

Practice Attitude Quiz

Food Processing

Part 1: About this Food Processing Resource

QUIZ

Guidance

This Practice Aptitude Quiz is intended to be a general illustration of some of the key learning standards required of people attempting an Australian Apprenticeships entry level qualification in the Food Processing industry.

This Practice Aptitude Quiz is neither a formal assessment tool nor a direct pre-requisite for any job application.

This quiz has been developed to provide you with an understanding of the literacy, numeracy, problem solving and contextualised knowledge and skills you will need when undertaking entry level training in the Food Processing industry.

The quiz has been developed with the assistance of industry, TAFE and the secondary school sector as a careers resource.

The quiz can be used by a number of different organisations and people such as careers practitioners with young people, and Group Training Organisations and Job Services Australia providers with job seekers.

The Practice Aptitude Quiz can be:

- > Used by careers practitioners with individuals or in a class setting to provide general guidance on the level of study involved in undertaking an entry level qualification in these industries;
- > Provided to people to enable them to practice their skills before sitting an actual aptitude test;
- > Used by mathematics teachers as a guide to industry maths requirements at the entry point of this particular Australian Apprenticeship career path;
- > Used by teachers as classroom based activities for students in Year 10.

The important thing to remember is that these skills and knowledge are vitally important for you to succeed and be safe in the Food Processing industry.

The quiz can be used by a number of different organisations and people such as careers practitioners with young people, and Group Training Organisations and Job Services Australia organisations with job seekers.

Please note that rates quoted in this assessment for various items, including pay rates, are not meant to reflect today's values, but are used purely for mathematical purposes.

This quiz has been developed with the assistance of industry, training providers and the secondary school sector as a careers resource.

The quiz should be able to be completed in approximately 60 minutes.

Calculators may be used to complete this practice exercise.

Food Processing Career, Occupational Information and Job Hunting Resources

Information and links on the Food Processing industry, careers, job prospects as well as career websites and job hunting resources can be found at www.aapathways.com.au/Career-Resources.

After the Quiz

There are a range of support services available to help you find out about courses that may help you improve your literacy and numeracy skills and also your readiness for work.

If you are still at school you should discuss any concerns you may have with your career practitioner. Further information may also be provided by a Job Services Australia provider, an Australian Apprenticeships Centre, a Group Training Organisation or a training provider.

Useful Contacts

Here are some links to job seeker support services:

- > Search for your local Australian Apprenticeships Centre - www.aapathways.com.au/aac
- > Find a local Group Training Organisation - www.grouptraining.com.au/Find/find_gto.html
- > Job Services Australia providers work with eligible job seekers to develop an individually tailored Employment Pathway Plan. The plan maps out the training, work experience and additional assistance needed to find job seekers sustainable employment - www.jobsearch.gov.au/provider/default.aspx

Part 2: The Quiz

Section 1: LITERACY, READING AND COMPREHENSION

1. Packaged food labeling includes specific information to assist consumers in making a choice. Look at this muesli bar label and answer the questions that follow.

NUTRITION INFORMATION		
Servings per package: 1	Average quantity	
Serving Size: 170g	Per serving	Per 100g
Energy	410kJ	240kJ
Protein	5.2g	3.1g
Fat - total	2.8g	1.7g
- saturated fat	0g	0g
Carbohydrate	11.5g	6.7g
- Sugars	3.5g	2.1g
Dietary fibre	2.2g	1.3g
Sodium	30mg	17mg
Potassium	335mg	210mg
Gluten	0mg	0mg
Iron	2.0mg	1.2mg

- a. How many servings are there per package?

- b. What is the serving size?

- c. How much Protein is there per serving?

- d. How much Gluten is there per 100g?

2. Match the task with the most appropriate equipment. Write your answer in the second column.

Task	Appropriate equipment	Equipment
Weigh a chicken		Trolley
Wash your hands		Thermometer
Bake a cake		Soap and paper towel
Move a box		Scales
Check a temperature		Oven

3. Work in the Food Processing industry requires the use of a wide range of measurements. Match the unit of measurement with the most appropriate word. Write your answer in the second column.

Unit of Measure	Appropriate Abbreviation	Abbreviation
Temperature		Lt
Weight		Km
Volume		Minutes
Time		°C (Celsius)
Distance		mm
Length		Kg

4. Look at the following descriptors and match them with the correct sign below.

- Wear eye protection
- Emergency exit
- Wash your hands
- First aid

Write a, b, c or d underneath the correct sign.









