... or ..... mild steel, and both of these may be jointed by using .....

6. Copper pipe is normally either ..... -hard or .....

7. Brazing fittings are used to joint piping made from..... .

8. Brazing rod used to joint copper pipe or sheet is referred to as ..... solder.

9. Black mild steel pipe may be jointed by either threading or .....

10. Lead and tin alloy is called by what name?

\_\_\_\_\_

11. The process of diagnosing and solving a fault in either a gas appliance or installation is called ..... shooting.



12. The task of fixing that fault is referred to as .....

13. Scheduled preventative maintenance is referred to as .....

**Section 3 Client base**

14. For a gasfitter, who would be a direct client?

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15. List 4 possible clients a gasfitter could sub-contract to.

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**Section 4 Supply relationships**

Explain what is meant by the following terms:

16. Accredited supply network?

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17. Trade account?

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18. Trade discount?

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19. What does “five year guarantee” mean?

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20. Why does a gasfitter need product training?

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### **Section 5 Relationships with other trades**

21. What does a person require in order to legally carry out gasfitting work?

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22. What tasks are plumbers responsible for in relation to gas installations?

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23. What tasks are builders and carpenters responsible for in relation to gas installations?

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24. What task(s) might a roofing contractor be required to carry out in relation to a gas installation?

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**Section 6 Requirements of industry bodies**

Insert the correct words in order to complete the following sentences:

- 25. A trainee gasfitter must sign a training agreement with their employer and the organisation called .....
- 26. Training is not carried out by the Skills Organisation, but by an accredited .....
- 27. The Skills Organisation is tasked with ..... how training providers train and assess trainees.
- 28. The Plumbers, Gasfitters and Drainlayers Board (PGDB) is tasked with setting and marking ..... exams, issuing ..... licences, and taking legal action against ..... gasfitting work.
- 29. In New Zealand, all gasfitting work must comply with NZS .....

**Section 7 Job roles and training requirements**

30. What type of gasfitter is responsible for deciding how gasfitting work should be undertaken, and ensuring that the work undertaken is both correct and compliant with regulations?

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31. Who can legally carry out gasfitting work?

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32. Who can supervise an apprentice gasfitter?

33. Does a Licensed gasfitter legally require supervision?

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**Assessor Sign off:**

Assessor name: ..... Assessor signature: ..... Date:.....	<b>RESULT:</b> A = Achieved, N = Not Yet Achieved
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# Model Answers

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## Section 1

1. Gasfitting work is defined as the installation of what features of a gas supply system?
  - (a) pipes
  - (b) appliances
  - (c) equipment
  - (d) flues
  - (e) ventilation.
  
2. Name the two points on a gas supply system where gasfitting work technically begins.
  - at the billing meter outlet
  - at the cylinder's regulator outlet.
  
3. Other than the installation of gas pipe networks and fittings, what other tasks are gasfitters responsible for?

*Repairing and servicing gas appliances.*

## Section2 Work processes

Insert the words to correctly complete the following

4. Gas pipework is usually connected to a gas appliance using a ..... fitting.

*Union.*
  
5. Gas pipework to be installed above ground may be made of ..... or..... mild steel, and both of these may be jointed by using .....

*Black; galvanized; threads.*
  
6. Copper pipe is normally either ..... -hard or .....

*Half-hard, soft.*
  
7. Brazing fittings are used to joint piping made from.....

*Copper.*
  
8. Brazing rod used to joint copper pipe or sheet is referred to as ..... solder.

*Hard.*

9. Black mild steel pipe may be jointed by either threading or .....  
*Fusion welding.*
10. Lead and tin alloy is called by what name?  
*Soft solder.*
11. The process of diagnosing and solving a fault in either a gas appliance or installation is called ..... shooting.  
*Trouble.*
12. The task of fixing that fault is referred to as .....  
*Repairing.*
13. Scheduled preventative maintenance is referred to as .....  
*Servicing.*

### **Section 3 Client base**

14. For a gasfitter, who would be a direct client?  
*A home or business owner who engages the gasfitter directly and pays them for their work.*
15. List 4 possible clients a gasfitter could sub-contract to.  
*Any four of:*
- *architect*
  - *builder*
  - *appliance retailer*
  - *gas supplier*
  - *property management company.*

### **Section 4 Supply relationships**

Explain what is meant by the following terms:

16. Accredited supply network?  
*Any company legally allowed to sell and supply gas.*



17. Trade account?

*An account that a gasfitter holds with a merchant or supplier enabling them to purchase goods without the upfront payment of cash, but rather being billed at the end of the month.*

18. Trade discount?

*The percentage below retail price at which the gasfitter can purchase products from merchants or suppliers.*

19. What does "five year guarantee" mean?

*That the product will be replaced if it fails within five years, provided that it was correctly installed, not subjected to unduly harsh conditions, and properly registered with the manufacturer.*

20. Why does a gasfitter need product training?

*In order to learn how to correctly operate, install and maintain a particular product.*

## **Section 5 Relationships with other trades**

21. What does a person require in order to legally carry out gasfitting work?

*A gasfitting practicing license.*

22. What tasks are plumbers responsible for in relation to gas installations?

*Installs the cold water supply to, and the hot water supply from, gas water heaters, relief pipes, valves and water controls.*

23. What tasks are builders and carpenters responsible for in relation to gas installations?

*They build the structures within which the gas pipes and appliances must be installed, such as mountings, access points, penetrations, and permanent ventilation openings and covers.*

24. What task(s) might a roofing contractor be required to carry out in relation to a gas installation?

*Provide flashings for roof penetrations.*

**Section 6 Requirements of industry bodies**

Insert the correct words in order to complete the following sentences:

- 25. A trainee gasfitter must sign a training agreement with their employer and the organisation called .....

*The Skills Organisation (Skills Org)*

- 26. Training is not carried out by the Skills Organisation, but by an accredited .....

*Training provider.*

- 27. The Skills Organisation is tasked with ..... how training providers train and assess trainees.

*Moderating.*

- 28. The Plumbers, Gasfitters and Drainlayers Board (PGDB) is tasked with setting and marking ..... exams, issuing ..... licenses, and taking legal action against ..... gasfitting work.

*Registration; practicing; unlawful.*

- 29. In New Zealand, all gasfitting work must comply with AS/NZS .....

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**Section 7 Job roles and training requirements**

- 30. What type of gasfitter is responsible for deciding how gasfitting work should be undertaken, and ensuring that the work undertaken is both correct and compliant with regulations?

*A Certifying gasfitter.*

- 31. Who can legally carry out gasfitting work?

*Licensed gasfitters.*

- 32. Who can supervise an apprentice gasfitter?

*A Certifying gasfitter.*

- 33. Does a Licensed gasfitter legally require supervision?

*Yes, they must be supervised by a certifying person who is ultimately responsible for ensuring the work is done competently.*