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BTEC Level 3 Business

Unit 3: Finance

Student Book

Learning Aim : F



Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Outcome F - Complete statements of comprehensive income and financial position and evaluate a business's performance.**

**Activity 1 – What is it & Key Words.**

As we go through a statement of comprehensive income you need to explain what it is, and the key words associated with it.

Use the table in your student workbook to explain the key words. Add any extra ones you may come across.

Explain what a statement of comprehensive income is and why it is used.

|  |  |
| --- | --- |
| **Key word** | **Explanation** |
| Sales revenue |  |
| Cost of goods sold |  |
| Inventory |  |
| Gross profit |  |
| Expenses |  |
| Depreciation |  |
| Net profit |  |
|  |  |
|  |  |

**Activity 2 – Annotating & Explaining Gross Profit**

As we go through the top half of a statement of comprehensive income. Annotate the example below (as I am on the board) and answer the questions provided.

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| Sales |  | 100,000 |
| Less cost of goods sold | | |
| Opening inventory | 12,000 |  |
| Purchases | 18,000 |  |
| Closing inventory | 5,000 |  |
|  |  | 25,000 |
| Gross profit |  | 75,000 |

How is cost of goods sold calculated?

Explain cost of goods sold.

Sales is calculated by:

What is gross profit & how is it calculated?

Explain what the first half of the statement of comprehensive income shows about the business’s financial performance.

**Activity 3 – Full Statement of Comprehensive Income**

Answer the questions and then fill in the statement of comprehensive income using the information provided.

Provide examples of 3 different expenses.

Explain what an expense is.

Describe revenue income.

How do you calculate Net profit and what does it mean?

**Information for Statement of comprehensive income**

* Jessica runs her own T-shirt design business. She sold 2000 t-shirts at a price of £40 from April 2019 to April 2020.
* She started that year with stock worth £6,000 and purchased another £10,000 of stock.
* She ended the year with £3,000 in stock.
* She stores her stock in a small storage facility costing £3,000 annually.
* She spends £100 a month on Instagram advertising.
* Her postage costs are £400 a month.
* She has depreciation of her equipment of £800 for the year *(we will cover depreciation in detail later)*
* She has no revenue income.

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| Sales |  |  |
| Less cost of goods sold | | |
| Opening inventory |  |  |
| Purchases |  |  |
| Closing inventory |  |  |
|  |  |  |
| Gross profit |  |  |
| Less Expenses |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Depreciation |  |  |
| Total expenses |  |  |
| Revenue Income |  |  |
| Net profit |  |  |

Assess the statement of financial position by commenting on key points and figures that have been produced.

**Activity 4 – Calculating Depreciation**

Watch the video on how to calculate straight line and reducing balance depreciation. Then answer the following questions.

[Video Link: Depreciation](https://youtu.be/_OiuLxg-rj0)

Describe the term depreciation.

What two methods are used to calculate depreciation?

Explain why depreciation is important for a business to monitor.

What is the calculation for straight line depreciation?

Historic value is…

Residual value is…

Expected life is…

Write down the calculation for the reducing balance method and explain what happens with the value of the van at the end of year one.

Now you have finished the video apply your knowledge to the following questions on both the straight-line method and reducing balance method.

**Questions on Straight Line Depreciation**

**A business buys a company car for the managing director that costs £50,000. Its residual value is £22,000 after 4 years.**

How much does the car depreciate by each year?

**A graphic design company buys a brand-new computer for £2,500. Its residual value after 2 years is £1200.**

How much does the computer depreciate by each year?

**The same business buys 4 new machines at a total cost of £80,000. The residual value of those machines after 5 years is £40,000.**

How much does each individual machine depreciate by each year?

**A new delivery business buys a fleet of 4 vans at a total cost of £120,000. Each van depreciates by £6,000 per year for a total of 3 years.**

What is the **residual value** of all 4 vans at the end of 3 years?

**Questions on Reducing Balance Depreciation**

A piece of office equipment is bought for £10,000. It depreciates at a rate of 20% for 6 years. Calculate the piece of office equipment’s residual value at the end of 6 years.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Value at start of year (£)** | **Depreciation (£)** | **Value at end of year (£)** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **6** |  |  |  |

A college has just purchased a brand-new printer for £6,000. The printer will depreciate by 15% for 3 years before it is replaced. Calculate the total amount of depreciation after 3 years.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Value at start of year (£)** | **Depreciation (£)** | **Value at end of year (£)** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |

A factory buys a large piece of manufacturing machinery for its warehouse. The machinery cost £125,000. It will depreciate by 22% for 8 years. What will the value of the machinery be at the start of year 6?