5. Imagine you are working in the bakery when the fire alarm sounds for evacuation. What action would you take? (Circle the correct response)

- a. Leave calmly via a fire exit
- b. Stand still and wait for someone to tell you what to do
- c. Shout "fire"
- d. Go to the toilet

6. The following words are misspelt. Write the correct spelling for each word in the column next to each misspelt word.

Develope	
Implament	
Inishiate	
Regilate	
Therefour	
Higene	
Refridgerate	
Pakaging	

7. Read the following passage and answer the questions that follow.

An introduction to compliance issues for the Food Processing industry

Workers in the Food Processing industry are required to have a basic knowledge of compliance issues. Compliance means laws and legislation that protect customers and govern the actions of employers, employees and the food industry in general.

To protect the consumer, compliance includes Trade Practices legislation which prevents misleading conduct by a food producer. Misleading conduct can include false labeling, underweight products, and false claims about the nutritional benefits of a product.

Legislation that applies to employers and food processing workers includes Food Safety, Occupational Health & Safety (OH&S) and Anti-Discrimination. These aim to guide the employer and the worker in their mutual responsibilities.

On the first day of work, a new employee will participate in induction training which focuses on their responsibilities.

OH&S prevents workplace injuries caused through unsafe work areas, accidents and poor work practices.

Manual handling injuries are a concern for all food producers. Injuries from incorrect lifting and lowering of items or from incorrect pulling of heavy trolleys can be both costly to the employer and the injured employee. Therefore a worker will be trained in the safe way to move objects.

This will include knowledge of correct lifting principles, i.e. bend at your legs, and keep your back in its natural curves.

Anti-Discrimination awareness will also be included in an induction. Discrimination means treating another person unfairly because of a perceived difference between them and someone else. A worker could be discriminated against for a range of reasons including their race, religion, age, gender, sexuality, carer responsibilities, disability, and marital status. Some examples of how a worker could be discriminated against are a casual worker not being offered shifts because a manager does not trust people of their religion or a male worker not being allowed to transfer to a work section that is viewed as a women's only area.

All workers in the Food Processing industry have a responsibility to handle food safely to prevent it becoming contaminated and causing food poisoning for the consumer. Therefore as part of their induction a new worker will have the personal hygiene guidelines explained to them. Correct personal hygiene includes hand washing, wearing a clean uniform and hair covering, not wearing jewelry and not working with food products if you have a sickness such as vomiting or diarrhea.

After induction a new worker has an understanding of their responsibilities to ensure they are a productive worker in the Food Processing industry.

Questions

- a. The Food Processing industry has key areas of compliance. In the following table, match the appropriate 'Compliance area' listed below with the 'Subject or activity'. Write your answer in the second column (each Compliance Area may be used several times).

Compliance areas: OH&S; Food safety; Anti-discrimination.

Subject or activity	Appropriate Compliance Area
Race	
Contamination	
Sexuality	
Religion	
Personal hygiene	
Hand washing	
Injury	
Food poisoning	
Accident	
Manual handling	

- b. List two ways that a Food Producer could mislead a consumer.

- c. What does OH&S stand for?

- d. Proper lifting techniques can prevent worker injuries. (Circle the correct principle)

- i. Bend your back, keep your legs straight
- ii. Bend your legs; keep your back in its natural curves
- iii. Bend your legs, bend your back
- iv. Keep your legs and back straight

- e. List three ways that a Food Processing worker could be discriminated against.

- f. If a Food Processing worker does not handle food safely, what issue can it cause for the consumer?

- g. What are three things a Food Processing worker can do to ensure correct personal hygiene?

8. Read this cake recipe and then identify whether the statements that follow are true or false by placing a tick (✓) beside each statement.

Whisked Sponge:

25cm diameter cake tin
4 eggs
100 g sugar
100 g flour
25 g butter, melted and cooled

Steps:

Preheat the oven to 170°C.
Line a cake tin with baking paper.
Whisk eggs and sugar till pale.
Sift flour and fold through the egg mixture.
Fold through butter.
Pour mixture into the cake tin.
Bake till springy to touch.
Allow to cool in tin for 5 minutes before turning out onto a wire rack.

Statement	True	False
This recipe has the same amount of flour and sugar.		
The eggs and flour are whisked.		
The flour and butter are folded through.		
The last ingredient to be added is butter.		
The cake is baked at 190°C.		
The cake can be immediately turned onto a wire rack.		

9. Circle the correct word that would complete each of these sentences:

a. Caitlin enjoys working as a pastry cook. Her supervisor says she is very ...

crative kreatif creative kraftive

b. All Food Processing workers must follow workplace policies and ...

proseedures procedurs procedure procedures

c. Many people have an allergic reaction to ...

peenuts peanuts penush

10. Circle the word that has the closest meaning to the word that is underlined:

a. In Food Processing, you will be expected to work independently and as part of a group.

team section colleagues friends

b. Health and safety hazards can be minimised by enforcing good health and safety practices within the workplace.

prevented deficient eluded reduced

c. Food labels must provide information on possible allergens.

give hide disguise not

d. Yogurt is made when specific bacteria are added to milk in a controlled environment and allowed to ferment.

chaotic supervised casual dirty

Section 2 - Mathematical Questions

Numbers (Conversions, Estimation, Time)

1. You are required to clean and sanitise the ice cream packaging equipment. To do this you have to prepare 10 litres of cleaning solution. If the detergent is diluted at 50 ml per litre how much detergent is needed?

