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| **Assessment Project** | | | | | | | |
| Name of student |  | | | | | Date |  |
| Name of Assessor |  | | | | | | |
| Unit/s (code and name) | FSKNUM014 - Calculate with whole numbers and familiar fractions, decimals and percentages for work | | | | | | |
| Method of assessment | Project | | | | | | |
| **Instructions** | | | | | | | |
| * This assessment consists of 3 activities * Answers must be clear, concise and in your own words * All writing, notes and responses to be done in the spaces provided, in pen * You must answer all questions or complete the activities correctly to be deemed competent in this unit * Re-assessment of any incorrect responses will be undertaken verbally and noted on the assessment * Identified special needs students may be able to undertake this assessment in a slightly different way please speak with your assessor if you believe that you are eligible for a modified assessment item | | | | | | | |
| **Declaration**  I declare that no part of this assessment has been copied from another person’s work with the exception of where I have listed or referenced documents or work and that no part of this assessment has been written for me by another person.  Signed: Date: | | | | | | | |
| **EDUCATIONAL ADJUSTMENTS MADE** | | | | | | | |
| Formatting | | Altered print size and layout  Audio Provided     Images to support text  Simplified language | | | | | |
| Time | | Extra Time      Rest Break     Administered in segments | | | | | |
| Assistive Technology | | Word Processor     Speech to text     Calculator | | | | | |
| Environmental | | Alternate location      Reduced audience     Support person present | | | | | |
| **Satisfactory**  **Not Satisfactory** | | | | **Due date for reassessment (if required):** |  | | |
| **Feedback to student:** | | | | | | | |
|  | | | | | | | |
| **Assessor Signature:** | | |  | | | | |

**CONTEXT:**

You have been assigned to organise the next Red Food Day at school.

Your group is in charge of purchasing the food supplies for the sausage sizzle and drinks stand.

The number of students and staff attending the day is approximately 450.

Usually, only 70% of attendees purchase food on the day.

Your group has been allocated a budget of $600.

**TASK 1**

1. *Decide on the food stuffs that you will need to order for the sausage sizzle and create a list.*

Sausages, bread, soft drink.

1. *Calculate how much of each item you will need to purchase if 75% of attendees each purchase one sausage and one softdrink.*

*Consider:*

*Sausages come in packs of 24, how many pack will you need to purchase?*

*Softdrink comes in cartons of 30, how many cartons will you need?*

*1 loaf of bread has 16 slices, how many loaves of bread will you need?*

70% of 450 = 315 attendees will purchase food on the day.

|  |
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| 315 cans of softdrink needed on the day  315/30 = 10.5 (so 11 cartons needed) |
| 315 Sausages needed on the day  315/24 = 13.125 (so 14 packs needed on the day) |
| 315 Slices of bread needed on the day  315/16 = 19.6875 (so 20 loaves of bread needed on the day) |

**TASK 2**

1. *Go to the Coles.com website to find out how much each of these items cost to purchase in their bulk packages:*

|  |  |
| --- | --- |
| carton softdrink | $38.05 |
| pack sausages | $10.00 |
| Loaf of bread | $1.30 |

1. *Calculate the total costs of each items required on the day*

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| Softdrink  11 x $38.05 = $418.55 |
| Sausages  14 x $10.00 = $140.00 |
| Bread  20 x $1.30 = $26.00 |

1. *Calculate the total cost of the foodstuff required for your stand at the Red Food Day.*

$418.55 + 140 + 26 = $584.55

**TASK 3**

1. *Your group has been allocated a budget of $600.00 for the day. Will there be any left over funds? If so, how much?*

$600 - $584.55 = $15.45

There will be $15.45 remaining after all of the food supplies have been purchased.

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| **Knowledge Assessment** | | | |
| Name of student |  | Date |  |
| Name of assessor |  | | |
| Unit/s (code and name) | FSKNUM014 - Calculate with whole numbers and familiar fractions, decimals and percentages for work | | |
| Method of assessment | Written (Time allowed – 1hr) Verbal | | |

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| **Instructions** | | | | |
| * This assessment consists of **8** questions * Answers must be clear, concise and in your own words * All writing, notes and responses to be done in the spaces provided, in pen * You must answer all questions correctly to be deemed competent in this unit * Re-assessment of any incorrect responses will be undertaken verbally and noted on the assessment * Identified special needs students may be able to undertake this assessment in a slightly different way please speak with your assessor if you believe that you are eligible for a modified assessment item | | | | |
| **EDUCATIONAL ADJUSTMENTS MADE** | | | | |
| Formatting | Altered print size and layout  Audio Provided     Images to support text  Simplified language | | | |
| Time | Extra Time      Rest Break     Administered in segments | | | |
| Assistive Technology | Word Processor     Speech to text     Calculator | | | |
| Environmental | Alternate location      Reduced audience     Support person present | | | |
| **Satisfactory**  **Not Satisfactory** | | | **Due date for reassessment (if required):** |  |
| **Feedback to student:** | | | | |
|  | | | | |
| **Assessor Signature:** | |  | | |

**Q1** Fractions:

* 1. ½ + ½ = 1
  2. 1 – ½ = ½
  3. 1 – ¾ = ¼
  4. ¾ + ¾ = 1 ½
  5. A baker makes 8 cakes. Each cake is then cut into quarters. How many slices of cakes are then in total?