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Value at start of year (£)** | **Depreciation (£)** | **Value at end of year (£)** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **6** |  |  |  |

**Activity 5 – Analysing a Statement of Comprehensive Income**

**Business X 2019 & 2020 Statement of Comprehensive Income**

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2019** | | |
|  | **£** | **£** |
| Sales |  | 100,000 |
| Less cost of goods sold | | |
| Opening inventory | 12,000 |  |
| Purchases | 18,000 |  |
| Closing inventory | 5,000 |  |
|  |  | 25,000 |
| Gross profit |  | 75,000 |
| Less Expenses |  |  |
| Rent |  | 12,000 |
| Salaries |  | 20,000 |
| Advertising |  | 3,000 |
| Business rates |  | 5,000 |
| Distribution |  | 12,000 |
| Depreciation |  | 8,000 |
| Total expenses |  | 60,000 |
| Revenue Income |  | 0 |
| Net profit |  | 15,000 |

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| Sales |  | 125,000 |
| Less cost of goods sold | | |
| Opening inventory | 5,000 |  |
| Purchases | 36,000 |  |
| Closing inventory | 8,000 |  |
|  |  | 33,000 |
| Gross profit |  | 92,000 |
| Less Expenses |  |  |
| Rent |  | 13,000 |
| Salaries |  | 30,000 |
| Advertising |  | 4,000 |
| Business rates |  | 5,000 |
| Distribution |  | 16,000 |
| Depreciation |  | 5,000 |
| Total expenses |  | 73,000 |
| Revenue Income |  | 0 |
| Net profit |  | 19,000 |

Compare the gross profit & net profit for 2019.

Compare the gross profit and net profit from 2020.

Compare the net profit from 2019 to 2020.

Evaluate the business profitability as a whole using key points and data from each year’s statement of comprehensive income.

Recommend what action the business could take to improve its profitability.

**Business Y 2019 & 2020 Statement of Comprehensive Income**

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2019** | | |
|  | **£** | **£** |
| Sales |  | 90,000 |
| Less cost of goods sold | | |
| Opening inventory | 0 |  |
| Purchases | 30,000 |  |
| Closing inventory | 2,000 |  |
|  |  | 28,000 |
| Gross profit |  | 62,000 |
| Less Expenses |  |  |
| Rent |  | 8,000 |
| Salaries |  | 12,000 |
| Advertising |  | 7,000 |
| Business rates |  | 3,000 |
| Distribution |  | 8,000 |
| Depreciation |  | 3,000 |
| Total expenses |  | 41,000 |
| Revenue Income |  | 0 |
| Net profit |  | 21,000 |

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| Sales |  | 150,000 |
| Less cost of goods sold | | |
| Opening inventory | 2,000 |  |
| Purchases | 50,000 |  |
| Closing inventory | 12,000 |  |
|  |  | 40,000 |
| Gross profit |  | 110,000 |
| Less Expenses |  |  |
| Rent |  | 8,000 |
| Salaries |  | 20,000 |
| Advertising |  | 10,000 |
| Business rates |  | 4,000 |
| Distribution |  | 11,000 |
| Depreciation |  | 5,000 |
| Total expenses |  | 58,000 |
| Revenue Income |  | 2,000 |
| Net profit |  | 54,000 |

Compare the gross profit & net profit for 2019.

Compare the gross profit and net profit from 2020.

Compare the net profit from 2019 to 2020.

Evaluate the business’s profitability as a whole using key points and data from each year’s statement of comprehensive income.

Recommend what action the business could take to improve its profitability.

Compare the two businesses profitability performance and provide clear examples of which one is performing better.

**Outcome F2 – Statement of Financial Position**

**Activity 6 – Statement of Financial Position Explained.**

While I go through the statement of financial position and the various sections. Take notes and annotate the various key points about the statement.

Explain what a statement of financial position is and its purpose.

**Statement of Financial Position 2020**.

Non-current assets:

Current assets:

Current liabilities:

Non-Current liabilities:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost  £ | Depreciation  £ | Carrying Amount  £ |
| Non – current assets | | | |
| Premises | 150,000 | 10,000 | 140,000 |
| Vehicles | 20,000 | 5,000 | 15,000 |
| Equipment | 18,000 | 4,000 | 14,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 23,000 |
| Trade receivables |  |  | 12,000 |
| Cash at bank |  |  | 6,000 |
| Cash in hand |  |  | 3,000 |
| **44,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 13,000 |
| Overdraft |  |  | 2,000 |
|  |  |  | **15,000** |
| Working capital |  |  | **29,000** |
|  | | | |
| Non – current liabilities | | | |
| Bank loan |  |  | 65,000 |
| Net assets |  |  | **133,000** |
|  | | | |
| Financed by | | | |
| Capital |  |  | 85,000 |
| Retained profit |  |  | 48,000 |
| Capital employed |  |  | **133,000** |

Net assets:

Capital employed:

Explain a tangible asset and provide examples.

Explain an intangible asset with examples.

A statement of financial position can be used to analyse:

**Activity 7 – Interpreting & Analysing a Statement of Financial Position**

First answer the questions regarding a statement of financial position and then complete both of the financial statements for 2019 and 2020 by filling in the missing amounts in the grey boxes.

Finish the activity by justifying which year the business was in the best financial position.

Explain what a Non-current asset is.

Explain how current assets are different to non-current assets.

Describe trade receivables.

Describe trade payables.

How do you calculate working capital?

Explain what capital employed is.

