





REQUIRED SOFTWARE

- ◆ MICROSOFT WORD 97
- ◆ MICROSOFT EXCEL 97
- ◆ MICROSOFT POWERPOINT 97

OPTIONAL SOFTWARE

- ◆ INTERNET EXPLORER
- ◆ MICROSOFT ENCARTA 97 ENCYCLOPEDIA

# BUY LOW, SELL HIGH

## Teacher Guide

### SUMMARY

This lesson will teach students how to invest in corporate stocks by creating investment “portfolios.” Step-by-step instructions will enable students to develop worksheets that track their portfolio’s performance over a specified time period and report the results to the class.

### OBJECTIVES

- ◆ To introduce students to the stock market
- ◆ To design a worksheet that calculates profit (or loss) for any given investment
- ◆ To generate line graphs representing stock performance

### PREREQUISITE SKILLS

- ◆ Knows *Microsoft® Excel* basics and its many features including creating worksheets and charting
- ◆ Knows how to create an electronic slide presentation using *Microsoft® PowerPoint®*
- ◆ Knows how to access the World Wide Web using *Microsoft® Internet Explorer* (optional)

### TIME ALLOTTED

Approximately six weeks to three months

### HOW TO BEGIN

Introduce students to the Stock Market summarizing its role in U.S. economic history (e.g., the

ACMEIATE CORPORATION					
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		Exchange:		NASDAQ	
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Stock portfolio worksheet created in *Microsoft Excel*

great crash of 1929). Define terms that students are likely to encounter in their research such as portfolio, dividend, and price/earnings ratio (i.e. stock price divided by stock earnings per share.) Have students bring in the business section of newspapers that publish stock market information and explain to them how to read a stock quote. Have each student choose five compa-

nies whose stock they want to purchase. Explain that everyone in the class will start with \$1,500 as seed money to purchase stocks at the current market value and that they will track their portfolio’s performance over a period of time from six weeks to three months. Finally, discuss with students the effectiveness of line charts in presenting their results.

## Extension Activities

- ◆ Have students consider trading their stock (buying or selling shares) during the specified time period.
- ◆ Have students create a Summary worksheet of their investments. Columns should contain cells that reference initial investments, total shares owned, current price/share, and profit/loss figures for every company in the portfolio.

## Student Activity

### DESCRIPTION

In this activity, you will invest \$1,500 in five different companies and then track the stock market price of those companies over a period of time.

### STEP 1

#### Research The Market

**SOFTWARE:** Microsoft Encarta, Internet Explorer

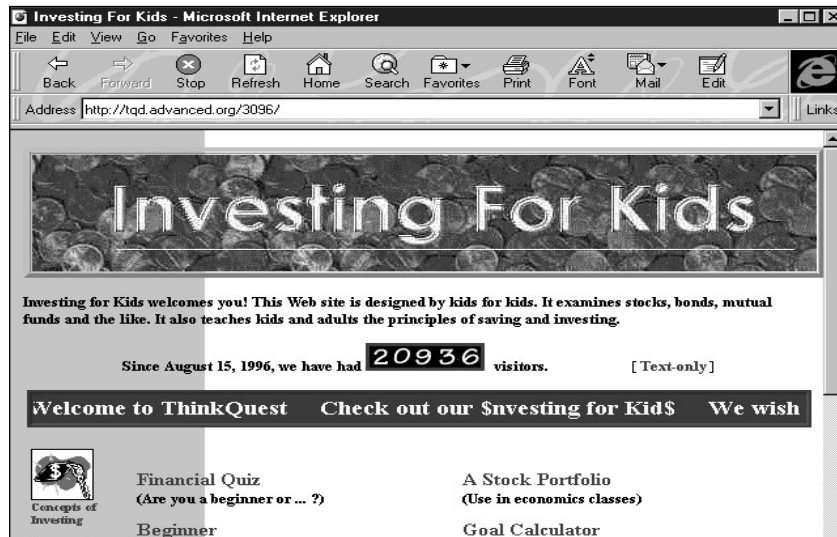
**WHAT TO DO:** Choose ten companies in which you think you would like to invest. Using Microsoft's *Internet Explorer* and a search engine such as Lycos or Yahoo, access each company's Web site in order to gather as much background information as possible about each company, including:

- ◆ Type of company
- ◆ Number of years in business
- ◆ Summary of what the company does
- ◆ 1996 profits
- ◆ 1997 profits (thus far)

Now, review the information gathered and decide on five companies in which to invest. Find out the current selling price per share for each company's stock. Decide how many shares of stock you want to buy in each company keeping in mind that you have only \$1,500 to invest.