8 x 4 = 32

**Q2** Complete the missing numbers in the following table:

|  |  |  |
| --- | --- | --- |
| **Fraction** | **Decimal** | **Percentage** |
| 3/4 | 0.75 | 75% |
| 1/2 | 0.5 | 50% |
| 1/5 | 0.20 | 20% |
| ¼ | 0.25 | 25% |
| 1/8 | 0.125 | 12.5% |

**Q3** Use a multiplication question to check the given division (the first one has been completed for you). Complete the division then show the how you would check this with a multiplication.

|  |  |
| --- | --- |
| **Division** | **Multiplication (Checking)** |
| 42 ÷ 3 = 14 | 3 x 14 = 42 |
| 54 ÷ 9 = 6 | 6 x 9 = 54 |
| 990 ÷ 10 = 99 | 99 x 10 = 990 |
| 60 ÷ 12 = 5 | 5 x 12 = 60 |

**Q4** Place value of zero:

* 1. For the number 3098, what does the 0 mean?
     + 0 hundreds
     + 0 tens
     + 0 units
     + 0 thousands
  2. For the number 1980, what does the 0 mean?
     + 0 hundreds
     + 0 tens
     + 0 units
     + 0 thousands

Q5 When completing mathematical calculations you will need to follow the correct Order of Operations eg: BOMDAS: Brackets, Orders (eg: powers, square root), Multiplication, Division, Addition and Subtraction.

For example if you were given: 100 - (5 x 42 + 3)

Start inside the Brackets

Do Orders first: 100 – (5 x 16 + 3)

Then Multiply: 100 – (80 + 3)

Then Add: 100 – (83)

Then Subtract: 17 (final answer)

**What is the result of the following:**

1. 8 x 3 - 12 ÷ 4 + 8

= 24 – 3 + 8

= 29

1. 2 x 8 – 2 x3 + 16+ 4

= 16 – 6 + 16 + 4

= 30

1. 80 - (5 x 22 + 3)

= 80 – (5 x 4 + 3)

= 80 – (20 + 3)

= 80 – 23

= 57

1. (3 – ½ x 4) x 3

= (3 – 2) x 3

= 1 x 3

= 3

**Q6** Two construction workers combined income is $3025. If one earns $175 more than the other, find the monthly take home pay of each.

$3025 – $175 = $2850

$2850 / 2 = $1425

$1425 + $175 = $1600

Worker 1 earns $1425 and Worker 2 earns $1600

**Q7** You have been asked to estimate the following areas of several rectangular fields. Provide the estimate and then check your answer with a calculator

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| **Field**  **(length x width)** | **Estimate** | **Using a Calculator** | **Was your result reasonable? Why/why not** |
| 51m x 20m | 50 x 20 = 1000 metres | 1020 metres | Yes the estimate of 1000 is close to the actual answer 1020 |
| 690m x 100m | 700 x 100 = 70,000 m | 69,000 m | Yes the estimate of 70,000 is close to the actual answer 69,000 |
| 82m x 100m | 80 x 100 = 8000 m | 8200 m | Yes the estimate of 8000 is close to the actual answer 8200 |
| 78m x 50m | 80 x 50 = 4000 m | 3900 m | Yes the estimate of 4000 is close to the actual answer 3900 |

**Q8** Part of the nutritional information provided on a milk drink includes information about the recommended daily allowances of minerals and vitamins.

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| Minerals and vitamins | Per Serving | Percentage of recommended daily allowance |
| Iron (mg) | 2.7 | 20% |
| Calcium (mg) | 110 | 50% |
| Vitamin A (µg) | 105 | 25% |
| Vitamin B1 (mg) | 0.18 | 20% |
| Vitamin B2 (mg) | 0.14 | 25% |
| Sodium (mg) | 49 | 10% |
| Potassium (mg) | 120 | 10% |

1. Calculate how many of the milk drinks do you need to drink to provide your recommended daily allowance of calcium.

Calcium is 50% of RDI so, 100 / 50 = 2 drinks

1. Calculate how many of the milk drinks do you need to drink to provide your recommended daily allowance of sodium.

Sodium is 10% of RDI so 100 / 10 = 10 drinks