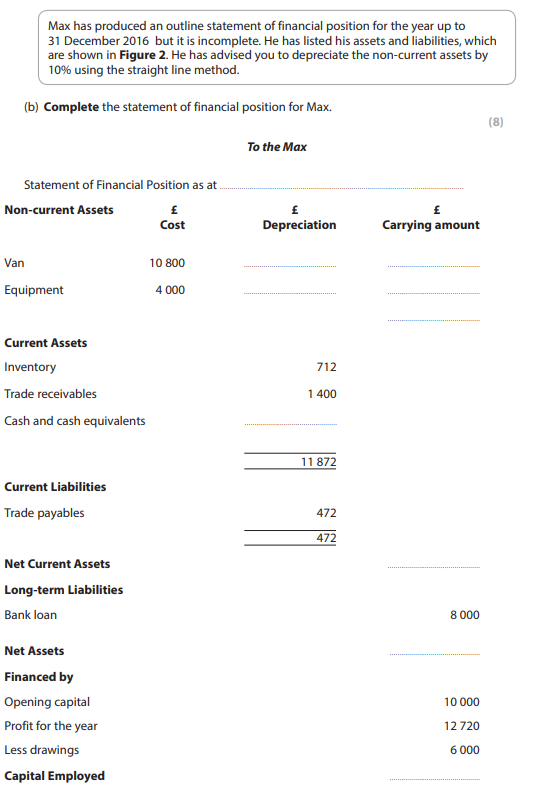
|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 200,000 |  | 180,000 |
| Vehicles | 20,000 | 5,000 | 15,000 |
| Equipment | 35,000 | 8,000 |  |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 30,000 |
| Trade receivables |  |  |  |
| Cash at bank |  |  | 6,000 |
| Cash in hand |  |  | 3,000 |
| **50,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 8,000 |
| Overdraft |  |  | 4,000 |
|  |  |  |  |
| Working capital |  |  |  |
|  | | | |
| Non – current liabilities | | | |
| Bank loan |  |  | 85,000 |
| Net assets |  |  |  |
|  | | | |
| Financed by | | | |
| Capital |  |  |  |
| Retained profit |  |  | 75,000 |
| Capital employed |  |  | **175,000** |

**Statement of Financial Position April 2019**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises |  | 18,000 | 162,000 |
| Vehicles |  | 5,000 | 12,000 |
| Equipment |  | 9,000 | 40,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 10,000 |
| Trade receivables |  |  | 20,000 |
| Cash at bank |  |  | 20,000 |
| Cash in hand |  |  | 2,000 |
|  | | |  |
| Less current liabilities | | | |
| Trade payables |  |  | 4,000 |
| Overdraft |  |  |  |
|  |  |  | **7,000** |
| Working capital |  |  | **45,000** |
|  | | | |
| Non – current liabilities | | | |
| Bank loan |  |  | 100,000 |
| Net assets |  |  |  |
|  | | | |
| Financed by | | | |
| Capital |  |  | 49,000 |
| Retained profit |  |  | 110,000 |
| Capital employed |  |  |  |

**Statement of Financial Position April 2020**

Justify which year the business was in the best financial position. Ensure you comment on both statements and make clear comparisons to both throughout your answer.

**Activity 8 - Exam Question**

**Outcome F3 – Measuring Profitability**

**Activity 9 – Quick Practice Questions on Gross & Net Profit**

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| **Sales** |  | 217,000 |
| Less cost of goods sold | | |
| Opening inventory | 13,500 |  |
| Purchases | 58,000 |  |
| Closing inventory | 27,250 |  |
|  |  | 44,250 |
| **Gross profit** |  | **172,750** |
| Less Expenses |  |  |
| Rent |  | 10,000 |
| Salaries |  | 22,000 |
| Advertising |  | 4,000 |
| Business rates |  | 5,000 |
| Distribution |  | 32,000 |
| Depreciation |  | 12,000 |
| Total expenses |  | 85,000 |
| Revenue Income |  | 0 |
| **Net profit** |  | **87,750** |

Calculate the gross profit margin using the information above.

Explain whether the business is performing well in terms of its gross profit margin.

Calculate the net profit margin using the information above.

Explain whether the business is performing well in terms of its net profit margin.

**Activity 10 - Gross & Net Profit Margin**

Watch the video **named ‘Gross Profit vs Net Profit | Differences, Calculations and Interpretation Explained’** and answer the questions below.

[Video Link: Gross & Net Profit Margin](https://www.youtube.com/watch?v=DM7TqljUues)

Explain what gross profit is, how it is calculated and why it is important for a business.

Explain what net profit is, how it is calculated and why it is important for a business.

Compare the difference between net/gross profit vs net/gross profit margins. Is one more important than the other? Justify your answer.

.

Explain how a business could increase their gross profit margin %.

Explain how a business could increase their net profit figure.

A business has a gross profit margin of 45%, what does that mean?

True or false? Net profit will always be higher than gross profit. Explain the reasons for your answer.

What is the net profit also known as?

