



Australian Government

A U S T R A L I A N
A P P R E N T I C E S H I P S

Your Life. Your Career. Your Future.

Building and Construction Finishing Trades - Plastering, Tiling and Painting

Practice Aptitude Quiz

Practice Aptitude Quiz

Part 1: About this quiz

Use this quiz to prepare for an Apprenticeship in the Building and Construction industry

This quiz:

- Is NOT a formal assessment tool or pre-requisite for any job application
- Shows key learning standards for the Building and Construction industry
- Has been developed with the help of industry leaders, TAFE and high schools

Quiz details

This quiz will:

- Take approximately 45 to 60 minutes to complete
- Ask you numeracy and literacy questions specific to the Building and Construction industry
- Assess your literacy and numeracy at a Year 11 standard
- Allow you to use a calculator
- Share correct answers at the end

Who should take this quiz?

You should complete this quiz if you:

- Are thinking about starting an Apprenticeship in the Building and Construction industry
- Want to practise for a formal aptitude test

Need help with your literacy and numeracy skills?

If you want to improve your literacy and numeracy skills, reach out to any of the below:

- Australian Apprenticeship Support Network providers
- Your Registered Training Organisation when you start training
- Reading Writing Hotline:
1300 655 506
www.readingwritinghotline.edu.au
- Careers advisers and your teachers (if you're in high school)

More information about the Building and Construction industry

Visit www.yourcareer.gov.au/industries/e/construction

On this page you'll be able to:

- See the most popular Building and Construction industry occupations
- Get general information and statistics about the industry
- Search for Building and Construction industry courses

Practice Aptitude Quiz

How to use this quiz

This is an interactive form that can be filled out on your computer.

You can either:

- Fill it out on your computer; OR
- Print it out; OR
- Write your answers down on paper as you go.

Use the answers section at the end of the quiz to see how you went.

How to complete this quiz on your computer

1. Download and save the quiz onto your computer
2. Open the file from your computer
3. Fill in the form using a keyboard and mouse

Practice Aptitude Quiz

Part 2: The Quiz

Section 1: Language and Literacy

1. The following text has 10 spelling errors in it. List those errors with the correct spelling in the order you find them in the text:

Today the Construction, Plumbing and Services Industry is worth over \$50 billion and employs over three quarters of a million people. The industry is divided into three sectors: domestic; commercial; and civil. The majority of workers are either apprentices, trainees, construction workers or tradespersons. One of these trades is Wall and Ceiling Lining (Plastering). This trade involves the lining of the interior walls and ceilings in either domestic dwellings or commercial and industrial properties using plasterboard or fibre cement board. There are many career pathways and opportunities available to prospective employees willing to apply themselves.

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

2. Write the correct spelling for the following words:

Troweel	
Prefabrikated	
Demolishon	
Certifkate	
Hamma	
Plastrin	
Safty	
Sillycone	
Undercoate	

Practice Aptitude Quiz

3. Write the following paint colour names in alphabetical order:

Hollywood Cerise	
Antique White	
Pacific Blue	
Bondi Blue	
Vermilion	
Electric Purple	
Mulberry	
Veronica	
Amaranth	
Unmellow Yellow	

4. Read the following passage and answer the questions that follow:

The Building and Construction industry covers many occupations including the three mentioned below.

Wall and Ceiling Fixers or Plasterers line the interior walls and ceilings of either domestic housing or commercial and industrial properties using plasterboard or fibre cement board.

The plasterboard is fixed to either a timber frame or a metal frame using a combination of fasteners and adhesives following the guidelines set down by Australian Standards and the manufacturers. It is then finished off using various compounds to give a clean smooth surface ready to take whatever decoration is specified, such as paint, wall paper or tiles. Projects can be as simple as a small house in the suburbs or as complicated as a large commercial property like a shopping centre.

