

**THE CRIMSON PRESS CURRICULUM CENTER
THE CRIMSON GROUP, INC.**

**PRIMER ON
FINANCIAL ACCOUNTING**

AN INTERACTIVE, SELF-PACED TEXT

**Edition 1.3
2005**

**To order the complete copy of the primer go to www.thecrimsongroup.org
Click on Curriculum Center and follow the links.**

**by
DAVID W. YOUNG, D.B.A.
Professor of Accounting and Control
School of Management
Boston University**

**Distributed by
The Crimson Press Curriculum Center
The Crimson Group, Inc.
1770 Massachusetts Avenue
Cambridge, MA 02140
Voice: 617-497-9600
Fax: 617-576-7693
www.thecrimsongroup.net**

Copyright © 2005 by David W. Young and The Crimson Group, Inc. All rights reserved. To order copies or request permission to reproduce this document, contact The Crimson Press Curriculum Center at 617-497-9600 (Voice) or 617-576-7693 (Fax), or go to www.thecrimsongroup.net. Under provisions of United States and international copyright laws, no part of this document may be reproduced, stored, or transmitted in any form or by any means without written permission from The Crimson Group.

If you believe you have an illegal copy of this document, please notify the Curriculum Center. Thank you.

To the Instructor

This Primer has been written principally for a one-semester, user-oriented course in financial accounting, using the case method of instruction. Each chapter is designed to be covered in a one to two weeks, ideally over two or three classes of 1.5 to 2 hours each. It also has been used in a half-semester course on financial accounting for MBA students. Here, each chapter was covered in one to two class meetings of 2 hours each. Clearly, a great deal depends on the amount of depth that you wish to pursue and/or how quickly or slowly you wish to move through the material.

Students' preparation for the first class session associated with a given chapter should include reading the chapter, engaging in the interactive activities in the chapter, and analyzing the practice case at the end of the chapter. Please bear in mind that, because of the interactive nature of the chapters, students will need considerably more time to read them than in a more traditional text. They also will need to spend time analyzing the practice cases.

In this regard, it sometimes is useful to have an open class discussion following the students' reading of each chapter and preparation of the practice case. This discussion can serve to clarify the chapters's concepts, and to deal with any difficulties the students are having in using them.

After this class session, each remaining class for a given chapter can focus on a case study that requires students to use chapter concepts and techniques. This way, the concepts are first clarified and then used in the analysis of case situations.

If you wish help in selecting cases for your course, you should contact The Crimson Press Curriculum Center at the address shown on the first page or go to its Web site, which has information on some 200 cases and a list of suggested cases for each chapter.

WHY USE THIS PRIMER?

This is a non-traditional text in five important respects: user orientation, interactive learning process, length, organizational focus, and emphasis on the case method of instruction.

User Orientation

While it would be nice if a user orientation could be achieved without working through some of the details of accounting, that is not the goal. However, accounting details are discussed, only to the extent they are needed to understand the concepts and techniques used in most organizations. The term *used in most* is key in this regard. In general, the text does not cover exceptions to the rules or some of the possible variations on the traditional theme. Of course, the instructor can discuss these matters in class if he or she wishes to do so, supplementing the text, where necessary, with additional readings or exercises.

Interactive Learning Process

The Primer includes problems and mini-tests within the chapters. The idea is to shorten the "feedback loops" in the learning process. Rather than waiting until the end of a chapter to answer questions or analyze problems, students are requested to do so immediately following the discussion of a particular topic. Sometimes, if the discussion of a topic is lengthy, there are problems and mini-tests during the discussion. Despite this emphasis, some students may be tempted to shortcut this process, especially toward the end of the course. The instructor may need to remind the class at regular intervals of the importance of continuing the interactive learning process.

Length

The Primer is only nine chapters long. As such, it is ideally suited for a half-semester graduate-level course where, on average, a single chapter can be covered in one to two class sessions. Most of the chapters contain enough substance, however, that each could be covered at a more reasonable pace over two to three class sessions, and thus the Primer could be used rather easily in a one-semester course. If this approach is followed, students would have more time to digest the material in each chapter, and the instructor would be able to supplement the text with additional readings.

Organizational Focus

Many texts use manufacturing examples to illustrate accounting concepts and principles. This Primer uses both manufacturing and non-manufacturing examples. Many examples are of service organizations. As students will see, most accounting concepts are universal; thus, the type of organization used to illustrate a point is relatively unimportant. Service and nonprofit organizations are used as examples in recognition of their growing importance in the economy, and to help students see the universal applicability of the concepts. Moreover, most examples have been chosen with the hope that they will “resonate” with the student, as an organization with which he/she has some familiarity. The same is true for the practice cases at the end of the chapters.

Case Method of Instruction

Increasingly, accounting educators are recognizing the importance of using the case method in the teaching of accounting. Its value is that it puts students in the middle of the action, and requires them to be analytical—to apply principles rather than just memorize them. As such, it prepares students for work in a world where analysis, judgment, and attention to nuances increasingly are required for success.

The practice cases are all quite short, and might even be thought of as extended problems. The distinction between an extended problem and a case is not always clear, but a case usually is considered to be a situation where there is no right answer. With most of the cases, there are right answers, although as students will see, there is sometimes more room for judgment than they might initially imagine. Thus, what may seem like a problem frequently has some of the flavor of a more traditional case.

Use of Microcomputers. Given the technology available in the workplace today, students need to become proficient in the use of microcomputers in general, and spreadsheet packages in particular. To this end, several practice cases are good candidates for a relatively simple spreadsheet analysis, and students should be encouraged to use spreadsheet software in preparing their analyses of those cases.

ORGANIZATION OF THE PRIMER

The nine chapters are discussed below. The Table of Contents shows the major headings of each chapter.

Chapter 1. Introduction to Financial Accounting

This chapter provides a very brief introduction to financial accounting. It describes the balance sheet, some specific assets and liabilities, and discusses three of the nine fundamental accounting concepts. The chapter also provides some guidance to students in undertaking their first analysis of a set of financial statements. It concludes with a discussion of the operating and financing cycles.

Chapter 2. The Accounting System and Transaction Analysis

The financial accounting process moves in a regular rhythm, called the “accounting cycle.” This chapter discusses that cycle, and also devotes some attention to the technique of “transaction analysis,” i.e. the analysis of economic events that have an impact on an organization’s financial statements, and a determination of the accounting entries associated with them. The chapter also discusses three more of the fundamental accounting concepts, and introduces several new techniques and concepts.

Chapter 3. The Income Statement

In the first two chapters, the focus is on preparing a balance sheet, either via expanding upon the basic accounting equation of $\text{Assets} = \text{Liabilities} + \text{Equity}$, or via the use of transactions. With knowledge of the techniques for analyzing transactions presented in Chapter 2, students are ready to prepare an income statement. The purpose of this chapter is to discuss the income statement, and to provide some guidance in preparing one. By the time they have completed this chapter, students should be ready to analyze some relatively simple economic events

and do the accounting needed to prepare a balance sheet and income statement. The chapter also discusses the last three of the fundamental accounting concepts.

Chapter 4. Some Additional Concepts and Accounts

This chapter discusses several accounts and concepts that, for pedagogical purposes, were omitted in the first three chapters. These topics include prepaid expenses, unearned revenue, accumulated depreciation, bad debts, extraordinary items, dividends, and accelerated depreciation. With the basic conceptual understanding developed in the first three chapters, students should have a relatively easy time seeing how these new topics fit into an accounting system.

Chapter 5. Inventories and Fixed Assets

This chapter discusses the various kinds of inventories that can exist in an entity, placing most of the emphasis on manufacturing inventories, and demonstrating how a company's cost of goods sold can be calculated for a manufacturing company. It also discusses different methods for inventory evaluation, leases, and several other common fixed assets, such as land and intangibles.

Chapter 6. Liabilities and Shareholders' Equity

This chapter discusses several new accounts and concepts related to liabilities and stockholders' equity. These topics include bonds, different types of stock, stock splits, treasury stock, and dividends. Again, with the basic conceptual understanding developed in the first three chapters, students should have a relatively easy time seeing how these new topics fit into an accounting system.

Chapter 7. The Statement of Cash Flows

The third statement needed for a complete set of financial statements is the Statement of Cash Flows (SCF). The SCF can be somewhat difficult to understand, so a full discussion of it is deferred until students have attained some initial mastery of the financial accounting material. Students are shown how to prepare a relatively simple SCF, and the meaning and use of the SCF are discussed at some length. Additionally, this chapter discusses the importance of cash, and some of the issues involved in managing an organization's cash.

Chapter 8. Financial Statement Analysis Part I: Ratios

This chapter discusses financial ratios, by far the most common technique used to analyze a set of financial statements. By comparing the relationship between two or more items (i.e. a ratio) on one or more of an organization's financial statements, an analyst can obtain a great deal of insight about how the organization is managing its financial activities. The chapter discusses some of the more common ratios, classifying them into four categories: profitability, liquidity, asset management, and long-term solvency. It shows how the ratios are calculated, and how they can be interpreted.

Chapter 9. Financial Statement Analysis Part II: Accounting and Financial Management Issues

By combining the statement of cash flows, ratio analysis, and a general understanding of the contents of a set of financial statements, students can learn a great deal about how an organization is being (or has been) managed. This chapter discusses a general approach that students can take to perform an analysis of a company's financial statement, including making a distinction between accounting and financial management issues. It also looks in some depth at the concept of leverage and the role of profit.