**Income Statements**

|  |  |  |
| --- | --- | --- |
| Basic Income Statement Example | | |
| Year Ended 31st December | **2020** | **2019** |
|  | **£** | **£** |
| Revenue | 300,000 | 285,000 |
| Cost of Sales | (90,000) | (85,000) |
| Gross Profit | 210,000 | 200,000 |
| Total Business Expenses | (35,000) | (30,000) |
| Net Profit | 175,000 | £170,000 |

Complete the income statement to calculate the Gross Profit and Net Profit for AJ’s Hats for years 2019 and 2020 using the following information:

|  |  |  |
| --- | --- | --- |
|  | 2020 | 2019 |
| Year Ended 31st December | £ | £ |
| Selling price per hat | 25 | 20 |
| Number of hats sold | 10,000 | 11,000 |
| Cost of direct material | 5 | 4 |
| Cost of direct labour | 8 | 7 |
| Monthly rent | 1200 | 1200 |
| Other monthly overhead expenses | 4000 | 3500 |

|  |  |  |
| --- | --- | --- |
| Basic Income Statement | | |
| Year Ended 31st December | **2020** | **2019** |
|  | **£** | **£** |
| Revenue |  |  |
| Cost of Sales |  |  |
| Gross Profit |  |  |
| Total Business Expenses |  |  |
| Net Profit |  |  |

You are now required to calculate the gross profit margin and net profit margin for the business for both 2019 and 2020.

|  |  |  |  |
| --- | --- | --- | --- |
|  | | 2020 | 2019 |
| Gross Profit Margin |  | |  |
| Net Profit Margin |  | |  |

Analyse the key factors which have caused change in both the gross profit margin and net profit margin. Recommend what the business should do to improve their margins in 2021.

**Activity 11 – Quick Practice Questions on Mark-up and ROCE**

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| **Sales** |  | 217,000 |
| Less cost of goods sold | | |
| Opening inventory | 13,500 |  |
| Purchases | 58,000 |  |
| Closing inventory | 27,250 |  |
|  |  | 44,250 |
| **Gross profit** |  | **172,750** |
| Less Expenses |  |  |
| Rent |  | 10,000 |
| Salaries |  | 22,000 |
| Advertising |  | 4,000 |
| Business rates |  | 5,000 |
| Distribution |  | 32,000 |
| Depreciation |  | 12,000 |
| Total expenses |  | 85,000 |
| Revenue Income |  | 0 |
| **Net profit** |  | **87,750** |

Calculate the mark-up in this statement of comprehensive income.

Explain whether the mark-up is good or bad.

Calculate the return on capital employed.

Explain whether the business is performing well in this area.

**Activity 12 – Calculate, Interpret and Analyse Profitability Ratios**

You are working as a financial advisor for **DC Socks LTD** and they have provided you with a statement of comprehensive income for 2019 & 2020.

They have also provided you with the amount of capital they employed.

**Capital employed 2019 - £114,500 Capital employed 2020 - £66,000.**

They would like you to perform some profitability ratios and the use them to analyse the profitability of the business.

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2019** | | |
|  | **£** | **£** |
| **Sales** |  | 228,000 |
| Less cost of goods sold | | |
| Opening inventory | 48,000 |  |
| Purchases | 55,000 |  |
| Closing inventory | 12,000 |  |
|  |  | 91,000 |
| **Gross profit** |  | **137,000** |
| Less Expenses |  |  |
| Rent |  | 18,000 |
| Salaries |  | 30,000 |
| Advertising |  | 10,000 |
| Business rates |  | 6,000 |
| Distribution |  | 20,000 |
| Telephone & Broadband |  | 1,200 |
| Depreciation |  | 17,000 |
| Total expenses |  | 102,200 |
| Revenue Income |  | 0 |
| **Net profit** |  | **34,800** |

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| **Sales** |  | 256,000 |
| Less cost of goods sold | | |
| Opening inventory | 12,000 |  |
| Purchases | 130,000 |  |
| Closing inventory | 32,000 |  |
|  |  | 110,000 |
| **Gross profit** |  | **146,000** |
| Less Expenses |  |  |
| Rent |  | 20,000 |
| Salaries |  | 40,000 |
| Advertising |  | 12,000 |
| Business rates |  | 6,000 |
| Distribution |  | 20,000 |
| Telephone & Broadband |  | 1,200 |
| Depreciation |  | 14,000 |
| Total expenses |  | 113,200 |
| Revenue Income |  | 0 |
| **Net profit** |  | **32,800** |

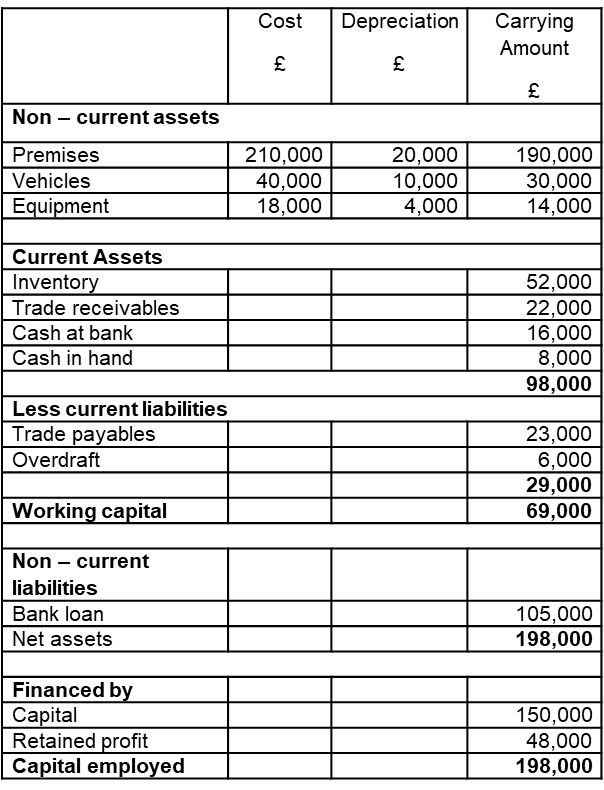
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ratio** | **Ratio Formula** | **2019** | **2020** | **Good or bad?** | **Is there a significant change?** |
| **Gross profit margin** |  |  |  |  |  |
| **Net profit margin** |  |  |  |  |  |
| **Mark-up** |  |  |  |  |  |
| **ROCE** |  |  |  |  |  |

Compare what the gross profit margin and net profit margin suggest about the business financially for 2019.