Another area of the Building and Construction industry involves Wall and Floor Tiling occupations. Wall and Floor Tilers lay ceramic, clay, slate, marble, glass and other types of tiles on external and internal walls and floors to provide protective and decorative finishes. Much of the work is undertaken on new buildings including houses, shops, offices, factories and swimming pools, but wall and floor tilers also renovate existing buildings.

Wall and Floor Tilers sometimes work in confined areas where bending and kneeling are required. They also need to be physically fit as they may have to lift and carry bags of cement and stacks of tiles. They sometimes work at heights using ladders or scaffolding. Most tilers work in small teams and move frequently from one job location to another.

Practice Aptitude Quiz

Section 2: General Knowledge

1. What tool is that?

Match the tool names to the pictures of the tools.

Tape Measure

Stanley Knife

Paint Roller

Calculator

Hawk

Flat Towel



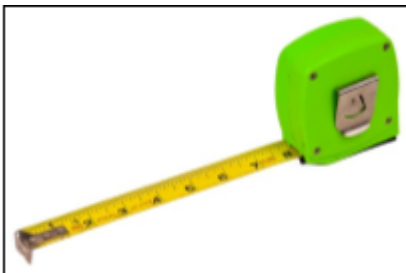
a.

b.



c.

d.



e.

f.

Practice Aptitude Quiz

2. Read the following information about health and safety and answer the questions that follow:

Safe Painting and Decorating

There are common hazards in the painting and decorating industry. It is important to learn about these hazards and how they can be controlled so people at work are not exposed to risk.

Some of the common hazards include:

- Tools and equipment
- Falls
- Hazardous substances
- Manual handling
- Working in enclosed areas
- Sunburn and heat stress.

Tools and equipment

A range of hazardous tools and equipment is found in the painting industry. For example, disc and belt sanders that are used to prepare surfaces for painting, portable air compressors and spray painting equipment, high pressure water cleaners, power drills, scrapers, and knives.

When equipment hazards cannot be sufficiently reduced, workers may need Personal Protective Equipment (PPE). PPE includes safety glasses or goggles, earplugs or earmuffs, protective gloves, overalls, and safety shoes or boots with reinforced toe-caps to protect your feet if any heavy or sharp items are dropped.

Prevention of falls

Falls are a major cause of workplace deaths each year. Painting often involves potential fall hazards. Work on roofs, at roof line or on multi-storey buildings is common, as is internal work, such as painting high ceilings.

The risk control options for working at heights are:

- Installing fall protection devices such as temporary work platforms or scaffolding
- Using a work positioning system such as a rope access system to position and support the worker
- Using a fall injury prevention system such as an industrial safety net or harness
- Using a ladder, as long as it can be employed safely for the duration of the task.

Hazardous substances

In the painting industry workers may use substances such as solvents, wood dust and paints containing lead which can have both a short and long-term impact on workers' health.

To minimise the risk of hazardous substances workers:

- should always follow safety procedures
- should not use solvents to clean their hands
- should clean up and dispose (in sealed polythene bags) of debris such as old paint stripped from timber
- should wear the correct PPE provided, such as a dust mask, protective overalls, suitable gloves and eye protection when sanding.

Practice Aptitude Quiz

Manual handling

Lifting and carrying paint cans, moving scaffolding and using paint brushes in a repetitive action are some examples of manual handling tasks in the painting industry. At times work tasks may involve bending and stretching, as well as twisting sideways, or working with materials and equipment above shoulder height. All of these increase the risk of manual handling injury.

Risk controls may include:

- Organising the work to reduce the number of manual handling tasks involved
- Making sure workers do not work long periods requiring strenuous manual handling activity
- Making sure the work place allows enough space to move and work safely and comfortably.

Work in enclosed areas

Some painting jobs could require working in enclosed areas where lack of ventilation could increase exposure to paint fumes.

