



Food Processing

Practice Aptitude Quiz

Part 1: About this quiz

Use this quiz to prepare for an Apprenticeship in Food Processing

This quiz:

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

Quiz details

This quiz will:

- Take approximately 60 minutes to complete
- Ask you numeracy and literacy questions specific to the Food Processing industry
- Assess your literacy and numeracy at a Year 10 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 Food Processing 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 Food Processing industry

Visit www.yourcareer.gov.au/industries/h/accommodation-and-food-services

On this page you'll be able to:

- See the most popular Food Processing industry occupations
- · Get general information and statistics about the industry
- Search for Food Processing industry courses

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

Part 2: The Quiz

Section 1: Language and Literacy

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: | Per | Per 100g | | |
| 170g | serving | _ | | |
| 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 | Omg | Omg | | |
| 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 from the list below. Write your answer in the second column:

Equipment:

Trolley Thermometer Soap and paper towel Scales Oven

| Task | Appropriate equipment |
|---------------------|-----------------------|
| Weigh a chicken | |
| Wash your hands | |
| Bake a cake | |
| Move a box | |
| Check a temperature | |

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

Abbreviations: L Km Minutes °C Mm Kg

| Unit of Measure | Appropriate Abbreviation |
|-----------------|--------------------------|
| Temperature | |
| Weight | |
| Volume | |
| Time | |
| Distance | |
| Length | |

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

- a. Wear eye protection
- b. Emergency exit
- c. Wash your hands
- d. 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. Select which action you would take:

Leave calmly via a fire exit

Stand still and wait for someone to tell you what to do

Shout "fire"

Go to the bathrooms

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, Work Health & Safety (WHS) 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. WHS 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:

Compliance areas: WHS Food safety Anti-discrimination Each compliance area may be used several times

| 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. Select the correct technique:

Bend your back, keep your legs straight Bend your legs; keep your back in its natural curves Bend your legs, bend your back 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 select whether the statements that follow are true or false:

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.

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

9. Select 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 | proceder | e procedures | |
| C. | Many people have an alle | ergic reaction | to | | |
| | peenuts | | peanuts | penush | |
| 10. | Select the word that has | the closest | meaning to the word | that is <u>underlined</u> : | |
| a. | In Food Processing, you group. | will be expec | ted to work independe | ntly and as part of a | |
| | team | section | colleague | es friends | |
| b. | Health and safety hazard practices within the work | | i <u>mised</u> by enforcing go | od health and safety | |
| | prevented | deficient | eluded | reduced | |
| C. | Food labels must provide | information o | on possible allergens. | | |
| | give | hide | disguise | not | |
| d. | Yogurt is made when spe and allowed to ferment. | ecific bacteria | are added to milk in a | <u>controlled</u> environment | |

casual

dirty

supervised

chaotic

Section 2: Numeracy

- 1. You are required to clean and sanitize 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. Select the weights from a sample of the last batch of muffins that fit within this target range:

| 101 g 119 g | | 119 g | 122 g | 110 g |
|-------------|----|-------|-------|-------|
| | | | | |
| | 99 | 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 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 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. Solve the following:

| a. 53 + 78 |
|------------------|
| |
| b. 0.87 + 2.01 |
| |
| c. 17 – 8.5 |
| |
| d. 95.23 – 67.03 |
| |
| e. 92 x 4 |
| |
| f. 8.453 x 0.25 |
| |
| g. 75÷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 | 10 kg | 5kg |
| | (i.e. 3 x 5 kg) | (i.e. 2 x 5 kg) | (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 |
| <u>u</u> . | <u> </u> |
| b. | 9 |
| υ. | 9 |
| 0 | 101 |
| υ. | 121 |
| d. | 700 |
| u. | 798 |
| 12 | Round the following to the nearest 100: |
| 12. | Round the following to the nearest 100. |
| a. | 13 |
| и. | |
| b. | 246 |
| <u>D.</u> | |
| c | 3972 |
| υ. | |

 13. Calculate the following values:

 a. 48% of 3.5 kg

 b. 33% of \$2.99

 c. 0.9% of \$39

 d. 125% of 6 litres

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?

| 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 \$22.60 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 Cor | ntrol Report | Peas, Peas, Peas P/L Call: 1500 PEAS | | |
|-------------------|--|---|--|--|
| Product: Date: | Frozen Peas – 15 kg boxes 27 October 2012 | 5 | | |
| | | eight 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?

Answers

Section 1: Language and Literacy

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



- **5.** Leave calmly via a fire exit
- 6. Develop, Implement, Initiate, Regulate, Therefore, Hygiene, Refrigerate, Packaging
- 7. a. Injury, Accident, Manual handling=OHSContamination, Personal hygiene, Hand washing, Food=Food safetyPoisoning. Race, Sexuality, Religion.=Anti Discrimination
 - b. False labeling, underweight products, and false claims about the nutritional benefits of a product.
 - c. Occupational Health & Safety.
 - d. 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.

| | Ctat | | | | | T | |
|-----|---------------------|-----------------------------|------------------|------------------|-----------|-----------|--------------|
| | Stater | | the same amo | unt of flour and | sugar | True ✓ | False |
| | | • | our are whiske | | Sugar. | • | \checkmark |
| | | | utter are folded | | | ✓ | |
| | | | ent to be adde | 0 | | • ✓ | |
| | | - | ed at 190°C. | | | • | |
| | | | | turned onto a w | ire rack. | | · · |
| | | | | | | | |
| Э. | a. creativ | 'e | b. procedures | c. pean | uts | | |
| LO. | a. team | | b. reduced | c. give | d | supervi | sed |
| 50 | otion 2. | Numoro | 01/ | | | | |
| | ction 2: | | - | | | | |
| | 500ml or | | | | | | |
| | 101g, 11 | 9 <u>9</u> , 110 <u>9</u> , | 115 g | | | | |
| | 3 bags | | | | | | |
| | -5, -2, 0, | | | | | | |
| | 7 hours 1 | | S | | | | |
| | 82,000 u | | | | | | |
| 7. | 12 full we | eeks | | | | | |
| 3. | a. 131 | b. 2.88 | c. 8.5 | d. 28.2 | e. | 368 | f. 2.11 |
| 9. | 90 kg = 4 | 15 kg flou | r, 30 kg fat, 15 | kg sugar, | | | |
| | 1200 ka : | = 600 ka | flour. 400 kg fa | it, 200 kg sugar | | | |
| | - | J | - | | | | |
| | a. 0.75 | | b. 1.25 | c. 0.035 | d. 0.06 | /5 | |
| | a. 0 | | b. 10 | c. 120 | d. 800 | | |
| | a. 0 | | b. 200 | c. 4000 | | | |
| | a. 1.68 k | - | b. \$0.99 | c. \$35.10 | d. 7.5 li | tres | |
| 1 4 | 74°C and | 179°C | | | | | |
| 14. | | | | | | | |
| | 10 tonne | S | | | | | |
| 15. | 10 tonne \$98.90 | S | | | | | |