# Business Skills for Chemists The Basic Rules of Business 

Developed by the University of Nottingham
This resource was produced as part of the National HE STEM Programme

## The Basic Rules of Business

## Finance

This resource aims to give students a basic appreciation of two of the key financial reports which accompany a business plan; specifically the Profit/Loss Report and the Balance Sheet.

Having worked through the associated PowerPoint presentation which describes how to complete these financial reports through simple worked examples, the students are challenged to complete a basic Profit/Loss Report and Balance Sheet for the hypothetical business, Chemistry Co.

All of the information required to complete these two reports, as well as the blank outline report spreadsheets are included within this handout, with the answers included in the PowerPoint presentation. This allows this case study to be implemented within the classroom setting.

## Implementing within the Classroom

1. Print the following handouts and distribute to the students.
2. Present the PowerPoint presentation which contains the worked example of a Profit/Loss Report being like Alan Sugar's bank statement, and stop at this point.
3. Allow the students time to complete the Profit/Loss Report Case Study for Chemistry Co. All of the information required is contained within the handout.
4. Continue with the PowerPoint presentation to work through the completed Profit/Loss Report for Chemistry Co. and establish that the company is in profit in the first quarter.
5. Continue to give the PowerPoint presentation and stop at the Balance Sheet Case Study.
6. Allow the students time to complete both parts of the Balance Sheet Case Study for Chemistry Co. All of the information required is contained within the handout.
7. Continue with the PowerPoint presentation to work through the completed Balance Sheet for Chemistry Co. and establish that the Balance Sheet balances as of $31^{\text {st }}$ December.
8. Continue to give the PowerPoint presentation to the end.

## Profit / Loss Report

## A Case Study for Chemistry Co.

On December $31^{\text {st }}$ the sales and dispatch department of Chemistry Co. reported that it has $£ 50,000$ of saleable chemical products in its store.

In the first quarter of the New Year, the company works hard to synthesize and sell some of the chemical compounds it produces.

During the first quarter, the company's credits and debits are:

| Item | $£$ | Credit or Debit |
| :---: | :---: | :--- |
| Sales income of chemical products | 185,000 |  |
| Business and Laboratory running <br> costs | 50,000 |  |
| Staff salaries | 55,000 |  |
| Invoice paid to chemical suppliers | 25,000 |  |
| Repayment of loans to bank | 25,000 |  |

Note: Consider carefully how we account for the $£ 50,000$ of stock carried over

## Questions

1. Label the entries in the accounts table above as credits or debits on the account of Chemistry Co.
2. Using the information in the completed table above, and the blank profit/loss spreadsheet below, calculate whether Chemistry Co. made a profit or a loss in the first quarter?
3. What was the value of this profit or loss?

| Sales income of chemical products |  |  |
| :---: | :--- | :--- |
| Business and Laboratory running costs |  |  |
| Staff salaries |  |  |
| Invoice paid to chemical suppliers |  |  |
| Repayment of loans to bank |  |  |
| Total Credit or Debit |  |  |
| Net Profit or Loss for $\mathbf{1}^{\text {st }}$ Quarter |  |  |

## The Balance Sheet

## A Case Study for Chemistry Co.

Chemistry Co. wants to see its company balance sheet as of the $31^{\text {st }}$ of December.

## Questions

Using the information in the table below please:

1. Label each item in the table as an asset, a liability or as capital/reserve.
2. Label each of the assets as a fixed asset (fixed or F) or variable asset (variable or V ).

| Item | £ | Asset, Liability <br> or Capital \& Reserve |
| :---: | :---: | :---: |
| Freehold of laboratory | 350,000 |  |
| Equipment used within the business <br> (inc. chemistry, I.T. etc.) | 775,000 |  |
| Business fixtures and fittings | 175,000 |  |
| Amount owed to chemical suppliers and bills | 25,000 |  |
| Stocks of chemicals within the laboratory | 25,000 |  |
| Stocks of saleable chemical products | 50,000 |  |
| Loan from bank (repayable in 5 years) | 250,000 |  |
| Venture capitalist investment | 500,000 |  |
| Cash in the bank | 125,000 |  |
| Capital invested by the owner | 375,000 |  |
| Accumulated profits (after 5 years trading) | 350,000 |  |

3. Using the information in the completed table above, complete the following blank balance sheet spreadsheet.
4. Do the books balance on this date (Yes or No)?

| Fixed Assets | £ | Liabilities | £ |
| :---: | :---: | :---: | :---: |
| 1. <br> 2. <br> 3. |  | 1. <br> 2. <br> 3. |  |
| Variable Assets | £ | Capital and Reserves | £ |
| 1. <br> 2. <br> 3. |  | $1 .$ |  |
| Total Assets |  | Total Liabilities \& Capital |  |