Options that could be evaluated to reduce risks include:

- Providing ventilation by opening any doors or windows in the work area
- Increasing air circulation by use of a portable fan
- limiting the amount of time any worker spends in an enclosed area
- Providing workers with respirators to prevent inhalation of paint fumes.

Sunburn and heat stress

Heat stress, sunstroke, sunburn and skin cancer can all result from prolonged exposure to ultraviolet radiation from the sun. The longer the skin is exposed, the greater the risk regardless of tan or skin pigmentation.

Preparation for the job should include consideration of things like:

- Available shade
- Frequency of rest breaks
- Need for regular rehydration (by drinking water, not soft drinks)
- Awareness of each worker's heat tolerance (age, physical fitness and experience of the work can all affect a person's ability to adapt to hot or excessively humid conditions).

Protective clothing and sunscreen should always be worn when working in the sun. Head covering is important, as are loose, long sleeved shirts and long trousers in hot weather. Sunscreen should be rated SPF 15+ or more (this means it will give at least 15 times the protection that skin has without any covering). Sunscreen should be reapplied every two hours.

- a. What are the six common hazards in the painting and decorating industry?

Practice Aptitude Quiz

b. List three ways falls can be prevented.

c. What Personal Protective Equipment (PPE) must be used when working with hazardous substances?

d. From the list below select at least five manual handling activities and actions performed by painters:

Cycling

Twisting sideways

Carrying paint cans

Using equipment above shoulder height

Moving scaffolding

Dancing

Bending and stretching

Repetitive use of paint brushes

e. When might it be necessary to use a respirator and open windows?

f. What protective clothing should be worn when working in the sun?

Practice Aptitude Quiz

Section 3: Numeracy

1. Match the abbreviations to the correct unit of measurement which they represent. Write your answers in the table below:

kg ml Km/hr m² AUD m min °C

Length	
Time	
Temperature	
Weight	
Area	
Speed	
Volume	
Currency	

2. Match the numbers to their descriptions. Write your answers in the table below:

$\frac{3}{8}$ 35° 25% 5:4 16.37 $2\frac{1}{3}$

Percentage	
Decimal number	
Fraction	
Mixed number	
Ratio	
Angle	

3. Write as a number:

- a. Two thousand six hundred and thirty-four

- b. Fifty-six thousand and eighty-seven

4. Round:

- a. 35.6754 to two decimal places

- b. 425.8 to the nearest ten

- c. 248 to the nearest hundred

Practice Aptitude Quiz

5. Write the following decimals from highest to lowest:

7.19 71.9 0.719

6. Solve the following equations:

a. $2 + 3 \times 4 =$ _____

b. $4 - 10 \div 2 =$ _____

c. $50 + 50 =$ _____

d. $2 \times 25 =$ _____

e. $(16 - 5) \times 3 =$ _____

f. $(75 \div 5) \div (12 \div 4) =$ _____

g. $8^2 =$ _____

7. Subtract:

a. 1,784 from 5,218 _____

b. 29.461 from 43.18 _____

8. Find the total of:

a. \$2.00, \$21.45 and \$8.23 _____

b. 18.32, 471.019 and 315 _____

c. 2.63m and 50cm _____

9. Multiply:

a. 6.87 by 10 _____

b. 13.8 by 3 _____

c. 46.2 by 8.5 _____

10. Divide:

a. 3.45 by 10 _____

b. 3024 by 14 _____

c. 56.2 by 9 _____

Practice Aptitude Quiz

11. Select the best estimate for each of the following:

a. 4249×71

280 000

150 000

28 000

b. $80000 \div 38$

200

2 000

20 000

4 000

12. Add the following:

a. $\frac{1}{4}$ and $\frac{1}{2}$

b. $\frac{2}{9}$ and $\frac{5}{6}$

c. $3\frac{1}{4}$ and $\frac{1}{8}$

13. Subtract the following:

a. $\frac{5}{6} - \frac{1}{4}$

b. $\frac{21}{14} - \frac{4}{7}$

14. Which fraction is mid-way between $\frac{1}{4}$ and $\frac{3}{4}$?

15. Michelle earns \$800 a week. She gets a pay rise of 5%. What is her new wage?

16. Mal purchased a plaster mixer for \$250 which he later sold for \$375.

a. How much profit did he make?

b. What was the profit as a percentage of the cost price?