2. You are checking product weight on a muffin production line. Your target weight is between 100g and 120g per muffin.

Circle the weights from a sample of the last batch of muffins that fit within this target range.

101 g 119 g 122 g 110 g 99 g 98 g 115 g

3. You are required to marinate 20 kg of chicken wings. Each bag of marinade is sufficient for 6 kg and there is one half bag already open which must be used first. How many bags do you need to open?

4. Arrange the following in ascending order (from smallest to largest).

4 -2 $\frac{1}{4}$ 4.2 0 -5

5. How many hours & minutes are there in the day shift that starts at 8:25 am and ends at 3.40 pm?

6. If a production line packages 2,050 units of peanut butter in one hour, how much will be produced in a 40 hr week?

7. As a Food Processing worker Abel earns \$850 per week after tax. How many full weeks would he have to work to earn \$9,500 after tax?

8. Work out the following sums.

a. $53 + 78$ = _____

b. $0.87 + 2.01$ = _____

c. $17 - 8.5$ = _____

d. $95.23 - 67.03$ = _____

e. 92×4 = _____

f. 8.453×0.25 = _____

g. $75 \div 3$ = _____

9. The following table sets out the proportion and volume of ingredients required to produce 30 kg of sweet pastry. Calculate the amount of ingredients required to make 90 kg and 1200 kg of sweet pastry and complete the chart.

Total Weight	Flour (3 units)	Fat (2 units)	Sugar (1 unit)
30 kg	15 kg (i.e. 3 x 5 kg)	10 kg (i.e. 2 x 5 kg)	5kg (i.e. 1 x 5 kg)
90 kg	_____	_____	_____
1200 kg	_____	_____	_____

10. Change the following percentages to decimals.

- a. 75% = _____
- b. 125% = _____
- c. 3.5% = _____
- d. 6.75% = _____

11. Round the following to the nearest 10.

- a. 3 _____
- b. 9 _____
- c. 121 _____
- d. 798 _____

12. Round the following to the nearest 100.

- a. 13 _____
- b. 246 _____
- c. 3972 _____

13. Calculate the following percentages:

- a. 48% of 3.5 kg _____
- b. 33% of \$2.99 _____
- c. 0.9% of \$39 _____
- d. 125% of 6 Litres _____

Problem Solving

14. In the baking sector of the Food Processing industry, food safety of a product is guaranteed by ensuring target temperatures are achieved. You are measuring the temperature of meat pies in the oven. To be safe for your customers, they must reach 80°C as a minimum.

Which of the following temperatures are unsafe? (Circle the correct answers)

82°C 74°C 86°C 80°C 79°C

15. "David's Pies" is a Food Processing factory that produces 80 tonnes of waste per week of which 15% is cardboard packaging which is recycled. A supplier to "David's Pies" switches from cardboard packaging to reusable plastic crates. This reduces the amount of waste cardboard packaging by 2 tonnes.

How many tonnes of cardboard will now be recycled?

16. Joel completed his four hour shift on Thursday. His rate of pay is \$12.60 per hour and he is also paid an extra allowance of \$8.50 for working in the freezer store room.

What is Joel's total pay for his shift?

17. Jeannie's job is to help operate and monitor a frozen pea production and packaging process. The production line packs frozen peas into 1 kg bags and then packs these bags into 15 kg boxes ready for shipment. As a quality control measure Jeannie takes a sample of five boxes, weighs them and records the data on a production chart (see below). The production line quality standard is that the average weight of a sample of boxes must be in the range 14.8 kg and 15.2 kg.

Quality Control Report		Peas, Peas, Peas P/L
		Call: 1500 PEAS
Product:	Frozen Peas – 15 kg boxes	
Date:	27 October 2012	
Target Quality Standard: Average box weight between 14.8 kg - 15.2kg (inclusive).		
Time sample taken	Weight of sample	
09.15	15.5 kg	
09.20	15.3 kg	
09.25	14.9 kg	
09.30	15.1 kg	
09.35	14.9 kg	

- a. Use this Quality Control Report to calculate the average box weight from the measurements recorded.

b. Is this average weight within the required Target Quality Standard?

c. On how many occasions was the weight of a sample box outside of the Target Quality Standard range?