**TIP!** *Encarta 97* includes several helpful articles about the stock market. Use the encyclopedia's Find command to search for keywords such as "Stocks and Bonds," "Finance," and "Stock Exchange."

**TIP!** Using *Internet Explorer*, visit a Web site called "Investing for Kids" (see Example 1) or "StockMaster,"



*Example 1:* "Investing for Kids" Web site (from *Internet Explorer*) at <http://tqd.advanced.org/3096>

the stock market site referenced in the Web Links section of *Encarta*. Or, you can access a wealth of business news and financial information to track the performance of selected stocks by visiting the Web site of "Microsoft Investor."

#### Recommended Web Sites

- ◆ **Investing for Kids**  
<http://tqd.advanced.org/3096>
- ◆ **StockMaster**  
<http://www.stockmaster.com>
- ◆ **Microsoft Investor**  
<http://www.investor.msn.com>

### STEP 2

#### Create A Spreadsheet

**SOFTWARE:** Microsoft Excel, Microsoft Word

**WHAT TO DO:** Open Microsoft Excel. Add 2 new worksheets to your workbook so you have a worksheet for each of the five companies in your investment portfolio.

**TIP!** Adding worksheets is easy. Simply click Worksheet from the

Insert menu. Use the Office Assistant to learn how to rename a worksheet.

For each company's worksheet, you will input (a) some basic information about the company, such as the company Symbol (the unique symbol assigned to a NASDAQ security) and the name of the particular Stock Exchange that lists the stock; (b) an Initial Investment section; and (c) a Daily Record section (see Example 2).

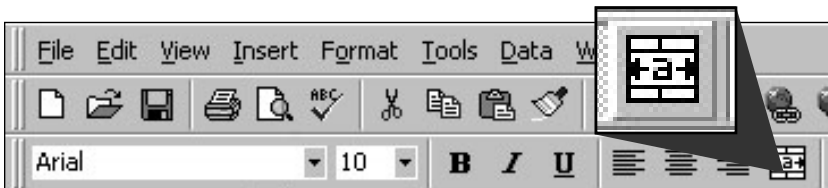
Here are some step-by-step instructions to get you started with your worksheets:

- ◆ In cell A1, type the company name, for example, ACMEIATE Corporation
- ◆ Highlight A1:E1; then click Merge and Center on the Formatting Toolbar to center the company name (see Example 3).
- ◆ In cell A3, type "Symbol:" followed by the company's four-letter symbol, for example, ACME; in cell E3, type "Initial

## BUY LOW, SELL HIGH

ACME INTERMEDIATE CORPORATION					
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Example 2: Stock portfolio worksheet created in Microsoft Excel



Example 3: Merge and Center icon on the Formula Toolbar

Investment” followed by the total amount of money (number of shares times the price per share) you are investing in that company. Your total investment equals the total price paid for the stock.

◆ In cell A4, type “Exchange:” followed by the name of the exchange listing the stock.

TIP! To enlarge a cell, point to the column border, the cursor will change to a two-headed arrow. Now, drag the column to the desired width.

TIP! Format all currency for two decimal places by choosing Cells under the Format menu, clicking the Number tab, and then selecting Currency under Categories. In the Decimals places enter the number 2 (see Example 4.)

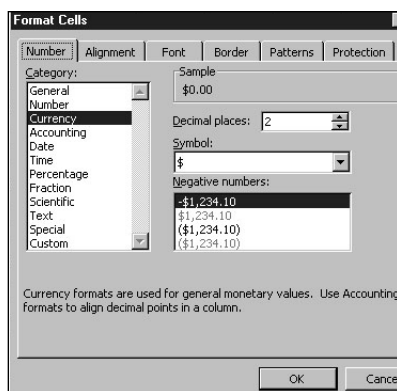
### STEP 3

## Invest In Your Companies

SOFTWARE: Microsoft Excel

WHAT TO DO: To create the Initial Investment section of your worksheets, try these tips:

◆ In cell A6, type “Initial Investment” and change to bold face type.



Example 4: Format Cells dialog box

◆ In cell A7, type “Date of Transaction.”

◆ In cell C7, type “\$/Share”; in D7, “# of Shares Bought”; in E7, “Total Investment”.

◆ Highlight A7:E7

◆ Right click the highlighted cells, then choose Format cells.

◆ Click Alignment, select Center.

◆ In cell A8, type the date of the initial transaction

TIP! At this point you may want make four copies of the worksheet to use as a template for each company’s stock that you track. Select Move or Copy Sheet from the Edit menu, click the Create a Copy check box, then repeat this procedure for as many copies as you need.