Practice Aptitude Quiz

17. Rebecca is a plasterer who buys the following items from a plaster store: plasterboard \$215, trowels and reinforcing tape \$95, fasteners and adhesive \$12, and plastic mixing pots \$8. Rebecca gets a 10% trade discount.

a. How much would Rebecca pay without the discount? _____

b. How much will she pay with the discount? _____

c. How much has Rebecca saved? _____

18. Akeem scored 80% in an exam. There were 25 questions.

a. How many questions did Akeem get right? _____

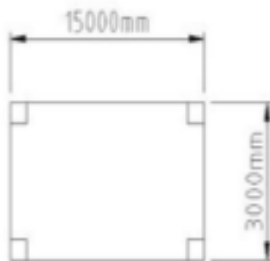
b. How many questions did he get wrong? _____

19. Find the decimal number halfway between:

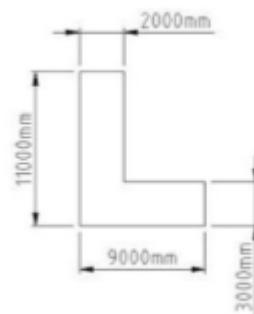
a. 0.6 and 0.8 _____

b. 2.8 and 2.9 _____

20. Find the perimeter of these shapes:



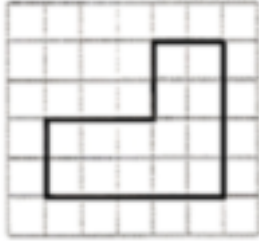
a. _____



b. _____

Practice Aptitude Quiz

21. If each square represents 1 square centimetre, what is the area of the shape shown?



22. Calculate the area of this circle? Use the formula $A = \pi r^2$ where $\pi = 3.14$.



23. Calculate the cost of 20 metal external angles at \$3.00 per external angle:

24. If five litres of plasterboard adhesive costs \$65.00, how much will 1 litre cost?

25. There are 7.2 square metres of plasterboard in a single sheet 6000mm x 1200mm. Simon is a plasterer. How many 6000 x 1200 sheets will Simon need to line the walls and ceilings in a house requiring 900 square metres of plasterboard?

Practice Aptitude Quiz

26. Gerry is fixing wooden battens to a timber frame. She hit a nail 65 mm long through the batten (which is 22.5 mm thick), and into the frame. How far did the nail go into the timber frame?
27. If a 3600mm length of scotia cornice costs \$3.50 a linear metre, how many complete metres of cornice could be bought for \$60.00?
28. A plasterer estimates there are 7.2 square metres in a single sheet of plasterboard 6000mm x 1200mm. How many square metres are there in a pack of 50?
29. Henry is tiling a bathroom wall, so first he calculates the area of the wall. The wall has a height of 2400mm and length of 3500mm. Henry's employer tells him to always add an extra 10% when calculating an order to allow for tile cuts and breakages. Complete these calculations:
- Calculate the area of the wall including the extra 10%:
 - Henry also has to calculate a quote for laying the tiles. When laying the ceramic tiles used in the job, Henry's employer quotes on the basis of \$95 per square metre. What will be the quote for this job? Calculate using the area plus the extra 10%.

Practice Aptitude Quiz

30. Danesh has been given the job of painting a meeting room in an office.

He must apply two coats of paint, with one litre of paint covering 16m^2 . The dimensions of the room are: length 4m ; height 2.4m ; width 5m .

- a. Calculate the area to be painted:
- b. Calculate how many litres of paint Danesh will need?

