

# The stock market: How it works



**GRADE**  
**9-11**

This lesson introduces students to the stock market. Students will understand the difference between primary and secondary markets and explain the relationship between bids and asks in determining stock prices.



## Subjects

BB10/20 - Introduction to Business  
CIE3M - The Individual and the Economy

## Suggested timing

2 X 70 minutes

## Financial literacy objectives

At the end of this lesson, students will:

- use financial terminology fluently,
- analyze the relationship between risk and reward as it relates to savings and investments,
- describe basic investment options.

## Curriculum expectations

**Business Studies, grades 9 and 10 (2006)**  
Introduction to Business Studies (BB10/20)

### Finance

- Describe various types of investment alternatives available to individuals (e.g., GICs, stocks, bonds, mutual funds, ethical funds) and to businesses (e.g., capital investments, treasury bills, stocks).

**Canadian and World Studies, grades 11 and 12 (2005)**  
The Individual and the Economy (CIE3M)

### Methods of economic inquiry and communication

- Use economic concepts (e.g., supply and demand) to analyze and describe an economic reality or choice.

## Assessment

Collect and assess:

- Drawing conclusions: The stock market (Appendix D)
- Exit card (Appendix E)

## What you need

- Conceptions and misconceptions (Appendix A)
- Student copies of Stock market basics (Appendix B)
- Student copies of How stock prices are set (Appendix C)
- Student copies of Drawing conclusions: the stock market (Appendix D)
- Student copies of The stock market exit cards (Appendix E)
- Word wall materials
  - Bulletin board and push-pins, or
  - Blank wall and tape
- Assorted markers (at least 7 different colours)
- Assorted highlighters (at least 1 for each pair of students)
- Pieces of card stock (4" x 10")
- Chart paper

## Minds on

### Day 1

#### **Activity: Conceptions-misconceptions (2 corners)**

Start the activity by explaining to the class that people often have misconceptions about the stock market and its processes.

Assign one wall of the class as "A" and the opposite wall as "B" (you may consider taping a piece of paper that says "A" and one that says "B" on the corresponding walls).

Tell students that for each round of the game, you will read 2 statements about the stock market; one of the statements is a true concept and one of the statements is a misconception about that concept. (All statements for this activity are found in Conceptions and misconceptions Appendix A.)

After reading statement A and B for the first round, instruct students to walk over to the wall of the statement that they think is true. (Ask students to help you move desks out of the way if necessary.)

Once at their wall of choice, invite students to discuss why they think that statement is true with the rest of their peers at the wall. Then, ask one member of each wall to share their discussion with the class. *Do not reveal which statement is the true concept and which is the misconception* (the students will do this at the end of the lesson). Continue this for all 5 statements.

#### **Teacher notes**

Students often have misconceptions about the stock market and its processes.

The first activity, Conceptions and misconceptions (Appendix A) is designed to help clarify five fundamental concepts:

1. All stock exchanges do not have a physical trading floor. Technology has replaced the need for stock exchanges to have a physical floor.
2. Stock exchanges and stock brokers are often considered the same. Stock exchanges regulate and manage trading, while brokers carry out the trades.

## Minds on (cont'd)

3. Stock prices are based on the law of supply and demand. Students need to understand the concepts of *bid* and *ask* and how prices change.
4. When investors trade on the stock exchange, they are buying and selling from other investors, not the company. Students need to understand the distinction between the primary and the secondary market.
5. Insider trading is legal when insiders follow certain rules.

### Context for learning

Bill Fold is a character who is constantly getting himself into financial scrapes. Use the scenario below to provide students with a context for learning.

Bill Fold is trying to figure out why stock prices rise and fall. If prices are set by the companies, why don't they keep increasing the stock prices to make bigger profits?

## Action

### Stock market word wall

Distribute the handouts Stock market basics (Appendix B) and How stock prices are set (Appendix C) to each student. Divide students into groups of 3 and give each group 1 marker, 2-3 highlighters, and 15 strips of card stock (4" x 10").