Section 1: LITERACY, READING AND COMPREHENSION

1. a. One b. 170 g c. 5.2 g d. 0 mg

- 2.
- | |
|--|
| Weigh a chicken = Scales |
| Wash your hands = Soap and paper towel |
| Bake a cake = Oven |
| Move a box = Trolley |
| Check a temperature = Thermometer |

- 3.
- | |
|----------------------------|
| Temperature = °C (Celsius) |
| Weight = Kg |
| Volume = l |
| Time = Minutes |
| Distance = Km |
| Length = mm |

- 4.
- 

A



D



B



C

5. a. Leave calmly via a fire exit

6. Develop, Implement, Initiate, Regulate, Therefore, Hygiene, Refrigerate, Packaging

- 7.
- a. OHS = Injury, Accident, Manual handling.
 - Food safety = Contamination, Personal hygiene, Hand washing, Food Poisoning.
 - Anti Discrimination = Race, Sexuality, Religion.
 - b. False labeling, underweight products, and false claims about the nutritional benefits of a product.
 - c. Occupational Health & Safety.
 - d. ii. Bend your legs; keep your back in its natural curves
 - e. Race, religion, age, gender, sexuality, carer responsibilities, disability and marital status.
 - f. Food poisoning
 - g. Hand washing, wearing a clean uniform and hair covering, not wearing jewelry and not working with food products if you have a sickness such as vomiting or diarrhea.

- 8.
- | Statement | True | False |
|--|------|-------|
| This recipe has the same amount of flour and sugar. | ✓ | |
| The eggs and flour are whisked. | | ✓ |
| The flour and butter are folded through. | ✓ | |
| The last ingredient to be added is butter. | ✓ | |
| The cake is baked at 190°C. | | ✓ |
| The cake can be immediately turned onto a wire rack. | | ✓ |

9. a. creative b. procedures c. peanuts
10. a. team b. reduced c. give d. supervised

Section 2 - Mathematics

1. 500ml or half a litre
2. 101 g 119 g 110 g 115 g
3. 3 bags
4. -5 -2 0 $\frac{1}{4}$ 4 4.2
5. 7 hours 15 minutes
6. 82,000 units
7. 12 full weeks
8. a. 131 b. 2.88 c. 8.5 d. 28.2 e. 368
f. 2.11 g. 25
9. 90 kg = 45 kg flour, 30 kg fat, 15 kg sugar, 1200 kg = 600 kg flour, 400 kg fat, 200 kg sugar
10. a. 0.75 b. 1.25 c. 0.035 d. 0.0675
11. a. 0 b. 10 c. 120 d. 800
12. a. 0 b. 200 c. 4000
13. a. 1.68 kg b. \$0.99 c. \$0.35 d. 7.5 litres
14. 74°C and 79°C
15. 10 tonnes
16. \$58.90
17. a. 15.14 kg b. Yes c. 2 (15.5 kg and 15.3 kg)

Contributions

This Practice Aptitude Quiz was developed by:



Australian Apprenticeships Pathways Website - www.aapathways.com.au

This website, part of the Australian Apprenticeships and Traineeships Information Service, provides sample Australian Apprenticeships job descriptions and links to more Australian Apprenticeships information and resources. The service is funded by the Department of Industry.



AgriFood Skills Australia - www.agrifoodskills.net.au

AgriFood Skills Australia is one of 11 Industry Skills Councils which have custodianship of all vocational education Training Packages. AgriFood oversees seven Training Packages in the following industry sectors: Agriculture, Horticulture, Conservation and Land Management; Animal Care and Management; Australian Meat; Food Processing; Racing; Seafood and Sugar Milling. AgriFood works closely with industry, education and government to ensure that the qualifications in these sectors reflect real industry skill requirements and to build capability, professionalism, and innovative capacity in Australia's workforce.



Bannister Technical - www.bannistertechnical.com.au

Bannister Technical is a Registered Training Organisation which aims to provide its food processing clients with a broad suite of training solutions. This includes Certificate III & IV in Food Processing, Certificate IV in Frontline Management & Certificate III & IV in Competitive Manufacturing. Bannister Technical also specialises in OHS management systems including policy & SWP development, auditing and training in OH&S Consultation.



The Career Education Association of Victoria - www.ceav.vic.edu.au

The CEAV is the Victorian peak body for secondary school career practitioners, work experience coordinators, VET coordinators and MIPS coordinators. The CEAV provides professional development opportunities for members and also works with business, industry, and the education and training sector.



Industry Training Australia P/L - www.itaust.com.au

Industry Training Australia (ITA) delivers consultancy services to government and non-government organisations in the education and training sector. ITA develops and delivers information and communication services, including the Australian Apprenticeships Job Pathways website, for service provider networks and the general public.

**For enquiries about this Practice Aptitude Quiz contact
Industry Training Australia on 1800 338 022.**