TABLE OF CONTENTS

Page

Preface.....	i
Chapter 1. Introduction to Financial Accounting	
ROLE OF FINANCIAL ACCOUNTING.....	1
A Brief History	
The Fundamental Financial Accounting Statements	
Standards and Standard Setters	
The Role of Auditors	
LEVELS AND FLOWS.....	4
Relationship Between Levels and Flows	
The Nature of an Account	
THE BALANCE SHEET.....	5
The Entity Concept	
Dual Aspect Concept	
Structure of the Balance Sheet	
Analyzing the Relationship Between Current Assets and Current Liabilities	
IMPORTANT CONCEPTS.....	13
Asset Exchanges	
Leverage	
Money Measurement Concept	
The Double Entry Approach	
Unmeasured Value	
The Role of Cash	
Basis for Equity Changes	
PRACTICING WITH THE CONCEPTS.....	14
1. The Dual Aspect Concept	
2. The Balance Sheet	
3. Nature of Asset, Liability, and Equity Accounts	
4. Double Entry	
5. Equity Creation	
6. Non-Cash Activities	
FINANCIAL STATEMENT ANALYSIS.....	15
The Operating Cycle	
The Financing Cycle	
Financial Accounting versus Financial Management	
SUMMARY OF FUNDAMENTAL ACCOUNTING CONCEPTS COVERED.....	20
SUMMARY OF THE CHAPTER.....	20
Practice Case. Homeworks, Inc.....	21
APPENDIX TO CHAPTER 1.....	22
Chapter 2. The Accounting System and Transaction Analysis	
THE GOING CONCERN CONCEPT.....	25
THE COST CONCEPT.....	28

DEFINITION OF AN ASSET.....	29
Accounts Receivable	
Notes Receivable	
THE ACCOUNTING CYCLE.....	33
IMPORTANT POINTS.....	35
Cash vs. Retained Earnings	
Reductions in Retained Earnings	
Interest versus Principal	
The Dual Aspect Concept	
Net Resource Inflows and Outflows	
DEPRECIATION.....	37
Economic Life and Residual Value	
Some Caveats	
THE MATERIALITY CONCEPT.....	40
THE ACCOUNTING SYSTEM.....	41
The Concept of an Account	
The Chart of Accounts	
Accounting Transactions	
THE USE OF DEBITS AND CREDITS.....	48
Double Entry	
Rule of Thumb	
PRACTICE CASE.....	52
Beginning Balances	
Interest Expense	
Accrued Interest	
Accounts Receivable	
Wages Payable	
Paying off Accounts Payable	
SUMMARY OF FUNDAMENTAL ACCOUNTING CONCEPTS COVERED	53
SUMMARY OF THE CHAPTER.....	53
Practice Case. The Opera Workshop (A).....	54
APPENDIX TO CHAPTER 2.....	56
Chapter 3. The Income Statement	
MEASURING FINANCIAL PERFORMANCE.....	60
Measuring Profitability	
THE CONCEPT OF ACCRUAL ACCOUNTING.....	63
The Realization and Matching Concepts	
The Conservatism Concept	
Application of the Realization Concept	
Application of the Matching Concept	

Costs versus Expenses	
Expense versus Expenditure	
Product Costs versus Period Costs	
THE INCOME STATEMENT.....	71
Reason for an Increase in Retained Earnings	
The Accounting Period	
Revenue	
Cost of Goods Sold	
Gross Margin	
Operating Expenses	
Operating Income	
Interest Expense	
Income Before Taxes	
Provision for Income Tax	
Income from Continuing Operations	
Net Income	
FINANCIAL RATIOS.....	78
PREPARING THE INCOME STATEMENT.....	79
Debits and Credits to Income Statement Accounts	
Posting to the Ledger	
The Closing Process	
Structuring the Income Statement	
RELATIONSHIP BETWEEN THE BALANCE SHEET AND THE INCOME STATEMENT.....	85
SUMMARY OF FUNDAMENTAL ACCOUNTING CONCEPTS COVERED.....	85
SUMMARY OF THE CHAPTER.....	85
Practice Case The Opera Workshop (B).....	86
APPENDIX TO CHAPTER 3.....	88
Review of Chapters 1-3	
FUNDAMENTAL ACCOUNTING CONCEPTS.....	93
KEY CONCEPTS AND DEFINITIONS.....	95
NEXT STEPS	100
Chapter 4. Some Additional Concepts and Accounts	
NEW BALANCE SHEET AND INCOME STATEMENT ACCOUNTS.....	101
Prepaid Expenses	
Unearned Revenue	
Alternative Treatments	
Accumulated Depreciation	
The Allowance for Doubtful Accounts	

INCOME STATEMENT AND RETAINED EARNINGS ISSUES.....	110
Extraordinary Items	
Dividends	
The Statement of Retained Earnings	
ACCELERATED DEPRECIATION.....	114
Sum-of-Years'-Digits Method	
Declining-Balance Method	
Advantages of Accelerated Depreciation	
LINKAGES AMONG THE STATEMENTS.....	120
SUMMARY OF THE CHAPTER.....	121
Practice Case National Investor Association.....	122
APPENDIX TO CHAPTER 4.....	124

Chapter 5. Inventories and Fixed Assets

INTERACTIVE ACTIVITIES.....	130
INVENTORIES.....	130
Service Organizations	
Merchandising Organizations	
Manufacturing Organizations	
Cost of Goods Sold	
Accounting for Inventories and Cost of Goods Sold	
Accounting for Inventories When Prices are Changing	
Effect of Methods on Inventory Levels	
Choice of a Method	
Inventory Adjustments to Reflect Market Conditions	
LEASES.....	140
Operating Leases	
Capital Leases	
Accounting Treatments	
OTHER FIXED ASSETS.....	142
Land	
Intangible Assets	
Sale of Fixed Assets	

SUMMARY OF THE CHAPTER.....	145
Practice Case Arlington Boat Club.....	146
APPENDIX TO CHAPTER 5.....	148

Chapter 6. Liabilities and Shareholders' Equity

GAAP INCOME VERSUS TAXABLE INCOME.....	153
DEFERRED INCOME TAXES.....	154

BONDS.....	157
Fundamentals of Bonds	
Accounting for Bonds	
Issuance Costs	
Discounts and Premiums	
Accounting for Interest Expense	
Some Complications	
SHAREHOLDERS' EQUITY.....	169
Types of Organizations	
Types of Shareholders	
Dividend	
ACCOUNTING FOR SHAREHOLDERS' EQUITY.....	171
Common Stock	
Treasury Stock	
Dividends	
EARNINGS PER SHARE.....	174
The Price/Earnings Ratio	
Calculating EPS	
DEBT VERSUS EQUITY.....	175
SUMMARY OF THE CHAPTER.....	176
Practice Case A “Steel” Wheeler.....	177
Practice Case B. Prey Company, Inc.....	177
APPENDIX A TO CHAPTER 6.....	178
APPENDIX B TO CHAPTER 6 (The Concept of Present Value).....	181
Chapter 7. The Statement of Cash Flows	
THE CASH VERSUS ACCRUAL DILEMMA.....	185
Operating Activities	
Investing Activities	
Financing Activities	
PURPOSE OF THE SCF.....	186
PREPARING THE SCF.....	189
Direct Method	
Presentation Format	
Indirect Method	
Other Accounts	
Direct versus Indirect Method: Advantages and Disadvantages	
USING THE SCF.....	200
SUMMARY OF THE CHAPTER.....	201

Practice Case Energy Devices, Inc. (A).....	202
APPENDIX TO CHAPTER 7.....	203
Chapter 8. Financial Statement Analysis Part I: Ratio Analysis	
PURPOSE OF FINANCIAL STATEMENT ANALYSIS.....	205
Role of Ratios	
CATEGORIES OF RATIOS.....	207
Profitability	
Liquidity	
Asset Management	
Long-Term Solvency	
CALCULATING RATIOS.....	208
Profitability Ratios	
Liquidity Ratios	
Asset Management Ratios	
Long-Term Solvency Ratios	
VARIATIONS ON THE THEME.....	213
USING RATIOS FOR FINANCIAL STATEMENT ANALYSIS.....	214
Standards for Comparison	
The Need for Judgment	
A Disclaimer	
SUMMARY OF THE CHAPTER.....	217
Practice Case Energy Devices, Inc. (B).....	219
APPENDIX TO CHAPTER 8.....	221
Chapter 9. Financial Statement Analysis Part II: Accounting and Financial Management Issues	
PROCESS OF FINANCIAL STATEMENT ANALYSIS.....	224
Distinction Between Accounting and Financial Management Issues	
ACCOUNTING ISSUES.....	225
An Example	
Notes to the Financial Statements	
Incorporating Accounting Issues into the Analysis	
FINANCIAL MANAGEMENT ISSUES.....	229
Calculating Ratios	
Using the SCF	
Compiling Other Descriptive Information	
LEVERAGE.....	231
Drawbacks to Leverage	

THE ROLE OF PROFIT.....	233
Profit and Growth	
How Much Profit is Needed?	
THE ANALYTICAL PROCESS.....	236
Strategic Assessment	
Accounting Issues	
Financial Management Issues	
SUMMARY OF THE CHAPTER.....	238
Practice Case Weston Community Housing, Inc.....	229
APPENDIX TO CHAPTER 9.....	244

THE CRIMSON PRESS CURRICULUM CENTER

THE CRIMSON GROUP, INC.

Chapter 1. Introduction to Financial Accounting

Financial accounting is concerned principally with financial information prepared for distribution outside an organization. This chapter contains an introduction to financial accounting and briefly describes the statements used to present financial accounting information. It also provides some guidance to you in undertaking your first analysis of a set of financial statements. The learning objectives for this chapter are contained in Exhibit 1.

Exhibit 1. LEARNING OBJECTIVES

Upon completing this chapter, you should know about:

- The balance sheet and what it measures, including definitions of assets, liabilities, and owners' equity, the nature of an account, the distinction between current and non-current items, and the current ratio.
- The creation of owners' equity, and the basis for changes in it.
- Some specific assets and liabilities, including, cash, inventory, equipment, accounts payable, loans payable.
- Three of the nine fundamental accounting concepts: entity, dual aspect, and money measurement.¹
- Some basic accounting and finance concepts including, levels and flows, working capital, leverage, unmeasured value.
- The definition of revenues and expenses.
- Some basic techniques for financial statement analysis.
- Some of the distinctions between financial accounting and financial management, including the operating cycle and the financing cycle.

ROLE OF FINANCIAL ACCOUNTING

Financial accounting information plays an important role in our economy. It is used by managers, investors, financial analysts, creditors, regulators, and even employees and customers on occasion. All of these people need to understand both the current financial status of an organization, as well as the events that caused a change in that status from some prior point in time.

A Brief History

Accounting's roots can be traced to the Italian Renaissance and its emerging city states. At that time, as commerce among the city states was becoming increasingly significant, merchants began to recognize the need for improved record keeping, both to avoid mistakes in keeping track of financial information, and to provide them with better information on the performance of their businesses.

¹ The six remaining concepts are going concern, cost, conservatism, materiality, realization, and matching. They will be discussed in subsequent chapters.

Copyright © 2005 by David W. Young and The Crimson Group, Inc. All rights reserved. To order copies or request permission to reproduce this document, contact The Crimson Press Curriculum Center at 617-497-9600 (Voice) or 617-576-7693 (Fax), or go to www.thecrimsongroup.net. Under provisions of United States and international copyright laws, no part of this document may be reproduced, stored, or transmitted in any form or by any means without written permission from The Crimson Group.