31. Painting the meeting room isn't as straight forward as Danesh first thought as he has to subtract the area of the windows and door in the meeting room from his calculation of the amount of paint he needs to paint the room.

There are two windows the same size: height 2m ; length 1.5m .

There is one door: height 2.04m ; width 0.82m .

- a. Calculate the area of the windows and the door, and add them together. Round the answer to the nearest whole number:
- b. Recalculate how much paint Danesh will need to paint the meeting room, use your previous rounded answer:

32. Adam always mixes 8 shovels of sand with 10 shovels of metal when he makes concrete. How many shovels of sand will Adam mix with 50 shovels of metal?

Practice Aptitude Quiz

33. Jake is a first-year apprentice with a large tiling company that employs three apprentices and six qualified Wall and Floor Tilers. He has been asked by his supervisor to check that there are adequate supplies of essential trade materials and hardware for the team.

Fill the missing values in the columns below:

Item/s	Supplies in stock	Total supplies required	Price per item	Supplies to be ordered (a)	Price of additional supplies (b)
Adhesives, Grout & Additives					
Trade Mastic- 15 litre pail	7	10	\$50.40		
Level Floor Filler – 20kg bag	80	480	\$25.43		
Flexible Grout- 10kg bag	50	100	\$17.95		
				Subtotal:	
Silicones & Sealers					
Trade Silicone – white	4	35	\$6.00		
Trade Silicone – grey	3	35	\$6.00		
Polyurethane Sealant – black sausage 14LM	5	10	\$10.00		
Paving Sealer- 6 litre pail	1	5	\$77.00		
WD-40 - spray can	2	6	\$9.95		
				Subtotal:	
Hand Tools					
Trowel – 4mm	0	3	\$17.50		
Trowel – 12mm	1	4	\$24.10		
Notched scraper – 6 mm	1	4	\$8.95		
Notched scraper – 10mm	0	6	\$12.65		
				Subtotal:	
Miscellaneous					
Masking tape -48mm x 50m	4	30	\$5.25		
Cross Spacers					
1mm x 5000 per bucket	2	6	\$66.00		
5mm x 5000 per bucket	4	8	\$175.00		
				Subtotal:	
Total cost of order (c)					\$

Practice Aptitude Quiz

ANSWERS

Section 1: Language and Literacy

1. billion, commercial, majority, either, apprentices, tradespersons, lining, career, opportunities, employees
2. Trowel, Prefabricated, Demolition, Certificate, Hammer, Plastering, Safety, Silicone, Undercoat
3. Amaranth, Antique White, Bondi Blue, Electric Purple, Hollywood Cerise, Mulberry, Pacific Blue, Unmellow Yellow, Vermilion, Veronica
4. a. The main purpose of the Plastering industry is to line the interior walls and ceilings of either domestic housing or commercial and industrial properties using plasterboard or fibre cement board.
b. Three from this list: ceramic; slate; clay; marble; glass.
c. Wall and floor tilers need to be physically fit as they may have to lift and carry bags of cement and stacks of tiles.
d. Wall and Ceiling Fixers or Plasterers, Wall and Floor Tilers, and Painters and Decorators.

Section 2: General Knowledge

1. a. Hawk b. Paint Roller c. Flat Trowel d. Calculator e. Tape Measure
f. Stanley Knife
2. a. Tools and equipment; Falls; Hazardous substances; Manual handling; Working in enclosed areas; Sunburn and heat stress.
b. Three from this list: Installing fall protection devices; using a work positioning system; using a fall injury prevention system; and safely using a ladder.
c. A dust mask; protective overalls; suitable gloves; and eye protection.
d. Carrying paint cans; moving scaffolding; Repetitive use of paint brushes; bending and stretching; twisting sideways and using equipment above shoulder height.
e. When working in enclosed areas.
f. Long sleeved shirt; long trousers/pants; head covering.