◆ In cell C8, type the cost per share (e.g., 20 3/4) as listed on the stock exchange. *Microsoft Excel* will automatically convert this figure to decimals. Be sure to format the number for two decimal places.

◆ In cell D8, type the number of shares bought. In cell E8, type the formula: =C8\*D8 and press enter. The total cost of your investment will automatically be calculated. Format to two decimal places.

### STEP 4

## The Daily Record Section

SOFTWARE: Microsoft Excel

WHAT TO DO: To create The Daily Record section of the worksheet, follow these steps

◆ In cell A9, type “Daily Record.”

◆ In cell A10, type “Date of Transaction”; in B10, “#/Shares”;

in C10, "\$/Share"; in D10, "Current Value"; in E10, "Profit/Loss".

- ◆ Highlight A10:E10 and center and wrap text.

- ◆ Beginning with cell A11, highlight the range of data in Column A you will be entering on your worksheet, for example, A11:A22. Right click the highlighted cells. Choose Format Cells. Click the Number tab. Click Date, then choose Type of Date. Click OK.

- ◆ In cell B11, type the number of shares bought. Ask the Office Assistant "How do I fill down?"

- ◆ In cell C11, record the price of your stock on the first date of transaction.

- ◆ In cell D11, type the formula: **=B12\*C12**.

- ◆ In cell E11, create a formula that calculates Profit/Loss by taking the Current Value (D12) minus the initial investment (E8). The formula should refer to D8 as an absolute reference=**=D12-\$E\$8**.

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Example 5: Highlighted data to create Microsoft Excel line chart

TIP! Look up "cell references" in Office Assistant to learn more about this term. Ask the Office Assistant how to format Column E for currency.

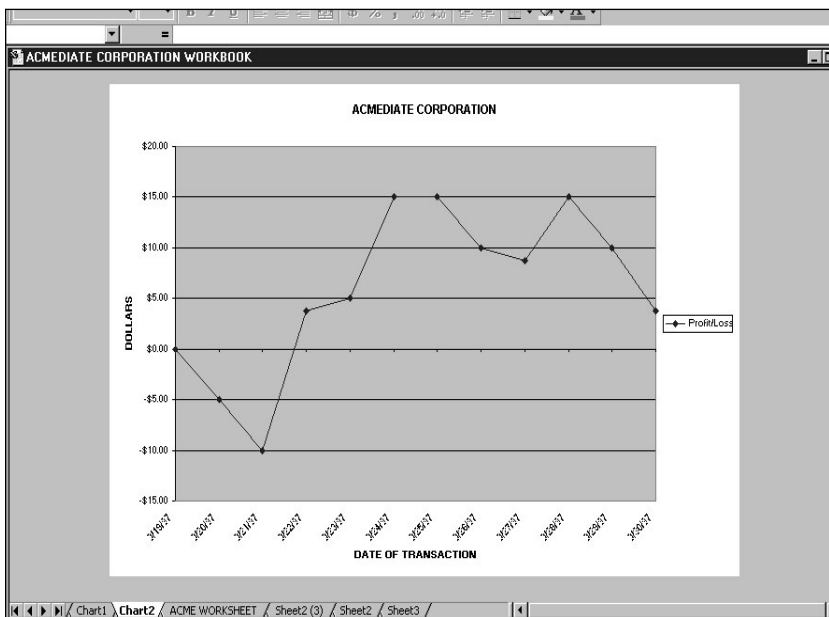
## STEP 5 Tracking Stocks

SOFTWARE: Microsoft Excel

WHAT TO DO: At the end of the stock performance period, use the Chart Wizard in Microsoft

Excel to create a line chart showing "profit or loss" for each stock you invested in.

Highlight the range of data you've entered on your worksheet, for example, E12:E23 (see Example 5). Click Chart from the Insert menu, then choose Line and step through the procedures for creating a line chart. Be sure to add a chart title. Label the chart's X and Y axes (see Example 6). Why does the line chart do a better job of representing the stock data than a pie chart? For more help, ask the Office Assistant about "charting."



Example 6: Line chart created in Microsoft Excel showing profit/loss.

## STEP 6 Reporting The Results

SOFTWARE: Microsoft Word, Microsoft PowerPoint

WHAT TO DO: Summarize your stock market experience in a printed report using Word and incorporate worksheets and charts copied from Microsoft Excel. Or, create a slide presentation using PowerPoint. The presentation should summarize the company's stock performance and any trends that are apparent.