If you believe you have an illegal copy of this document, please notify the Curriculum Center. Thank you.

The breakthrough came when an Franciscan monk, Fra. Luca Pacioli, devised the system of double-entry bookkeeping that remains the cornerstone of accounting today. Fra. Pacioli, a mathematician, reasoned that if instead of making a single entry to the accounts each time a transaction took place, a bookkeeper made two entries in two different accounts, there could be a system of checks and balances. His insight gave rise to the *dual aspect concept* of accounting, which we will examine later in this chapter.

The Fundamental Financial Accounting Statements

The purpose of an accounting system is to collect, summarize, and report information concerning the impact of various business events upon an organization's *financial status* and *financial performance*. Organizations periodically report their financial status as of a certain date, and their financial performance for some period of time preceding that date, called the *accounting period*. They do this on four separate financial statements: the balance sheet, the income statement, the statement of retained earnings, and the statement of cash flows.

The *balance sheet* is a financial status report, usually prepared as of the last day of the accounting period. The *income statement* is a financial performance report for the accounting period. The *statement of retained earnings* explains the changes that took place in the owners' (as opposed to the lenders') claims on the organization. The *statement of cash flows*, or *SCF*, explains in an organized way the reasons for any change in the organization's cash during the accounting period.

Standards and Standard Setters

For financial accounting information to be useful to readers of financial statements, it must be collected and presented in a reasonably similar fashion by all organizations. As a result, the accounting profession has developed a set of standards, called *Generally Accepted Accounting Principles*, or *GAAP*. The goal of these principles is to try to assure financial statement users that a particular item means essentially the same thing on the financial statements of any organization doing business in any industry. As we will see, this is a tricky proposition, and despite the presence of GAAP, most organizations have considerable latitude in the way they interpret information and present it on their financial statements. Indeed, as the financial scandals in the first few years of the 21st century demonstrated, sometimes the latitude extends beyond a legitimate choice in the application of GAAP to a serious misrepresentation or downright fraud.

The Financial Accounting Standards Board. The development of accounting principles is the responsibility of the *Financial Accounting Standards Board*, or the *FASB*. The FASB is a private sector body with seven full-time members and a large staff. It has an annual budget of about \$15 million, which is contributed by a variety of organizations, including public accounting firms.

In setting accounting standards, the FASB works closely with the accounting profession, especially the American Institute of Certified Public Accountants, or AICPA. Prior to issuing a new standard, the FASB issues discussion papers, solicits testimony from interested parties, and, in general, follows an open process. Nevertheless, many of its pronouncements concerning accounting standards are highly controversial.

Public Company Accounting Oversight Board. Following the accounting scandals of the early 2000s, the U.S. Congress passed the Sarbanes-Oxley bill, which was signed into law in 2004. Sarbanes-Oxley mandated several actions in an attempt to create a more arms-length relationship between companies and their auditors. Among other steps, it restricted the provision of non-audit services by an organization's auditing firm, mandated the rotation of the lead auditor from the firm conducting the audits, and instituted a one-year "cooling off" period between the time a partner resigned from his or her firm and when he or she could be employed by the client. In addition, the law created the Public Company Accounting Oversight Board (called "the Board"), which was charged with monitoring the provisions of the act.²

² A more complete summary of the Sarbanes-Oxley Act of 2004 can be found at www.aicpa.org/info/sarbanes_oxley_summary.htm. The full text of the Act itself may be found at <http://news.findlaw.com/hdocs/docs/gwbush/sarbanesoxley072302.pdf>

According to the act, the Board is to have five full-time “financially-literate” members, appointed for five-year terms. The members are to be appointed by the Securities and Exchange Commission (SEC). The head of the SEC is to “consult” with the Chairman of the Federal Reserve Board and the Secretary of the Treasury prior to making the appointment. The SEC may remove any of these members at any time “for good cause.”

In an attempt to assure the board’s independence as well as a focus that is broader than just accounting, per se, the Act requires that two of the members must be or have been certified public accountants, but that the remaining three members *must not be and cannot have been* certified public accountants (CPAs). The Chair may be held by one of the CPA members, provided that he or she has not been engaged as a practicing CPA for five years. In addition, during their service on the Board, the members may not share in any of the profits of, or receive payments from, a public accounting firm (other than fixed continuing payments, such as retirement payments).

The Internal Revenue Service. In many instances, the Internal Revenue Service (IRS) has accounting standards that differ from GAAP. For this reason, an organization usually must prepare two sets of financial statements: one according to the guidelines of GAAP, and one for tax purposes. There is nothing illegal or unethical about this; rather, there are two sets of standards and guidelines that are not always consistent with each other. In general, we will not be concerned with tax accounting in this book, although in later chapters we will see how the guidelines for tax accounting affect the financial statements prepared under GAAP.

Nonprofit and Governmental Organizations. Nonprofit and governmental organizations march to the beat of yet a different drummer. Many nonprofit organizations use something called *fund accounting*, and the financial statements of most governmental organizations differ considerably from financial statements prepared according to GAAP. Moreover, the standard setting organization for state and local government organizations is not the FASB, but the *GASB* (for *Government Accounting Standards Board*).³ The GASB is similar to the FASB (and is located in the same building), but it has a smaller staff and budget, and has not been in operation as long as the FASB.

The Role of Auditors

Any company wishing to have its stock traded publicly, i.e., on a stock market, must have its financial statements audited by a CPA. Most healthcare organizations, except for very small ones, also have their financial statements audited by a CPA. Many CPAs work independently or in small- to medium-sized public accounting firms. Others work for one of the four large international public accounting firms.⁴

Although an audit could be conducted by a single CPA, most audits are conducted by audit teams. An audit team usually consists of one of the firm’s partners, who is in charge of the audit, and several other members of the firm who, while CPAs, have not yet achieved partnership status.

The auditors’ role is to determine if an organization—their client—followed GAAP in the preparation of its financial statements. At the conclusion of its audit, the auditors issue an *opinion letter*, usually signed by the firm itself, not by the individuals who conducted the audit. The opinion letter states that the auditors conducted all reasonable tests to ascertain whether the company’s accountants followed GAAP in preparing the financial statements.⁵

³ For a brief treatment of financial accounting in nonprofit and governmental organizations, see Anthony, Robert N., and David W. Young, *Management Control in Nonprofit Organizations*, 7th Edition, Burr Ridge, IL, Irwin/McGraw Hill, 2003, Chapter 3. For a more extensive treatment, see Emerson O. Henke, *Introduction to Nonprofit Organization Accounting*, Cincinnati, Ohio, South-Western Publishing Co., 4th Edition, 1992. See also Leon E. Hay and Earl R. Wilson, *Accounting for Governmental and Non-profit Entities*, Homewood, Illinois, Richard D. Irwin, Inc., 9th edition, 1992.

⁴ The four firms are Deloitte & Touche, Ernst & Young, Peat Marwick Main & Co., and PricewaterhouseCoopers. Some consolidation has taken place over the past few years to create these four, and one firm (Arthur Andersen) went out of business following the Enron debacle. Further consolidation is, of course, possible.

⁵ Note that the financial statements are *prepared* by the *company’s* (client’s) accountants. The underlying information and accounting practices that went into the statements are the subject of the *audit*. This is the case in most medium-sized and large organizations. In small organizations, the statements actually may be prepared by the auditors, who also audit the underlying information and records they used to prepare the statements.

If the auditors believe that the company followed GAAP, and that there were no material errors or omissions, they give the company what sometimes is called a *clean opinion*. If, in the auditors' judgment, the company did not follow GAAP, or if the auditors believe there were material errors or omissions, they give the company a *qualified opinion*. In giving a qualified opinion, the auditors indicate that the accuracy of the financial statements is subject to question in certain areas, which they specify in their opinion letter.

LEVELS AND FLOWS

Much of what we do financially is built around the idea of levels and flows. If, for example, we wish to determine whether someone is wealthy, we might look at how much that person owns as of a given *point in time*, such as cash in a bank account, an automobile, a house, or other property. Alternatively, we might look at how much the person accumulates during a given *period of time*, such as his or her salary for a year, less his or her personal expenses for that year. If we look at what a person owns as of a point in time, we are concerned with the *level* of his or her resources, sometimes called *assets*. If we look at accumulation during a period of time, we are concerned with the *flow* of resources.

In accounting, resource inflows are called *revenues*, and resource outflows are called *expenses*. (There are some exceptions to these generalizations which we will discuss later.) Revenues arise from the sale of an organization's goods or services to its customers. Expenses are incurred by the organization in the course of earning its revenues. An example of an expense is the rent a company pays for its offices.

The difference between revenues and expenses is called *income*. Income can have many modifiers, such as *operating income*, *income before tax*, and *net income*. All of these will be discussed in later chapters. Also, in practice, we occasionally encounter some confusing terminology. For example, some people use the term *income* to mean what accountants call *revenue*. Finally, as we will see in later chapters, revenues and expenses pose some conceptual problems in terms of their relationship to cash. This is because revenue *earned* is not necessarily cash *received*, and *expenses incurred* are not necessarily cash *paid out*. This somewhat counter intuitive aspect of accounting will be discussed in later chapters.

Relationship Between Levels and Flows

Levels and flows are related. For example, if your salary during a given period of time exceeds your personal expenses, you add to your level of your wealth. To illustrate, assume that as of December 31, 2004, you had the following personal asset:

Cash in checking account	\$6,000
--------------------------	---------

The \$6,000 is the beginning *level* of your asset, cash. During 2005 you earned \$40,000 and had expenses of \$38,000. These are your *flows*. You deposit the \$40,000 in your checking account, and you write checks for \$38,000. Therefore, as of December 31, 2005, you had the following asset:

Cash in checking account	\$8,000
--------------------------	---------

The level of your personal asset increased by \$2,000 as a result of the *net inflow* of resources from your salary and personal expenses. Since you had a beginning level of \$6,000 and net inflows of \$2,000, you had an ending level of \$8,000.

The Nature of an Account

The above activities describe the nature of an *account*. All of financial accounting uses this basic building block. Everything that appears on a set of financial statements is derived from an organization's accounts, and each account behaves in exactly the same way. Specifically:

- It has a beginning level, called the *beginning balance*.
- It is increased with inflows and decreased with outflows (but not always with revenues and expenses).
- It has an ending level, called the *ending balance*.