Compare the gross & net profit margin from 2019 to 2020. Discuss what this suggests about the business financially.

**Outcome F3 – Measuring Liquidity**

**Activity 13 – Quick Practice Questions on Current Ratio and Liquid Capital Ratio**

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Calculate the current ratio.

Explain whether the business is performing well in this area.

Calculate the liquid capital ratio.

Compare the current ratio with the liquid capital ratio and suggest what it means for the business.

**Activity 14 – Liquidity Video**

Watch the video on liquidity ratios and complete the tasks below to apply your knowledge.

[Video: Liquidity Ratios](https://www.youtube.com/watch?v=LBW_IR9_eP8&t=113s)

Explain why businesses use liquidity ratios.

What three bits of information are needed from a statement of financial position in order to calculate the current and liquid capital ratio?

Write down the formula for the current ratio.

Explain why the current ratio is useful to a business.

Write down the formula for the liquid capital ratio and explain why a business may want to exclude inventory from the calculation.

Evaluate the usefulness of both ratios in analysing a business’s liquidity.

**Calculating Liquidity Ratios**

Below is a balance sheet for Company Z. The owners want you to provide them with some information and advice on the liquidity of their business.

|  |  |  |
| --- | --- | --- |
| **Balance Sheet Company Z** | **2019** | **2020** |
|  | **£** | **£** |
| Current Assets | | |
| Cash | 35,000 | 115,000 |
| Inventory | 95,000 | 15,000 |
| Accounts Receivable | 7,000 | 2,000 |
| Total Current Assets | 137,000 | 132,000 |
|  |  |  |
| Fixed Assets | | |
| Building | 100,000 | 100,000 |
| Land | 20,000 | 20,000 |
| Machinery | 20,000 | 20,000 |
| Equipment | 5,000 | 2,000 |
| Total Fixed Assets | 145,000 | 142,000 |
|  |  |  |
| Total Assets | 322,000 | 314,000 |
|  |  |  |
| Current Liabilities | | |
| Accounts Payable | 2,000 | 8,000 |
| Wages Payable | 40,000 | 46,000 |
| Interest Payable | 4,000 | 4,000 |
| Total Current Liabilities | 46,000 | 58,000 |
|  |  |  |
| Long Term Liabilities | | |
| Bank Loan | 78,000 | 66,000 |
| Total Long-Term Liabilities | 78,000 | 66,000 |
|  |  |  |
| Total Liabilities | 124,000 | 124,000 |
|  |  |  |
| Net Assets | 198,000 | 190,000 |

Use the balance sheet to calculate the current ratio and liquid capital ratio in the table provided for 2019 and 2020. Then answer the questions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Ratio** | **2019** | **2020** | **Good or bad** |
| **Current Ratio** |  |  |  |
| **Liquid Capital Ratio** |  |  |  |

Assess the liquidity of the business using both ratios for 2019.

Assess the liquidity of the business using both ratios for 2020.

Compare the liquidity of both years and whether it has significantly changed or not.

Provide advice to the business owners on what they could do to improve the liquidity of their business for 2021.

**Activity 15 – Calculate, Interpret and Analyse Liquidity Ratios**

You did such a great job with the evaluation of **DC Socks LTD** profitability that they now want you to advise them on their liquidity.

They have provided you with a statement of financial position for 2019 & 2020.

They would like you to calculate the current ratio and liquid capital ratio for both years and then use it to analyse the liquidity of the business.

**Statement of Financial Position 2019**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 220,000 | 11,000 | 209,000 |
| Vehicles | 90,000 | 22,000 | 68,000 |
| Equipment | 74,000 | 17,000 | 57,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 82,000 |
| Trade receivables |  |  | 12,000 |
| Cash at bank |  |  | 12,000 |
| Cash in hand |  |  | 6,000 |
| **112,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 28,000 |
| Overdraft |  |  | 4,000 |
|  |  |  | **32,000** |
| Working capital |  |  | **80,000** |
|  | | | |
| Non – current liabilities |  |  |  |
| Bank loan |  |  | 112,000 |
| Net assets |  |  | **302,000** |
|  | | | |
| Financed by |  |  |  |
| Capital |  |  | 188,000 |
| Retained profit |  |  | 114,000 |
| Capital employed |  |  | **302,000** |

**Statement of Financial Position 2020**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 209,000 | 9,000 | 200,000 |
| Vehicles | 68,000 | 18,000 | 60,000 |
| Equipment | 57,000 | 12,000 | 45,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 12,000 |
| Trade receivables |  |  | 8,000 |
| Cash at bank |  |  | 65,000 |
| Cash in hand |  |  | 9,000 |
| **94,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 34,000 |
| Overdraft |  |  | 1,000 |
|  |  |  | **35,000** |
| Working capital |  |  | **59,000** |
|  | | | |
| Non – current liabilities |  |  |  |
| Bank loan |  |  | 98,000 |
| Net assets |  |  | **266,000** |
|  | | | |
| Financed by |  |  |  |
| Capital |  |  | 120,000 |
| Retained profit |  |  | 144,000 |
| Capital employed |  |  | **266,000** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratio | Ratio Formula | 2019 | 2020 | Good or bad? | Is there a significant change? |
| Current Ratio |  |  |  |  |  |
| Liquid Capital Ratio |  |  |  |  |  |

Compare the current ratio & liquid capital ratio and suggest what it says about the business financially in 2019.