Explain to students that the class will find key vocabulary in both handouts. Have students independently scan the handouts and highlight the words and phrases that they are unfamiliar with using the highlighters given (ask students to share them within their group). Once the class is finished this, ask students to list their top 15 unfamiliar words on a piece of paper, then to compare their lists within their group and create a group list of 15 unfamiliar words.

Once each group has completed their list, ask groups to print each of their unfamiliar words and phrases in large letters on the top of the cards (leave room underneath for their definition). Common words/phrases to expect: ask, bid, primary market, secondary market, trade, stockbrokers, brokerage firm, stocks, Initial Public Offering (IPO), Automated Trading Systems (ATS), Over-The-Counter (OTC) markets, commission, Toronto Venture Exchange (TSX Venture Exchange), Toronto Stock Exchange (TSX), dividend, stock exchange.

Invite students to pin their vocabulary words/phrases to the bulletin board alphabetically (allow for duplication of words – this will be a visual way for students to see that there are many people in the class who are unfamiliar with that word/phrase).

Lead some discussion on what students anticipate the definitions to be.

Unpin one card for each word/phrase (no duplicates) and redistribute them evenly to each group. Ask students to scan the handouts for the definition of the words or phrases they were assigned (if the definition of some words are not listed in the handouts, for example “equity” or “asset”, invite students to use a business textbook in the classroom or a computer if it is available).

Students can then neatly write the definition or description on the card underneath the word(s). Once each group is finished doing this for each of their assigned words, ask groups to present it to the class and re-pin it to the board.

## Action (cont'd)

### Graffiti

Write each of the 6 questions below on the top of different sheets of chart paper (the paper should be in portrait orientation). Once the question is written, divide each sheet into 2 pieces by drawing a horizontal line across the middle of the remaining space. Post the chart paper around the room in order of number.

1. What is a stock market? Describe the primary market and the secondary market. Why does almost all activity in a stock market take place in the secondary market?
2. Why would a company issue an IPO? What is an IPO?
3. What is a stock exchange? What does a company have to do to sell shares of its company on a stock exchange?
4. What are examples of exchanges and trading systems in Canada? What is the focus of each example?
5. What is the process of buying and selling stocks on a stock exchange?
6. What is a bid? What is an ask? When will the price of stock increase? When will it decrease? What is a trade and what is required to make it happen?

Call on students to read each question aloud to the class from the chart paper posted around the room.

Then, ask students to read the handouts Stock market basics (Appendix B) and How stock prices are set (Appendix C) independently. As they read, instruct students to indicate where they will find the answer to a question by putting a number sign and the question number in the left margin next to the section (for example: in Appendix B, next to the section “What is a stock market?” students should write “#1” beside it in the left hand margin. Then, when students need to find information pertaining to question 1, they can look at their notes and look for the “#1” in the left margin of the handouts.)

Give students time in class to finish the reading and look for the answers to the listed questions.

If students do not finish reading the handouts and writing questions numbers in the margins in class, assign to finish for homework.

## Minds on

### Day 2

At the start of the second part of the lesson, lead the class through a short “Minds on” by unpinning the card stock words created in the last lesson from the Word Wall and quizzing the students. You may also pin fresh pieces of card stock with the words listed on them to the Word Wall. Then read out the descriptions of the words and phrases and ask students to match the descriptions to the vocabulary on the wall.

### Continuation of graffiti

Divide the class into 6 groups (1 group for each question). Assign each group a different colour and give them one marker of that colour. Ask students to number their group members starting with 1. Then, assign each group a question to start with (#1-6) and direct the group to stand at the chart paper of that question.

## Action

Tell students that they will have 2 minutes to write their group's responses to the question by listing key words and phrases in point form using the handouts that they read and made notes on in the previous lesson (Appendix B and C). *Students should write their graffiti notes below the horizontal line drawn on each sheet.*

At the first graffiti station, the student that was numbered "1" will be the recorder for group (other students should shout out words for the recorder to write on the paper).

Remind students that their answers should be respectful and appropriate to the question. Students are held accountable for their group's responses since each group was assigned a different colour of marker.