To illustrate, the behavior of your checking account was as follows:

Beginning Balance	\$ 6,000
Inflows	40,000
Outflows	(38,000)
Ending Balance	\$ 8,000

Organizations have many different accounts in their accounting systems. Regardless of the number of accounts, however, each always behaves in exactly the same way: it has a beginning balance, is increased with inflows, decreased with outflows, and the result is an ending balance. The accountant's task is to determine the accuracy of the balances and the amounts of the inflows and outflows. As we will see, while simple sounding, this task can become quite complicated in practice.

THE BALANCE SHEET

As discussed above, the financial statement that is used to show an organization's levels (or status) as of a particular date is called the *balance sheet*. A balance sheet should always indicate the relevant ending date, i.e., the date when the ending balances were calculated.

It is important to understand that a balance sheet is prepared *as of* a particular date. This does not mean that it was prepared *on* that date. Thus, a balance sheet for December 31, 2002 probably was prepared in early 2003.

To illustrate how a balance sheet works, assume that you have decided to form a company that will purchase toys from manufacturers and distribute them to retailers. You have decided to call your company Toys FR' Kids. To begin your company, you must engage in a variety of activities. Many of these will affect your ability to be profitable, but will not appear directly on your financial statements. Others will show up in some form on your financial statements. Among these latter activities are the following:

- You plan to purchase some special equipment for storing, packing, and shipping the toys.
- You plan to purchase some toys from manufacturers in preparation for sales to retailers.
- You plan to pay salaries, rent, utilities, and other expenses.

Assume that the amounts associated with the above items are as follows:

• Purchase of special equipment:	\$240,000
• Purchase of toys:	200,000
• Annual salaries:	300,000
• Annual rent, utilities, and other expenses:	180,000

The special equipment and toys you will need to purchase immediately. The salaries and other expenses, by contrast, will occur fairly evenly throughout the first year of your operations. Let's assume that you would like to have enough cash on hand after buying the equipment and toys, to pay for two months of salaries and other expenses, plus a \$1,000 cushion for unanticipated needs. Therefore, to begin your business, you will need to have the following amount of cash:

To purchase special equipment	\$240,000
To purchase toys	200,000
To pay two months of salaries (30,000÷12= \$2,500 per month; \$2,500 per month x 2 months)	50,000
To pay two months of other expenses (18,000÷12 = \$1,500 per month; \$1,500 per month x 2 months)	30,000
Cushion	<u>10,000</u>
Total	\$530,000

This means that before you can even begin operations, you must have a total of \$530,000 in cash. Where do you get it?

There are only two sources for this cash: investors and lenders. Investors are individuals who will provide you with resources (generally cash) in return for some ownership in your company. Lenders will provide resources (usually cash) without expecting ownership; instead, they expect to have their loans repaid with interest.

The Entity Concept

You may decide to be an investor in your own company. This happens all the time. When it does, accountants must distinguish between two entities: you as an individual and your company. Your company may be a sole proprietorship, a partnership, or a corporation. As a sole proprietorship, there is only one owner (and investor)—you. A partnership, by contrast, has two or more owners (who generally, although not necessarily always, also are investors). A corporation also has two or more owners, generally many. Unlike a partnership, however, it is an entity that is legally distinct from its owners.

Regardless, of the form chosen for a company, the entity concept holds, namely, for accounting purposes, the company is a *separate entity* from its owners. As such, if you decide to form a corporation (by far, the most common business form), you as an individual can lend money to your corporation—the accountants treat you and your corporation as two separate entities, and keep separate accounting records for each. Let's see how the entity concept works for Toys FR' Kids.

To get the business off the ground, you decide to invest some of your own funds in it. You remove some cash from your savings account, and take out a second mortgage on your house. When you are all finished, you have amassed \$200,000, which you invest in your newly-formed corporation. You expect that, over time, this investment will grow in value as the corporation earns profits.

How do you account for what is yours and what is the corporation's?

To help resolve this question, we need to distinguish between the two different entities: you and your corporation. For example, the fact that you have borrowed on a second mortgage to obtain some of the cash that you invested in the corporation is of no consequence to the entity called Toys FR' Kids (the corporation). The mortgage is related to the entity "You." This is the *entity concept*.

The discussion in the remainder of this chapter will focus on the entity *Toys FR' Kids*, or TFK. The goal will be to help you understand how a variety of economic events affects the financial status of TFK. Let's begin with some of the steps you would take to create your new entity. First, since you have raised only \$200,000 of the \$530,000 that is required to get started, you must find some additional cash.

Let's assume that you convince a friend to invest \$200,000, and a bank to lend you the remaining \$130,000 on a one-year note (or loan) at an interest rate of 9.6 percent (per year). On January 2, 2002, having completed the necessary legal work to form the corporation, you put the \$530,000 into a bank account in the name of the corporation, Toys FR' Kids.

So far, TFK has purchased no toys for resale, has sold nothing, and has no employees. But it does have \$530,000 in cash in a bank account. This \$530,000 was received from investors (totaling \$400,000) and lenders (\$130,000). For financial accounting purposes, the entity must be able to reflect its status as of January 2, 2002. This is the purpose of the balance sheet.

.....
Problem: How would you set up the balance sheet for Toys FR' Kids? Prepare your own analysis below before looking at the answer that follows. Do so using your intuition of how you might set up the information so someone else could make sense out of it



.....
It is extremely important that you write out your own answer before looking at the one given.

Please do not shortcut this feature of the learning process.

If you have not written an answer yet, please do so *before* you continue reading.

.....
 Answer: The accounting answer relies on the fact that all transactions must be represented by at least two separate items. For example, take the investment of \$400,000 (\$200,000 of which is yours and \$200,000 of which is your friend's). The result was the creation of \$400,000 in cash in a bank account and the creation of *ownership* of \$400,000, called *contributed capital*. Similarly, the \$130,000 loan led to an additional \$130,000 in cash, and the creation of a *bank loan debt* of \$130,000. The result is a *balance sheet* (so named because its two sides must balance) that might look as follows:

**Toys FR' Kids
 Balance Sheet
 As of January 2, 2002**

Cash	\$530,000	Bank loan	\$130,000
		Contributed capital	<u>400,000</u>
Total	\$530,000	Total	\$530,000

.....
 Note that we have not distinguished between the portion of cash in the bank account that came from lenders and the portion that came from investors. We don't need to, since the distinction is shown on the other half of the balance sheet. We also don't identify on the balance sheet the number of owners or the amount each owns, although this information would be kept somewhere in the company's records. Indeed, a corporation must keep this information so that it can provide its owners with information about the company, dividends on their investments, and other items which will be discussed in later chapters.

In financial accounting, the left side of the balance sheet is called *assets*, and the right side is called *liabilities and equity*. Because of the dual aspect of accounting, *assets must always equal liabilities and equity*. This is not an empirical proposition; it is true by definition. Whatever happens in financial accounting—whatever entries the accountant makes to the system, whatever purchases, sales, etc. that take place by the company—cannot change this fundamental equality. As a result, the basic accounting equation is

$$\text{ASSETS} = \text{LIABILITIES} + \text{EQUITY}$$

Dual Aspect Concept

This equality is known as the *dual aspect concept* of accounting. *Assets* are those things an entity owns or has claim to, *liabilities* represent obligations of the entity to outsiders, and *equity* represents obligations of the entity to its owners. Under these circumstances, when an organization increases its assets, it does so either by borrowing the funds from outsiders to finance the increase, or by obtaining the funds from its owners.

Every accounting-related event that takes place in an organization can be analyzed in terms of its effect on this equation. If one asset increases, the amount of its increase must be matched by (a) a decrease of an equal amount in one or more other asset accounts, (b) an increase of an equal amount in one or more liability accounts, (c) an increase of an equal amount in one or more equity accounts, or (d) some combination of the above. At the end of the process, the equation must balance (the overall totals may change, however).

Let's now look at the pieces that comprise the dual aspect concept in TFK.

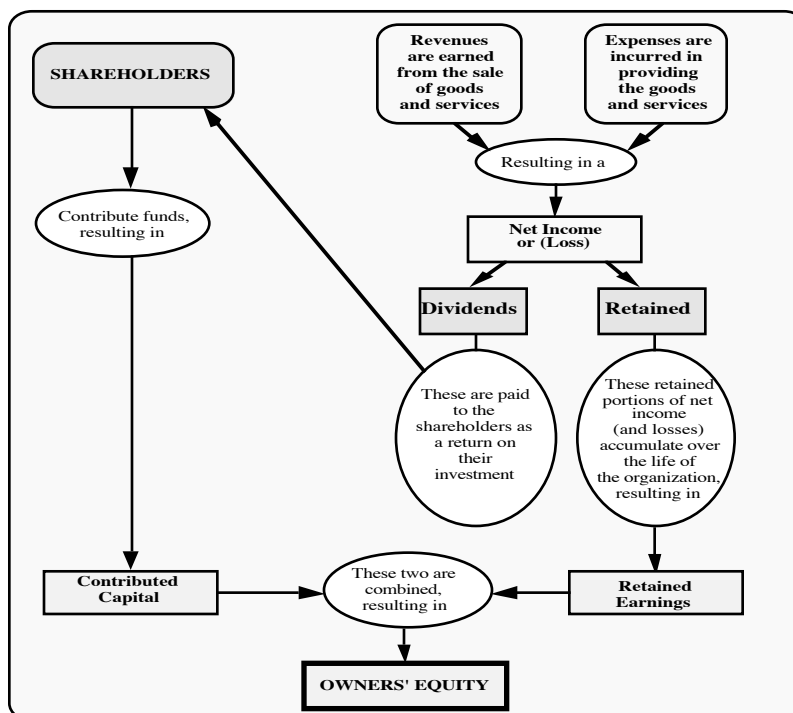
Assets. At the moment, TFK has only one asset: cash. Later we will change the composition of its assets.

Liabilities. Recall that liabilities result from resources that are provided to the entity by individuals and groups other than its investors. If a manufacturer sells us some toys and lets us wait for, say, 30 days before we must pay cash, that manufacturer has provided us with a resource—the toys—for which we have not had to pay any cash; instead, we have a 30-day loan, called an *account payable*. This is a liability—we owe the money to the manufacturer.

The bank that lent us \$130,000 also has provided us with a resource—cash—in exchange for a liability: a one-year loan. We have a liability because we owe the money to the bank. In general, the individuals or entities other than owners that provide funds to us are called our *creditors*. That is, they have extended us credit.