Compare the liquid capital ratio in 2019 to 2020 again suggesting what it suggest about the business’s performance.

**Outcome F4 – Measuring Efficiency**

**Activity 16 – Quick Practice Questions on Trade Receivable Days, Trade Payable Days and Inventory Turnover.**

**Trade Receivable Days**

A small business called Reed Guitars wants to know its trade receivable days. They have told you that they have £70,000 in credit sales and trade receivables of £40,000. Calculate their trade receivable days.

Help Reed Guitars by explaining what this figure you have calculated means.

**Trade Payable Days**

Reed Guitars have trade payables of £4,000 and credit purchases of £60,000. They were really happy with what you told them about their receivable days that they want you to:

Calculate their trade payable days and explain the figure to them.

Compare their trade receivable days and payable days so they understand what this means for the business financially.

**Inventory Turnover Days**

Reed Guitars have opening inventory of £26,000, closing inventory of £7,000 and cost of goods sold of £33,000.

Calculate their inventory turnover.

Explain what this suggests about the business.

**Activity 17 – Calculate, Interpret and Analyse Efficiency Ratios**

What is the calculation for trade receivable days?

Explain what trade payable days shows a business.

What is the calculation for inventory turnover?

Between a fruit and veg shop and a second hand car dealer, explain which would have the highest inventory turnover and why?

Justify whether or not efficiency ratios are useful for a business to use.

**DC Socks LTD want you to investigate the efficiency of their business in 2020** and have provided you with financial statements for you to analyse.

They want you to tell them some information about trade receivable days, trade payable days and inventory turnover. They also want you to calculate the ratios for them.

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| **Sales** |  | 256,000 |
| Less cost of goods sold | | |
| Opening inventory | 12,000 |  |
| Purchases | 130,000 |  |
| Closing inventory | 32,000 |  |
|  |  | 110,000 |
| **Gross profit** |  | **146,000** |
| Less Expenses |  |  |
| Rent |  | 20,000 |
| Salaries |  | 40,000 |
| Advertising |  | 12,000 |
| Business rates |  | 6,000 |
| Distribution |  | 20,000 |
| Telephone & Broadband |  | 1,200 |
| Depreciation |  | 14,000 |
| Total expenses |  | 113,200 |
| Revenue Income |  | 0 |
| **Net profit** |  | **32,800** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement of Financial Position 2020** | | | |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 209,000 | 9,000 | 200,000 |
| Vehicles | 68,000 | 18,000 | 60,000 |
| Equipment | 57,000 | 12,000 | 45,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 12,000 |
| Trade receivables |  |  | 8,000 |
| Cash at bank |  |  | 65,000 |
| Cash in hand |  |  | 9,000 |
| **94,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 34,000 |
| Overdraft |  |  | 1,000 |
|  |  |  | **35,000** |
| Working capital |  |  | **59,000** |
|  | | | |
| Non – current liabilities |  |  |  |
| Bank loan |  |  | 98,000 |
| Net assets |  |  | **266,000** |
|  | | | |
| Financed by |  |  |  |
| Capital |  |  | 120,000 |
| Retained profit |  |  | 144,000 |
| Capital employed |  |  | **266,000** |

|  |  |  |  |
| --- | --- | --- | --- |
| Ratio | Ratio Formula | Calculation | Good or bad? |
| Trade Receivable Days |  |  |  |
| Trade Payable Days |  |  |  |
| Inventory Turnover |  |  |  |

Compare the trade receivable days with the trade payable days and suggest what it says about the business financially.

Suggest what DC Socks LTD could do to improve their inventory turnover days.

**Activity 18 – Profitability, Liquidity Efficiency & Limitations**

Using the information provided in the statement of comprehensive income and statement of financial position, calculate the ratios and answer the questions based on the information found.

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2019** | | |
|  | **£** | **£** |
| **Sales** |  | 140,000 |
| Less cost of goods sold | | |
| Opening inventory | 40,000 |  |
| Purchases | 22,000 |  |
| Closing inventory | 19,000 |  |
|  |  | 43,000 |
| **Gross profit** |  | **97,000** |
| Less Expenses |  |  |
| Rent |  | 18,000 |
| Salaries |  | 30,000 |
| Advertising |  | 12,000 |
| Business rates |  | 3,000 |
| Distribution |  | 8,000 |
| Depreciation |  | 4,000 |
| Total expenses |  | 75,000 |
| Revenue Income |  | 0 |
| **Net profit** |  | **22,000** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement of Financial Position 2019** | | | |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 88,000 | 2,000 | 86,000 |
| Equipment | 15,000 | 2,000 | 13,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 66,000 |
| Trade receivables |  |  | 4,000 |
| Cash at bank |  |  | 18,000 |
| Cash in hand |  |  | 2,000 |
| **90,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 36,000 |
| Overdraft |  |  | 5,000 |
|  |  |  | **41,000** |
| Working capital |  |  | **49,000** |
|  | | | |
| Non – current liabilities |  |  |  |
| Bank loan |  |  | 35,000 |
| Net assets |  |  | **154,000** |
|  | | | |
| Financed by |  |  |  |
| Capital |  |  | 132,000 |
| Retained profit |  |  | 22,000 |
| Capital employed |  |  | **154,000** |