At the end of the first 2 minute period, ask students to stop writing and move to the next question with the same marker (rotate clockwise around the room). The marker should be given to the new recorder (the student numbered "2"). When students get to the next chart paper, they can add comments, question marks, disagreements, or additional points to the previous group's comments. Continue for 2 minutes, and then ask students to rotate again. Repeat for the next round until each group has had a chance to write something for each of the 6 questions.

Instruct groups to return to the first question that they worked on. That group will be responsible for writing a complete answer to the question using the graffiti notes written by the class on the chart paper. The recorder of the group should write the answer neatly *above* the horizontal line and in complete sentences.

Once finished, ask each group to present their answer to the class. Clarify any confusion or remaining questions. As groups present, encourage students to take notes on each of the 6 questions and answers.

For more information on the process of buying and selling stocks, visit <http://www.getsmarteraboutmoney.ca/en/managing-your-money/investing/stocks/Pages/How-to-buy-and-sell-stocks.aspx>.

## Consolidation/ debrief

### Drawing conclusions and exit card

Distribute the handout Drawing conclusions: the stock market (Appendix D). Remind students that these are the same statements that you looked at as a class at the beginning of the lesson. Have students complete the worksheet and hand it in.

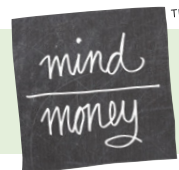
When finished, distribute one Exit card (Appendix E) to each student. Ask students to fill it in and hand it to you as a ticket out the door. Both the Appendix D and Appendix E can be assessed as an assessment for learning.



The stock market: How it works

## Conceptions and misconceptions

Round	Statement A	Statement B
1	Visitors can visit the trading floor of the Toronto Stock Exchange (TSX).	There is no physical trading floor at the TSX. Trades are conducted using technology.
2	Stock exchanges manage trading, while stock brokers carry out the trade.	Stockbrokers handle all aspects of stock trading.
3	Stock prices are set by companies and regulated by the government.	Stock prices are determined by the law of supply and demand.
4	Investors buy and sell (trade) their stocks from companies on the stock exchange.	Investors trade with other investors on the stock exchange (secondary market).
5	Insider trading is legal in some circumstances, but it must be reported.	Insider trading is illegal.



## The stock market: How it works

# Stock market basics

### What is a stock market?

A stock market brings together people who want to sell stock with those who want to buy stock. When you buy stock (or equity) in a company, you receive a piece of the company and become a part owner.

The stock market is made up of:

- **Primary market** – where the first sale (or offer) of stock by a private company to the public happens. This is also known as an Initial Public Offering (IPO).
- **Secondary market** – where any subsequent buying or selling (trading) of a company's stock takes place.

### Initial public offering (the primary market)

Business requires financing to buy assets that are needed for its operation. When world trade opened up in the 1600s, companies or joint partnerships were created to raise large sums of money to finance the building of ships and new trading ventures.

Few individuals had enough money to finance the building of a ship, or were willing to assume the entire risk, so ownership was divided into shares (stocks). A specific number of shares were sold at a fixed price to raise the amount of money needed to build a ship. Any profits earned by the ship were distributed in dividends back to the shareholder.

The first sale of shares by a company to the public is called a primary distribution or an initial public offering (IPO).

This type of transaction between a shareholder and the company occurs only once and takes place in the primary market. There are no further exchanges of stock and cash between the company and the shareholder, unless the company decides to issue more shares at a later date.

### The secondary market

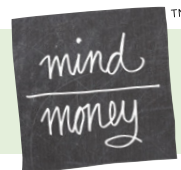
If shareholders wish to sell their shares and the company is listed on an exchange, they go to the stock market to find a new buyer for their shares. The buyer may pay more or less than the purchase price (\$100 per share in the above example) depending on supply and demand. This buying and selling of shares takes place in the secondary market. Almost all activity in a stock market is in the secondary market. Trading in the secondary market does not affect the original company or the owners' equity.