Equity. Equity (sometimes called “Owners' Equity” or “Shareholders' Equity”) consists of two parts, shown schematically in Exhibit 2.

Exhibit 2. SOURCES OF OWNERS' EQUITY



As Exhibit 2 indicates, one part of equity is provided by investors, and the other is earned by the entity during the course of doing business. *Contributed capital* consists of contributions that have been made to the company by investors in exchange for a share of ownership.

Retained earnings, the second part of equity, are the lifetime sum of a company's inflows (from revenues) and outflows (from expenses), less all dividend payments that have been made to the investors. A positive difference between revenues and expenses is called *net income* or *profit*; a negative difference is called a *loss*. As you will see later, dividends are not considered to be an expense, and thus are not included in computing net income.

Revenues are received from the sale of an organization's goods or services. Expenses are those resources that are consumed in the course of carrying out the organization's activities and earning revenue. Revenues, expenses, and dividends are discussed in detail in Chapter 3. As we will see then, and in later chapters, the measurement of both revenue and expenses can be quite tricky at times.

As Exhibit 2 shows, an organization's net income (or loss), less any dividends paid to its owners, accumulates over time. That is, the net income or loss shown on the income statement for any given accounting period, less dividends, results in a change in the *retained earnings* account on the balance sheet. These retained earnings are combined with *contributed capital*. The resulting total of these two is *owners' equity*.

Since TFK is a brand new organization on January 2, 2002, it cannot have any retained earnings. So far, it has only contributed capital.

Structure of the Balance Sheet

The balance sheet for an organization reflects the basic accounting equation. Usually, the left side (sometimes the top) of the balance sheet contains a listing of the organization's asset accounts and their amounts, and the right side (sometimes the bottom) lists the liability and equity accounts and their amounts. All accounting-related activities in an organization could be depicted solely through the use of the balance sheet. That is, an accounting-related activity will always affect some combination of asset, liability, and equity accounts.

Let's now recast the intuitive balance sheet shown above into its more formal format.

**Toys FR' Kids
Balance Sheet
As of January 2, 2002**

<u>Assets</u>		<u>Liabilities & Equity</u>	
Cash	\$530,000	Bank loan	\$130,000
Total current assets	\$530,000	Total current liabilities	\$130,000
Non-current assets	<u>0</u>	Non-current liabilities	<u>0</u>
		Total liabilities	\$130,000
		Owners' equity:	
		Contributed capital	\$400,000
		Retained earnings	<u>0</u>
Total assets	\$530,000	Total liabilities and equity	\$530,000

There are three items worth highlighting on this balance sheet: (1) the nature of assets, liabilities, and equity, (2) the relationship between specific asset accounts and specific liability or equity accounts, and (3) the concept of current and non-current accounts. Let's look at each separately.


Nature of Assets, Liabilities, and Equity. Since assets are resources that are owned or controlled by an entity, liabilities and equity can be viewed most easily as the ways the entity has *financed* its assets. Importantly, however, there rarely is a one-to-one correspondence between a given asset account and a given liability or equity ac-

count. Rather, the liability and equity accounts allow us to see how much of the *total assets* have been financed with debt (liabilities) and how much with the organization's own funds (equity). This is important because, as mentioned above, debt generally must be repaid while equity need not be.

Relationship Between Accounts on the Two Sides of the Balance Sheet. Note that we can see a rather clear relationship between the amount in the cash account and the portion of that amount that came from each provider (i.e., the bank and the owners). Over time, as the balance sheet becomes more complex, we will lose our ability to establish a one-to-one relationship between a given asset and a given liability. All we will know is that total assets are equal to the sum of total liabilities and equity.

Current versus Non-Current. The distinctions shown above between current and non-current assets, and current and non-current liabilities are important ones in accounting. A current asset is either cash or near cash (such as a money market fund), or is an asset that we would expect to use up or convert into cash within a year. We will discuss current assets in detail later on. Similarly, a current liability is a liability that we need to pay off in cash within a year. Since the bank loan is a one-year loan, it is considered to be a current liability.

Non-current items do not have this one-year-convertability characteristic. As you will see in subsequent chapters, the distinction between current and non-current items is an important one when we analyze an organization's financial statements. For the moment, however, consider the following:


.....
Problem: If an organization had current liabilities that exceeded its current assets by \$100,000, would you be concerned about its financial health? If so, why? If not, why not? Please write your answer below before looking at the answer that follows.


.....
Answer. The relationship between current assets and current liabilities is important because of the one-year-convertability criterion. If current assets are convertible into cash within one year and current liabilities are payable in cash within a year, then we would hope that, unless some very special circumstances existed (and they do for some companies) our current assets would at least equal our current liabilities. Otherwise we might not have the cash on hand to pay off the liabilities when they come due.
.....

Obviously timing differences within the year can affect the relationship between current assets and current liabilities. That is, some current assets will be collected fairly early in the year, and others will be created and collected during the year, while some current liabilities may not be due until near the end of the year. Nevertheless, if current liabilities *exceeded* current assets, we at least would have some cause for concern.

Analyzing the Relationship Between Current Assets and Current Liabilities

There are two relatively easy ways to analyze the relationship between current assets and current liabilities: the current ratio and working capital. The current ratio is computed by dividing current assets by current liabilities. Working capital is computed by subtracting current liabilities from current assets.
.....

Problem: Compute the current ratio and working capital for TFK.


.....

Answer. The current ratio is current assets ÷ current liabilities, or $\$530,000 \div \$130,000 = 4.1$. This generally is regarded as a healthy current ratio. Although there are exceptions, a current ratio of 2.0 or better generally is considered to be reasonable.

Working capital is current assets - current liabilities, or $\$530,000 - \$130,000 = \$400,000$. This means that Toys FR' Kids could pay off all of its current liabilities and still have \$400,000 in cash left over.

Now, try testing yourself to make sure you understand the concepts discussed so far.

Mini-Test #1



In each of the four situations described below, write out your answer on the balance sheet on the next page before looking at the one given in the Appendix. Assume that all of these events took place on January 3, such that your next balance sheet will be as of the close of business on January 3, 2002.

Situation #1. Additional Loan

TFK decides that it needs some more cash. Instead of asking the investors to contribute more or seeking additional investors, it approaches the bank that made it the \$130,000 loan originally. The bank agrees to lend TFK an additional \$160,000 on a two-year loan. The interest rate is 9.6 percent. The interest payment is due on the last day of each month, but the full amount of the loan itself is not due for two years. No interim principal payments on the loan are required.

How would this event change the balance sheet? Write your answer directly on the balance sheet on the next page, changing the account balances where necessary, and adding new accounts if needed. Then go on to Situation #2. **Do not look at the answer yet.**

Situation #2. Purchase Merchandise Inventory

TFK purchases \$60,000 of toys for resale, and pays its vendors in cash. These toys will be classified as Merchandise Inventory, which is a current asset on the balance sheet.

How would this event change the balance sheet? Write your answer directly on the balance sheet on the next page, changing the account balances where necessary, and adding new accounts if needed. Then go on to Situation #3. **Do not look at the answer yet.**

Situation #3. Accounts Payable

TFK purchases \$140,000 more of toys for resale. This time, the vendors of these toys tell TFK that it can wait for 30 days before paying for them. Therefore, there is an account payable on the balance sheet.

How would this event change the balance sheet? Write your answer directly on the balance sheet on the next page, changing the account balances where necessary, and adding new accounts if needed. Then go on to Situation #4. **Do not look at the answer yet.**

Situation #4. Purchase equipment

TFK purchases \$240,000 of equipment for cash. The equipment will appear as a non-current asset on the balance sheet.

How would this event change the balance sheet? Write your answer directly on the balance sheet on the next page, changing the account balances where necessary, and adding new accounts if needed.

Now look at the answer in the Appendix.

Spend some time comparing your solution with the one given.
If there are differences make sure you understand why they exist.
An explanation for each item follows the completed balance sheet.

WRITE YOUR ANSWERS HERE BEFORE LOOKING AT THE SOLUTION IN THE APPENDIX

**Toys FR' Kids
Balance Sheet
As of January 3, 2002**

	<u>Assets</u>		<u>Liabilities & Equity</u>
Cash	\$530,000	Bank loan	\$130,000
		Total current liabilities	\$
		Non-current liabilities	
Total current assets	\$	Total liabilities	\$
Non-current assets		Owners' equity:	
		Contributed capital	\$ 400,000
		Retained earnings	
Total assets	\$	Total liabilities & equity	\$

.....

IMPORTANT CONCEPTS

There are several important concepts that underlie the analysis of the Mini-Test. They are discussed below.

Asset Exchanges

When we use cash to purchase an asset, such as inventory, we do not affect either liabilities or owners' equity. We simply exchange one asset for another. In the case of Situation #2, we exchanged some cash (one type of asset) for some inventory (another type of asset). Nothing else changed. The same is true for the purchase of equipment in Situation #4.

Leverage

When we borrow from the bank or from our vendors (or other creditors), we give ourselves the ability to purchase more assets than we could if we had only cash from contributed capital. For example, if we had not borrowed from the bank, our beginning balance sheet would have shown only \$400,000 in cash and \$400,000 in contributed capital. There would have been no bank loan.

If we did not borrow from the bank or have our vendors extend credit to us, we could not have purchased both \$200,000 of inventory *and* \$250,000 of equipment, since the sum of these two items (\$450,000) exceeds the \$400,000 provided by investors. By borrowing from the bank and from our vendors, we gave ourselves the ability to purchase not only the \$200,000 of inventory and the \$250,000 of equipment, but to have \$390,000 left in our cash account after these purchases had been made.

The idea of using liabilities to finance asset acquisition is known as *leverage*. In effect, we use our liabilities as a “lever” to increase the amount of assets above what would have been possible with only equity.

As we will see in subsequent chapters, leverage can be very helpful but it also has some drawbacks. The most significant drawback is that liabilities ordinarily have a defined repayment schedule. Vendors usually want to be paid in 30 days, for example. Similarly, the bank wants its \$130,000 loan to be paid in one year and its \$160,000 loan to be paid in two years. We need cash for these repayments.

Money Measurement Concept

Financial accounting always measures items for the balance sheet (and other financial statements) in terms of money. This is called the *money measurement concept*.