|  |  |  |
| --- | --- | --- |
| **Statement of Comprehensive Income year end April 2020** | | |
|  | **£** | **£** |
| **Sales** |  | 220,000 |
| Less cost of goods sold | | |
| Opening inventory | 19,000 |  |
| Purchases | 89,000 |  |
| Closing inventory | 7,000 |  |
|  |  | 101,000 |
| **Gross profit** |  | **119,000** |
| Less Expenses |  |  |
| Rent |  | 20,000 |
| Salaries |  | 45,000 |
| Advertising |  | 18,000 |
| Business rates |  | 4,000 |
| Distribution |  | 10,000 |
| Depreciation |  | 4,000 |
| Total expenses |  | 99,000 |
| Revenue Income |  | 0 |
| **Net profit** |  | **18,000** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Statement of Financial Position 2020** | | | |
|  | Cost (£) | Depreciation (£) | Carrying Amount (£) |
| Non – current assets | | | |
| Premises | 86,000 | 2,000 | 84,000 |
| Equipment | 13,000 | 2,000 | 11,000 |
|  | | | |
| Current Assets | | | |
| Inventory |  |  | 101,000 |
| Trade receivables |  |  | 12,000 |
| Cash at bank |  |  | 20,000 |
| Cash in hand |  |  | 4,000 |
| **137,000** | | | |
| Less current liabilities | | | |
| Trade payables |  |  | 72,000 |
| Overdraft |  |  | 8,000 |
|  |  |  | **80,000** |
| Working capital |  |  | **57,000** |
|  | | | |
| Non – current liabilities |  |  |  |
| Bank loan |  |  | 55,000 |
| Net assets |  |  | **97,000** |
|  | | | |
| Financed by |  |  |  |
| Capital |  |  | 75,000 |
| Retained profit |  |  | 22,000 |
| Capital employed |  |  | **97,000** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Ratio** | **2019 Calculation** | **2020 Calculation** | **Is it a significant change?** |
| **Gross Profit Margin** |  |  |  |
| **Net Profit Margin** |  |  |  |
| **Mark-up** |  |  |  |
| **ROCE** |  |  |  |
| **Current Ratio** |  |  |  |
| **Liquid Capital Ratio** |  |  |  |
| **Trade Receivable Days** |  |  |  |
| **Trade Payable Days** |  |  |  |
| **Inventory Turnover** |  |  |  |

Discuss the profitability of the business in 2019.

Compare the profitability of the business from 2019 to 2020.

Evaluate the businesses overall liquidity.

Analyse the efficiency of the business in 2019 to 2020.

Assess how efficiently the business is being run.

Examine the limitations of ratio analysis when assessing the profitability, liquidity and efficiency of a business.

**Activity 19 – Test Your Knowledge Learning Outcome F Kahoot**

Test your knowledge of Learning Outcome F of Unit 3: Personal and Business Finance by clicking this link: [Click here to play the Kahoot](https://create.kahoot.it/share/btec-level-3-unit-3-personal-business-finance-outcome-f/e13b979a-5e50-4076-b5f6-1a1dc0d0b43a)

Once you have completed the quiz, answer the questions below to assess your strengths and areas of development.

What did you score on the Kahoot quiz?

/ 16

What areas of Learning Outcome F can you identify as your strengths after playing the quiz?

What areas of Learning Outcome F can you identify as your development areas after playing the quiz?

How do you plan to develop the areas you have identified to increase your knowledge and understanding of these topics?