Section 3: Numeracy

1. m, min, °C, kg, m², km/hr, ml, AUD
2. 25%, 16.37, 3/8, 2 1/3, 5:4, 35°
3. a. 2,634 b. 56,087
4. a. 35.68 b. 430 c. 200
5. 71.9, 7.19, 0.719
6. a. 14 b. -1 c. 100 d. 50 e. 33
f. 5 g. 64
7. a. 3,434 b. 13.719
8. a. \$31.68 b. 804.339 c. 3.13m or 313cm
9. a. 68.7 b. 41.4 c. 392.7
10. a. 0.345 b. 216 c. 6.24
11. a. 280,000 b. 2,000
12. a. 3/4 b. 19/18 or 1 1/18 c. 27/8 or 3 3/8
13. a. 7/12 b. 13/14
14. 1/2 or 2/4

Practice Aptitude Quiz

15. \$840
16. a. \$125 b. 50%
17. a. \$330 b. \$297 c. \$33
18. a. 20 b. 5
19. a. 0.7 b. 2.85
20. a. 36,000mm b. 40,000mm
21. 14cm²
22. 314m²
23. \$60.00
24. \$13.00
25. 125 sheets
26. 42.5mm
27. 17
28. 360m²
29. a. $2.4\text{m} \times 3.5\text{m} + 10\% = 9.24\text{m}^2$ b. $9.24\text{m}^2 \times \$95 = \877.80
30. a. $(4 \times 2.4) \times 2\text{walls} + (5 \times 2.4) \times 2\text{walls} = 43.2\text{m}^2$ b. $43.2\text{m}^2 / 16\text{m}^2 \times 2 \text{ coats} = 5.4 \text{ litres}$
31. a. $2\text{m} \times 1.5\text{m} \times 2 \text{ windows} = 6\text{m}^2$; $2.04\text{m} \times .82\text{m} = 1.6728\text{m}^2$; $6\text{m}^2 + 1.6728\text{m}^2 = 7.6728\text{m}^2$;
Rounded up to 8m^2
- b. $48\text{m}^2 - 8 \text{ m}^2 = 40 \text{ m}^2$; $40\text{m}^2 / 16\text{m}^2 \times 2 \text{ coats} = 5 \text{ litres.}$
32. 40

Practice Aptitude Quiz

33.

Item/s	Supplies in stock	Total supplies required	Price per item	Supplies to be ordered	Total price of additional supplies
Adhesives, Grout & Additives					
Trade Mastic- 15 litre pail	7	10	\$ 50.40	3	\$151.20
Level Floor Filler – 20kg bag Flexible	80	480	\$ 25.43	400	\$10,172.00
Grout- 10kg bag	50	100	\$ 17.95	50	\$897.50
					Sub \$11,220.70
Silicones & Sealers					
Trade Silicone – white	4	35	\$ 6.00	31	\$186.00
Trade Silicone – grey	3	3	\$ 6.00	32	\$192.00
Polyurethane Sealant – black sausage 14LM	5	5	\$ 10.00	5	\$50.00
Paving Sealer- 6 litre pail	1	5	\$ 77.00	4	\$308.00
WD-40 - spray can	2	6	\$ 9.95	4	\$39.80
					Sub \$775.80
Hand Tools					
Trowel – 4mm	0	3	\$ 17.50	3	\$52.50
Trowel – 12mm	1	4	\$ 24.10	3	\$72.30
Notched scraper – 6 mm	1	4	\$ 8.95	3	\$26.85
Notched scraper – 10mm	0	6	\$ 12.65	6	\$75.90
					Sub \$227.55
Miscellaneous					
Masking tape -48mm x 50m	4	30	\$ 5.25	26	\$136.50
Cross Spacers					
1mm x 5000 per bucket	2	6	\$ 66.00	4	\$264.00
5mm x 5000 per bucket	4	8	\$175.00	4	\$700.00
					Sub \$1,100.50
(c) Total cost of order					\$13,324.55