To illustrate this concept, assume that your inventory consisted only of Nintendo electronic games at a cost of \$20 each, and a competitor's inventory consisted only of Barbie Dolls at a cost of \$10 each. The two inventories might look as follows:

<u>Number of</u>	<u>TFK</u>	<u>Competitor</u>
Nintendo games	1,000	0
Barbie Dolls	0	2,000

While it might be helpful for you to know this about your competitor (and for your competitor to know it about you), you will not be able to see this distinction on your balance sheets.

.....
Problem: How would the merchandise inventory account look on the two balance sheets?



TFK

Competitor

.....
Answer: The two merchandise inventories would be identical on the balance sheets of the two companies, as follows:

TFK 1,000 games at \$20 each = \$20,000

Competitor 2,000 dolls at \$10 each = \$20,000

.....

The Double Entry Approach

The double-entry approach is the mechanism for putting the above relationships into practice. That is, every accounting-related event that takes place must result in at least two entries to the accounting system. Only in this way will it be possible to maintain intact the basic equation of Assets = Liabilities + Equity. A single entry would destroy the equality of the relationship. Note that each of the above four situations required two changes to the balance sheet. Sometimes, three or more changes can take place, but in all cases, the result must be one in which assets remain equal to liabilities plus equity.

Unmeasured Value

There are many items of value to TFK that do not appear as assets on its balance sheet. For example, if you, the chief executive officer of TFK, have a great deal of experience in the toy business, you are of great value to the company. You know what kinds of toys children enjoy, which retail stores have the highest volume sales, which manufacturers have the best quality and best prices, and so forth. But this value does not appear anywhere on the balance sheet. As we will see in subsequent chapters, there are many things of value to a company that financial accounting does not measure.

The Role of Cash

As we will see in later chapters, cash is critical to the financial viability of an organization. Nevertheless, as we saw with Situation #3, for financial accounting purposes, some activities recorded on an organization's financial statements do not involve cash. As a result, the change in cash between two balance sheets frequently says very little about the profitability of an entity. As indicated earlier, the statement of cash flows (SCF) explains the reasons for a change in cash between two balance sheets. The SCF is discussed in detail in Chapter 7.

One of the most difficult aspects of financial accounting for beginning students is the fact that revenues do not necessarily correspond to cash received, and expenses do not necessarily correspond to cash paid out. Students typically require some practice with problems and cases before they fully understand this idea.

Basis for Equity Changes

Note that, although a fair amount of activity took place between the balance sheets of January 2, 2002 and January 3, 2002, none of that activity affected owners' equity. As discussed above, owners' equity can be affected in one of only two ways: changes to contributed capital and changes to retained earnings.

Contributed capital increases if investors (either existing or new ones) make additional contributions, and decreases if the company repurchases any of its outstanding shares of stock. The retained earnings account changes if the company earns revenue, incurs expenses, or pays dividends to its investors. Since TFK has not begun operating yet, it has had no opportunity to either earn revenue or incur expenses. It therefore has no retained earnings.⁶

It is important to emphasize that the *purchase* of inventory is not an expense. It simply is an exchange of assets. TFK will incur the expense (and earn revenue) when it *sells* the merchandise, not before (unless there is an unusual event such as a fire that destroys the inventory). We thus leave Toys FR' Kids poised for action. We will return to it in Chapter 2.

PRACTICING WITH THE CONCEPTS

To practice with these concepts, you should now work through the Practice Case, *Homeworks*. A solution is contained in the Appendix. You should work your way through the case completely before looking at the solution.

You should prepare the Homeworks case before reading further

The Homeworks case allows us to see most of the above concepts operationalized:

- 1. Dual Aspect Concept.** Throughout the case, the *Assets* side of the Balance Sheet remained equal to the *Liabilities + Equity* side. The totals changed, but the two sides always remained equal.
- 2. The Balance Sheet.** The balance sheet is the financial statement used to depict all the activity of the organization. Note that it has the asset accounts on the left and the liability and equity accounts on the right.

⁶ These matters are discussed in greater detail in Chapter 3. Further information on shareholders' equity, including dividends, is contained in Chapter 6.

3. **Nature of Asset, Liability and Equity Accounts.** At the end of the activities in the case, we see that the organization owns or controls some cash, supply inventory, and equipment. These assets total \$18,200. We also see that it has financed these assets with \$10,000 of contributed capital and \$8,000 of debt (or liabilities). \$3,000 of this debt is owed to the organization's suppliers and \$5,000 to the bank. The remaining \$200 of the assets were financed with retained earnings.
4. **Double-Entry.** Notice that each accounting-related event resulted in at least two entries to the accounts. For example, the initial contribution of capital resulted in an increase in the asset account *Cash* and an equal increase in the owners' equity account *Contributed Capital*. Similarly, the borrowing event resulted in an increase of \$5,000 in the asset *Cash* and an equal increase in the liability *Loan Payable*. The purchase of supply inventory on January 12 resulted in an increase of \$3,000 in the asset *Supply Inventory* and an increase of \$3,000 in the liability *Accounts Payable*. By contrast, the purchase of inventory on January 20 resulted in an increase of \$2,000 in the asset *Supply Inventory* but an equal decrease in the asset *Cash*.
5. **Equity Creation.** Equity was created in two ways, corresponding to the two sources shown in Exhibit 2. First, \$10,000 of contributed capital came from the owners, who are the shareholders, (they now hold shares of stock in Homeworks). Second, there is \$200 of retained earnings. This is because Homeworks earned \$200 during the accounting period—a result of the receipt of \$4,125 (\$1,875 + \$2,250) in revenue (from customer payments), less the payment of \$3,925 (\$875 + \$1,000 + \$1,050 + \$1,000) in expenses (wages to the service staff and salary of the president).

As a result of these two sources, the Owners' *Equity* account increased to \$10,200; this is shown on the final balance sheet. Note that contributed capital is shown separately from retained earnings.

With Homeworks, the measurement of revenue and expenses was quite easy, since all items were in cash. What may be less clear at this point is why the supply inventory and equipment purchases were considered to be assets rather than expenses. Although the reason for this will become clear as you work your way through the remaining chapters, you nevertheless should note that when both were purchased, there was no impact on equity. That is, when we bought the equipment we simply exchanged *cash* (an asset) for the *equipment* (another asset). Similarly, when we purchased the supplies on January 12, we increased *supply inventory* (an asset) by \$3,000 and increased *accounts payable* (a liability) by \$3,000. In neither instance did the organization's equity change.

An expense comes about through the *using up* of a resource—it is this that reduces equity. Thus, as the equipment deteriorates with use, or the supply inventory is consumed in the course of doing business, Homeworks incurs expenses. For reasons of simplicity, we do not see that happening here. What we do see, however, is labor being consumed, which is an expense.

6. **Non-Cash Activities.** Note that when the organization bought \$3,000 of supplies on January 12, none of the \$3,000 was paid in cash; the entire amount was on credit. This is an example of an activity that did not involve the use of cash and yet is relevant for financial accounting purposes.

FINANCIAL STATEMENT ANALYSIS

The last question asked in the Homeworks case provides us with an opportunity to begin to think about the process of financial statement analysis. One of the major questions that all organizations must ask themselves is how much debt they should have on their balance sheet, and what the term of that debt should be, i.e., how long the payment period should be.

Homeworks has two kinds of debt on its balance sheet: (1) accounts payable, which is debt that is owed to its vendors, and (2) a bank loan, which is debt owed to a bank. We know that the account payable is due on February 10. When is the bank loan due? Unless we know this, we cannot say with certainty whether Homeworks has too much debt or not.

Problem: Why is it important to know the term of the bank loan? Please think about this for a few minutes before looking at the answer that follows.



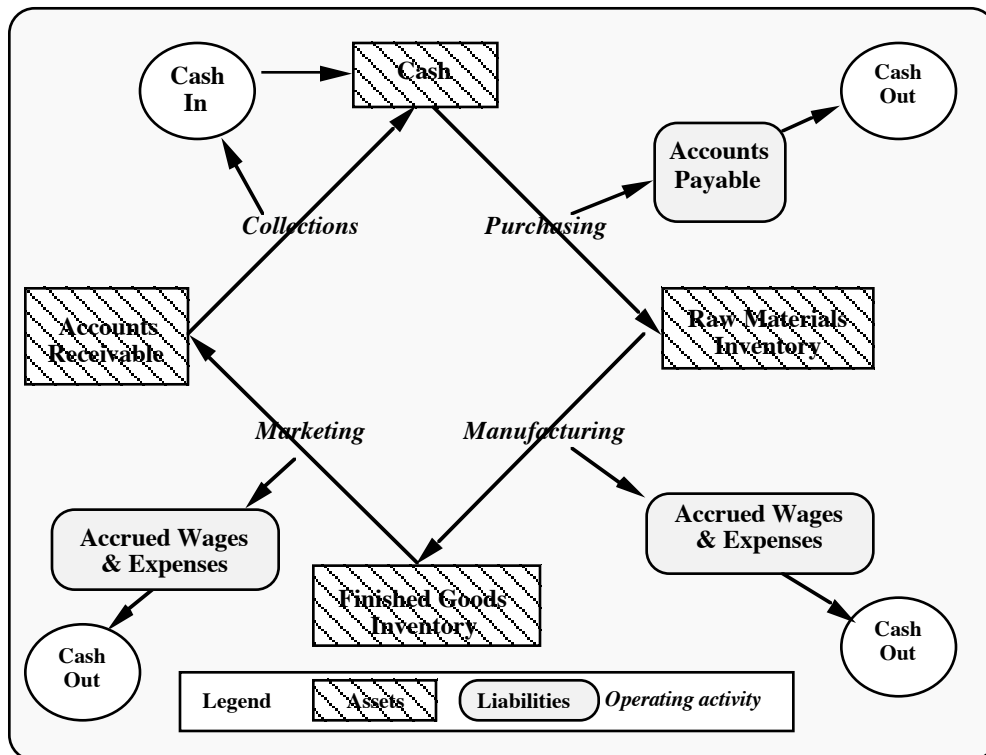
Answer: The answer to this question will become apparent as you progress through the remaining chapters, but for the moment, one important issue we must address for this organization is whether it will have enough cash on hand to meet its future obligations. That is, while the accounting process is indifferent with regard to cash, per se (i.e., a given transaction need not involve cash), managers are extremely concerned with cash. If an organization runs out of cash, it is in serious trouble. Among other things, employees and vendors cannot be paid, which jeopardizes the organization's financial viability.

The amount of cash on hand is affected by two cycles: the operating cycle and the financing cycle. Let's look at each separately.