**Activity 20 – Word Scramble Learning Outcome F**

1. GSORS FIROTP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. TEN FTIORP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. QUDIIL LTIPACA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. TCRUENR OTARI \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. AANFCILNI IPIOSTNO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. EERMVHESOICNP OCNIME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. XSENEPES \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. NEIVTRNOY \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. ADRNCETOIPIE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. EADTR IEVCREAELB DAYS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. NVEEURE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. LLSEIAITBII \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Activity 21 – Word Search Learning Outcome F**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H | J | S | H | Y | O | G | T | G | W | D | Q | X | J | C | K | L | E | T | V | N | O | P | X |
| E | P | R | H | N | T | D | R | D | E | L | W | B | G | O | D | J | K | R | E | O | S | F | M |
| O | Z | X | C | E | I | W | A | X | V | C | B | Y | G | M | Z | V | D | S | L | I | N | M | A |
| R | H | X | A | U | F | Y | D | T | T | U | I | Z | X | P | K | X | O | V | V | T | C | C | Q |
| N | B | J | W | G | O | X | E | Y | D | L | H | S | B | R | A | U | U | F | R | A | U | N | Y |
| G | U | I | F | Z | R | E | R | J | D | J | H | C | J | E | O | Q | Z | T | U | I | C | G | V |
| O | Q | V | S | X | P | O | E | W | H | C | A | U | K | H | J | F | B | R | W | C | O | B | E |
| S | S | R | E | R | T | L | C | L | T | R | L | R | Z | E | O | H | S | W | J | E | V | I | O |
| G | P | Z | J | N | E | I | E | G | L | U | H | R | Q | N | K | Q | Q | Y | K | R | X | T | O |
| H | Y | R | E | Z | N | A | I | U | V | Q | W | E | D | S | G | Y | E | L | N | P | G | G | M |
| W | M | V | M | H | J | B | V | X | K | S | L | N | I | I | Q | S | K | H | V | E | R | S | S |
| U | N | S | O | P | V | I | A | P | D | I | A | T | F | V | J | U | S | C | I | D | O | V | C |
| I | E | E | B | O | Z | L | B | P | I | O | E | R | O | E | P | C | E | B | G | P | S | D | R |
| O | J | S | S | U | C | I | L | E | C | V | Q | A | U | I | D | O | S | L | S | Q | S | W | E |
| O | A | N | A | N | Y | T | E | B | P | C | B | T | X | N | S | E | T | Q | C | Q | P | S | V |
| H | G | E | M | V | D | I | D | H | S | L | O | I | U | C | F | E | H | Z | I | B | R | N | E |
| D | N | P | J | R | C | E | A | G | T | S | A | O | R | O | Y | A | U | A | S | Y | O | I | N |
| T | L | X | L | E | T | S | Y | R | P | W | B | V | F | M | G | E | F | G | T | H | F | U | U |
| U | P | E | O | Q | J | Y | S | P | M | N | U | K | Z | E | J | W | M | W | Z | E | I | A | E |
| E | O | G | Z | V | K | P | C | C | Q | A | J | M | Z | Y | A | I | L | I | R | F | T | Q | D |
| P | L | A | T | I | P | A | C | D | I | U | Q | I | L | X | U | L | T | F | W | W | G | B | L |
| B | T | W | Z | D | P | Y | I | O | F | Z | L | P | A | W | N | J | Z | T | Y | K | J | V | Y |
| N | A | S | D | T | V | L | C | R | T | M | J | R | E | X | F | F | X | T | G | S | L | U | D |
| S | D | O | C | H | L | N | O | I | T | I | S | O | P | L | A | I | C | N | A | N | I | F | L |

   Liabilities       Revenue       Trade receivable days       Depreciation       Inventory

     Expenses       Comprehensive income       Financial position       Current ratio

Liquid capital       Net profit       Gross profit

**Activity 22 – Ratios Crossword Learning Outcome F**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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|  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 4 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |
| --- | --- |
| **Across**  **2.** Net profit ÷ revenue x 100 =  **4.** Trade receivables ÷ credit sales x 365 =  **6.** Current assets ÷ current liabilities =  **7.** Average inventory ÷ cost of goods sold x 365 =  **8.** Trade payable ÷ credit purchases x 365 =  **9.** Gross profit ÷ revenue x 100 = | **Down**  **1.** Current assets - inventory ÷ current liabilities =  **3.** Gross profit ÷ cost of goods sold x 100 =  **5.** Net profit ÷ capital employed x 100 = |

**Activity 23 – Personal and Business Finance Learning Outcome F**

|  |  |  |
| --- | --- | --- |
| **Unit 3: Personal and Business Finance Checklist** | | |
| **Learning Outcome F: Complete statements of comprehensive income and financial position and evaluate a business's performance** | | |
| **Topic** | **Your explanation of the terminology** | **Exam ready?** |
| **F1 – Statement of comprehensive income** | |  |
| Purpose & Use |  |  |
| Completion of a statement of comprehensive income |  |  |
| Calculating a statement of comprehensive income |  |  |
| Amending a statement of comprehensive income |  |  |
| Adjusting for depreciation |  |  |
| Adjusting for prepayments & accruals |  |  |
| Interpretation, analysis and evaluation of statements |  |  |
| **F2 – Statement of financial position** | |  |
| Purpose & Use |  |  |
| Completion of a statement of financial position |  |  |
| Calculating a statement of financial position |  |  |
| Amending a statement of financial position |  |  |
| Adjusting for depreciation |  |  |
| Adjusting for prepayments & accruals |  |  |
| Interpretation, analysis and evaluation of statements |  |  |
| **F3 – Measuring profitability** | |  |
| Calculating gross profit margin |  |  |
| Calculating net profit margin |  |  |
| Calculating mark-up |  |  |
| Calculating return on capital employed (ROCE) |  |  |
| Analysis & evaluation of profitability ratios |  |  |
| **F4 – Measuring liquidity** | |  |
| Calculating current ratio |  |  |
| Calculating liquid capital ratio |  |  |
| Analysis & evaluation of liquidity ratios |  |  |
| **F5 – Measuring efficiency** | |  |
| Calculating trade receivable days |  |  |
| Calculating trade payable days |  |  |
| Calculating inventory turnover |  |  |
| Analysis & evaluation of liquidity ratios |  |  |
| **F6 – Limitations of ratios** | |  |
| Limitations of ratios when assessing business performance |  |  |