The Operating Cycle

As indicated earlier, a transaction does not need to involve cash to be included on the financial statements. Nevertheless, as indicated above, it is important to have enough cash on hand to pay bills, meet payroll, and provide for many other operating expenses. This need gives rise to the concept of the operating cycle, which is the cycle that all organizations must manage to assure that there will be sufficient cash on hand to meet operating needs. The operating cycle is shown schematically in Exhibit 3.

Exhibit 3. THE OPERATING CYCLE



As Exhibit 3 indicates, in a start-up situation, operations begin with the purchase of some inventory. In a manufacturing organization this ordinarily is an inventory of raw materials. If we were manufacturing textbooks, for example, we would purchase paper, ink, glue for binding, and heavy stock for the covers.

Inventories differ in merchandising organizations (such as a retail store or TFK), where no manufacturing takes place, and in service organizations (such as a law firm), where no products are sold. Even service organizations typically need an inventory of supplies, however.

Generally, vendors will not require cash on delivery of the materials, such that an Account Payable is created (or is increased). As a result, the asset *Inventory* increases by the same amount as the liability *Accounts Payable*. Eventually, however, the organization's Accounts Payable must be paid in cash. Thus, there will be some "Cash Out," i.e., cash that is paid to the vendors.

Accounting Vignette
Occidental Petroleum

The cash manager at Occidental Petroleum, with annual check disbursements in excess of \$10 billion, learned that some suppliers were being paid early. He developed a series of measures to better monitor payments, and discovered that some payments for large invoices were being mailed out 10 to 12 days in advance of the due date. By changing the system to make payments on the due date by wire or with an automated clearinghouse (ACH) credit transaction, the cash manager was able to better manage one aspect of the company's operating cycle, and to realize substantial savings.⁷

In a manufacturing organization, the raw materials inventory is used up in the course of manufacturing the products, resulting in a finished goods inventory, which subsequently is shipped to customers. This, of course, requires some marketing and sales activities.

In carrying out its manufacturing and marketing activities, the organization incurs some expenses, such as wages for its employees, that are not paid out immediately in cash—some employees are paid biweekly, and others are paid monthly, for example. This gives rise to an account called *Accrued Wages*—the equivalent of an account payable for employees. The manufacturing and marketing activities also give rise to some other expenses that do not result in immediate cash payments. These will result in some *Accrued Expenses*. Eventually, these too must be paid out in cash. Of course, expenses such as rent and utilities are paid in cash at about the same time they are incurred.

Similar activities take place in merchandising and service organizations. Goods are sold (in a merchandising organization), or services are delivered to customers (in a service organization). Although the inventories are not transformed as they are in a manufacturing organization, they nevertheless must be paid for in cash, which usually happens before they are used up in the course of doing business.

Once the goods and/or services are delivered, the organization recognizes some revenue. However, in many organizations—particularly those that sell on credit (as most do)—the revenue is not received in cash immediately. Instead it takes the form of an *Account Receivable*. Only when these Accounts Receivable are collected, does the organization receive cash. At that point, the operating cycle begins again.

.....

Problem: Acton Manufacturing Company (AMC) purchases leather, plastic, and rawhide, and uses these raw materials to manufacture briefcases. It sells the briefcases to retail outlets.

The company began operations on January 1, when it purchased \$100,000 of raw materials. Its vendors gave it until February 1 to pay. During January, its employees earned \$50,000. Because of the timing of paydays, only \$40,000 of this amount was paid in January; the remaining \$10,000 will be paid in early February. AMC also incurred \$35,000 in other expenses, such as advertising and rent. Again, because of timing in payments, only \$30,000 was paid in January; the remaining \$5,000 will be paid in February.

⁷ Pisapia, Robert J., "The Cash Manager's Expanding Role: Working Capital," *Journal of Cash Management*, Vol. 10, Issue 7, Nov/Dec 1990.

During January, the company used up all its raw materials, and manufactured a total of 1,000 briefcases, all of which it sold to its outlets for \$250 each. Its customers did not pay cash in January, however, but all promised to pay by February 28. What happened to AMC's cash account during January? If it discontinues operations completely (including laying off its entire labor force) as of January 31, what will happen to its cash account in February?



January

February

.....
Answer: In January, cash declined by \$70,000: \$40,000 that was paid to manufacturing employees, and \$30,000 in other expenses. All other cash payments were deferred until February. There were no cash inflows during January.

In February, cash declined by \$115,000: \$100,000 for the raw materials, \$10,000 that was paid to manufacturing employees, and \$5,000 in other expenses. Cash increased by \$250,000 from the payment for the sale of the briefcases. The net increase thus was \$135,000, which more than offsets the decrease in January.

.....
The key point here is that the operating cycle can show wide variations in the amount of cash that flows into and out of the organization. This cycle must be carefully managed so that the organization does not run out of cash. We will explore issues related to the operating cycle in more detail in later chapters.

Accounting Vignette ***The Haggar Apparel Company***

The Haggar Apparel Company's *Haggar Order Transmission (HOT) Quick Response System* assists some 100 major merchants, representing about 26,000 stores, to better manage their operating cycles by reducing the amount of inventory they must carry. The system allows a retailer to use a PC software package to scan its inventory and produce orders in a relatively inexpensive way. This assists the retailer to order the merchandise it needs quickly and to keep inventories down.⁸

The Financing Cycle

Cash is paid out for activities other than operations. When, as happened in Homeworks, an organization purchases some equipment, it ordinarily must make the payment in cash. In some instances, organizations will *finance* these acquisitions with borrowings, such as bank loans or bonds. Eventually, however, these borrowing must be repaid, and generally some interest payments must be made as well. The sum of the payments to reduce the debt (called principal payments) and the interest payments (which represent the expense associated with using the creditor's funds) is called *debt service*. These relationships are shown in Exhibit 4.

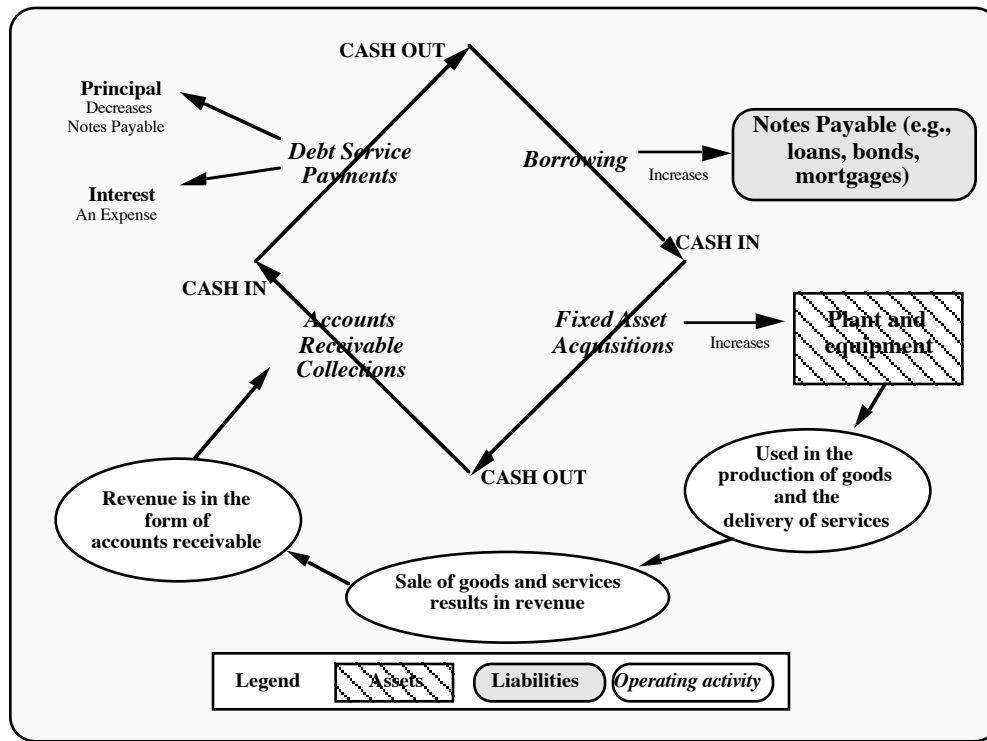
As this exhibit indicates, borrowing can increase an organization's cash (as can the receipt of contributed capital). Although, as Exhibit 3 indicated, some borrowing can consist of accounts payable and accrued wages, we usually include only more formal debt in the category called *borrowing*. This category includes bonds, mortgages, and other forms of bank loans or *notes*.

The resulting cash is used to purchase non-current (or fixed) assets, such as plant and equipment, and on occasion it is used to purchase inventory (a current asset). The fixed assets are used by the organization in the manufacture and/or merchandising of its products, or in the delivery of its services. Even a small organization that produces, say, quarterly newsletters usually needs a microcomputer, and it may also purchase some photocopying

⁸ "Haggar Makes the Modular Move in Slacks Production," *Bobbin*, Vol. 33, Issue 10, June 1992.

equipment. These are all fixed assets.

Exhibit 4. THE FINANCING CYCLE



As Exhibit 3 indicated, the sale of the company's products and services provides revenue, but usually in the form of Accounts Receivable, which eventually are collected in cash. The cash received from the collection of accounts receivable then can be used to make debt service payments—both principal and interest.

Managing this financing cycle is one of the most difficult tasks facing an organization. Senior management must make sure that there is enough cash on hand to purchase the fixed assets needed to produce the organization's products or deliver its services. But senior management also must worry about the timing of the cash inflows from the sale of products and services as compared to the timing of the required debt-service payments. Having a debt-service payment due before the cash is available to make it, can put an organization in serious difficulty with its lenders.⁹

Accounting Vignette
Zale Corporation

In December 1991, in the midst of a severe recession, Zale Corporation, the world's largest retail jewelry chain was counting on brisk Christmas sales to help it avoid bankruptcy.

The problem was the chain's heavy debt load coupled with operating losses and a lack of cash to meet its debt-service obligations. Zale's 1990 operating loss was \$54 million on sales of \$1.3 billion. Its second-quarter 1991 loss of \$85 million meant the company could not pay its bank credit lines, and was in default. Then, in early December, with debt of \$1.2 billion, it missed a \$52 million interest payment on its junk bonds.

⁹ For a fictional, but plausible and entertaining description of what happens when a company does not manage its financing cycle well, see Tom Wolfe, *A Man in Full*, New York, Bantam Books, 1999, Chapter 2.

The bondholders granted Zale a 30-day grace period, but without substantial Christmas sales, it would be unable to pay them by December 31. Some of its larger institutional bondholders were threatening to put the company into bankruptcy.¹⁰ Zale clearly was having a difficult time managing its financing cycle.

Financial Accounting versus Financial Management

Although liabilities (such as an account payable) can delay the *outflow* of cash, and accounts receivable delay the *inflow* of cash, eventually (with some minor exceptions that are not important at this stage of the learning process) all activities in the organization have an impact on cash. Although financial accounting measures the inflow or outflow of resources regardless of whether they are in cash, the organization's managers must pay careful attention to the associated cash flows. We will discuss this cash management activity in greater detail later. As we will see then, making sure there is enough cash on hand is not as easy as it might seem at first.

Recognizing the existence of an operating cycle and a financing cycle, and developing expectations for the amount of cash needed to make one complete rotation through each, is an important managerial task. By using some of the techniques discussed later, you will have an ability to measure managerial performance against these expectations. In large part, financial statement *analysis* consists of just this—comparing the financial performance of an organization against some set of standards that will allow us to make a judgment about the quality of the *financial management* activities within the organization.

SUMMARY OF FUNDAMENTAL ACCOUNTING CONCEPTS COVERED

Three fundamental accounting concepts were discussed in this chapter:

- | | |
|--------------------------|---|
| Entity | In financial accounting, records are kept and financial statements prepared for the organizational entity, as distinct from its owners. The owners may choose to have financial statements prepared for themselves, but when they do so, they are functioning as a different entity from the organization itself. |
| Dual-Aspect | Assets = Liabilities + Equity. |
| Money-Measurement | Items that appear on financial statements (as well as the accounting records that underlie them) are expressed exclusively in monetary terms. Items that can be counted must be expressed in monetary terms, and anything that cannot be measured in monetary terms is excluded from the financial statements. |

SUMMARY OF THE CHAPTER

The role of financial accounting is to prepare financial information principally for distribution outside an organization. The three basic financial statements are the balance sheet, the income statement, and the statement of cash flows. This chapter discussed those statements, and three of the nine fundamental accounting concepts. The chapter also discussed some concepts that are important to understanding a set of financial statements, such as the distinction between the two sides of the balance sheet, the nature of asset, liability and equity accounts, the notion of asset exchanges, the double entry approach, and the basis for equity changes.

The chapter also moved into the area of financial statement analysis, by distinguishing between financial accounting and financial management. With regard to financial management, the chapter looked at two cycles of great concern to managers: the operating cycle and the financing cycle. Managing these cycles so that an organization has sufficient cash on hand to meet its operating needs and debt service obligations is one of the biggest challenges managers face in all organizations.

¹⁰ “Anything Under Zale’s Tree?” *Business Week*, December 23, 1991.

PRACTICE CASE. HOMEWORKS, INC.

Homeworks, Inc. was a small corporation that provided home repair services in the Town of Ellington. Its services included chores, minor repairs, painting, snow shoveling, and gardening. It charged \$15 per hour to its clients, and paid its service staff \$7 per hour.

Homeworks began operations in January 2003. During the month of January, the following events occurred:

- January 2 Homeworks' investors contributed a total of \$10,000 in cash.
- January 3 Homeworks' took out a \$5,000 loan from a local bank to help finance its activities.
- January 5 \$5,000 of equipment (e.g. carpentry tools, snow shovels, etc.) was purchased for cash. Equipment is a fixed (non-current) asset.
- January 12 \$3,000 of supplies (e.g. paint) were purchased from a local hardware store. Payment was not due until February 10. These were put into the supply inventory.
- January 14 Clients paid for 125 hours of work that were completed during the first half of the month.
- January 15 Service staff was paid for the 125 hours of work that was completed.
- January 16 The president was paid \$1,000 for one-half month of work.
- January 20 \$2,000 of additional supplies were purchased. Payment was made in cash.
- January 28 Clients paid for 150 hours of work that were completed during the second half of the month.
- January 29 Service staff was paid for the 150 hours of work that was completed.
- January 31 The president was paid \$1,000 for the second half of the month.

Questions

1. Prepare a balance sheet for Homeworks as of January 31, 2003. To do so, draw up a basic balance sheet format, and make entries to the appropriate accounts for each event described above. Leave sufficient space below each asset, liability, and equity account to make several entries.
2. By how much did Homeworks' equity increase during January 2003? Why?
3. How has Homeworks financed its assets? Is this good or bad?

APPENDIX TO CHAPTER 1

Mini-Test #1

A balance sheet with the correct entries is shown below. The entries are numbered to correspond to the four situations that were given you. A brief description of each answer follows the balance sheet:

Toys FR' Kids Balance Sheet As of January 3, 2003

<u>Assets</u>		<u>Liabilities & Equity</u>	
Cash		Bank loan	
Beginning balance	\$53,000	Beginning balance	\$13,000
From new bank loan (1)	+ 16,000	Changes	<u>0</u>
To purchase inventory (2)	-6,000	Ending balance	\$13,000
To purchase equip.(4)	<u>-24,000</u>		
Ending balance	\$39,000	Accounts payable	
Merchandise inventory		Beginning balance	\$ 0
Beginning balance	\$ 0	For inv'tory purchase (3)	<u>14,000</u>
Purchase for cash (2)	+6,000	Ending balance	<u>14,000</u>
Purchase on credit (3)	+14,000		
Ending balance	<u>20,000</u>	Total current liabilities	\$27,000
Total current assets	\$59,000		
		Non-current liabilities	
Non-current assets		Bank loan payable	
Equipment		Beginning balance	0
Beginning balance	\$ 0	Additional loan (1)	<u>+16,000</u>
Purchase (4)	<u>24,000</u>	Ending balance	<u>16,000</u>
Ending balance	\$24,000	Total liabilities	\$43,000
		Owners' equity:	
		Contributed capital	\$40,000
		Retained earnings	<u>0</u> 40,000
Total assets	\$83,000	Total liabilities & equity	\$83,000

Situation #1. Additional Loan

The bank loan increases cash by \$16,000. Since it is not due for two years, it is a non-current liability. Note that the amount of interest due is not recorded. We will deal with the interest expense in Chapter 2 when we prepare our next balance sheet.

Situation #2. Purchase Inventory

Since TFK pays its vendors in cash, it uses up \$6,000 of cash in this transaction. In effect, we have exchanged one asset for another: cash for inventory.

Situation #3. Accounts Payable

Inventory increases by \$14,000. Note that it does not matter whether the inventory was purchased for cash or on account. In both instances, it increases by the amount of the purchase. This time, however, since vendors tell TFK that it can wait for 30 days before paying for them, an account payable is created as a liability on the balance sheet, i.e. \$14,000 is owed to the vendors.

Situation #4. Purchase equipment

TFK purchases \$24,000 of equipment. The equipment will appear as a non-current asset on the balance sheet. As with the inventory purchase in Situation #2, this is simply the exchange of one asset for another: cash for equipment.

Formal Balance Sheet

The formal balance sheet looks as follows. Note that accounts payable is listed before the bank loan payable. It is customary to list current liabilities in the order in which they will become due. Since the accounts payable are all due in one month, they are due before the bank loan payable.

**Toys FR' Kids
Balance Sheet
As of January 3, 2003**

<u>Assets</u>		<u>Liabilities & Equity</u>	
Cash	\$39,000	Accounts payable	\$14,000
Merchandise Inventory	<u>20,000</u>	Bank loan payable	<u>13,000</u>
Total current assets	\$59,000	Total current liabilities	\$27,000
Non-current assets:		Non-current liabilities:	
Equipment	\$24,000	Bank loan payable	<u>\$16,000</u>
		Total liabilities	\$43,000
		Owners' equity:	
		Contributed capital	\$40,000
		Retained earnings	<u>0</u> <u>40,000</u>
Total assets	\$83,000	Total liabilities & equity	\$83,000

CHAPTER 1 PRACTICE CASE. HOMEWORKS, INC.

Question 1

The accounts for the balance sheet and the appropriate entries are as follows. The numbers in parentheses indicates the dates of the transactions.

**Homeworks, Inc.
Balance Sheet
As of January 31, 2003**

<u>ASSETS</u>		<u>LIABILITIES</u>	<u>EQUITY</u>
<u>Cash</u>	<u>Equipment</u>	<u>Loan Payable</u>	<u>Contrib. Cap.</u>
(2) +10,000	(5) + 5,000	(3) +5,000	(2) +10,000
(3) + 5,000	5,000	5,000	10,000
(5) - 5,000			
(14) + 1,875			<u>Ret. Earnngs</u>
(15) - 875			(14) + 1,875
(16) - 1,000			(15) - 875
(20) - 2,000	<u>Supply Inventory</u>	<u>Accounts Payable</u>	(16) - 1,000
(28) + 2,250	(12) + 3,000	(12) + 3,000	(28) + 2,250
(29) - 1,050	(20) + 2,000	3,000	(29) - 1,050
(31) - 1,000	5,000		(31) - 1,000
8,200			200

Total Assets = \$18,200

Total Liabilities+Equity = \$18,200

Notes:

1. 14 January increase in Ret. Earns calculated as follows: 125 hours @ \$15/hour = \$1,875.
2. 15 January decrease in Ret. Earns calculated as follows: 125 hours @ \$7/hour = \$875.
3. 28 January increase in Ret. Earns calculated as follows: 150 hours @ \$15/hour = \$2,250.
4. 29 January decrease in Ret. Earns calculated as follows: 150 hours @ \$7/hour = \$1,050.

Question 2

Homeworks' equity increased by \$10,200. \$10,000 of this was from contributed capital, and the remainder from retained earnings. In the retained earnings category, it received a total of \$4,125 (\$1,875 + \$2,250) from selling its services, which increased its retained earnings. It paid \$1,925 (\$875 + \$1,050) to its service staff and \$2,000 (\$1,000 + \$1,000) to its executive director; these payments decreased retained earnings by a total of \$3,925.

Note that the increase in cash is \$8,200, which is quite different from the increase in equity. Although cash was increased by \$10,200 as a result of the increase in equity, it also was increased by the loan and decreased by the purchases of equipment and supplies. As you will see later, cash rarely increases by the same amount as the increase in equity.

Question 3

Assets of \$18,200 have been financed by a combination of \$8,000 in liabilities and \$10,200 in equity. The liabilities consist of a \$5,000 loan from a bank and \$3,000 in accounts payable to a hardware store. See the "Financial Statement Analysis" portion of the text for a discussion of whether this is good or bad.