### Where stocks are traded

A stock exchange is an organized market in which an investor can trade securities in a publicly visible manner, under rules that apply to all users of that exchange.

If a company is listed on a recognized stock exchange, it must:

- distribute a certain number of shares,
- file appropriate information about its management team, and
- provide specific financial information.



## The stock market: How it works

### Stock market basics (cont'd)

In the past, stockbrokers used to meet to buy and sell stock in a physical location. They would send trade instructions to the trade floor and traders would execute the trades in person. Today, stock trades are done electronically.

Stock exchanges in Canada focus on certain kinds of investments:

- **Toronto Stock Exchange (TSX)** - serves the senior equity markets and lists well-established companies
- **TSX Venture Exchange** - serves the public venture equity market and lists emerging companies that don't meet the listing criteria of the TSX
- **Montréal Exchange** - focuses on specialized investments such as stock options and derivatives

Stocks are also traded through:

- **Alternative trading systems (ATS)** - automated trading systems that bring together dealers and institutional investors who trade large quantities of stocks.
- **Over-the-counter (OTC) markets** - dealer networks where "unlisted" stocks are traded.

(Adapted from GetSmarterAboutMoney.ca - <http://www.getsmarteraboutmoney.ca/en/managing-your-money/investing/stocks/Pages/Stock-market-basics.aspx>)





## The stock market: How it works

### How stock prices are set

The buyer and seller must agree on a price before a stock can be bought or sold. Here's how it works:

- People compete to buy the stock if they believe that its price will rise and they will make a profit.
- Sellers compete to find buyers for their stock at the highest possible price.
- There are usually several investors trying to buy and sell stock in the same company at the same time. It's like a big computerized auction.
- Once a stock is bought or sold, the price is posted so that everyone knows the latest price.

The price is an agreed-upon value for the transaction. The *bid* is the highest price a buyer is willing to pay for a stock. In economics this is called *demand*. The *ask* is the lowest price a seller is willing to accept for his or her stock. In economics this is called *supply*. A stock price, therefore, is a manifestation of the law of supply and demand. When demand for a stock exceeds the number of shares available at a particular price, the price of the stock increases. Conversely, when there is no demand for a stock at a particular price, the price falls. Buyers and sellers have different expectations about the value of a stock. An exchange occurs when buyers and sellers agree on a price. This is called a *trade*.

As illustrated in the charts below, the only individuals who could agree on a trade would be C and E. A and B's bid prices are too low and F and G's ask prices are too high. The market would therefore match C and E and an exchange would occur at \$102. Bid and ask prices change from minute to minute as people react to news about the company, the industry, or the economy. Because stock values can change so quickly, investment in stocks involves an element of risk.

The buyer and seller must agree on a price before a stock can be bought or sold.

When you buy and sell stock, you pay a fee to your adviser or investment firm. This fee is called a commission.

Bid		Ask	
Buyer	Price	Seller	Price
A	\$99	E	\$102
B	\$100	F	\$103
C	\$102	G	\$104

(Adapted from GetSmarterAboutMoney.ca - <http://www.getsmarteraboutmoney.ca/en/managing-your-money/investing/stocks/Pages/Stock-market-basics.aspx>)



## The stock market: How it works

## Drawing conclusions: The stock market

These are the statements we used as a class in the 2 corners activity we played last lesson. Put a checkmark in the bottom right corner of the statements you had originally thought were true. Now, circle the correct statement and provide a detailed explanation to support the correct answer. Refer to the handouts used in class.

No.	Statement A	Statement B	Explanation
1	Visitors can visit the trading floor of the Toronto Stock Exchange (TSX).	There is no physical trading floor at the TSX. Trades are conducted using technology.	
2	Stock exchanges manage trading, while stock brokers carry out the trade.	Stockbrokers handle all aspects of stock trading.	
3	Stock prices are set by companies and regulated by the government.	Stock prices are determined by the law of supply and demand.	
4	Most trading occurs among corporations and investors on the stock exchange.	Most trading occurs among investors on the stock exchange.	
5	Insider trading is legal in some circumstance, but it must be reported.	Insider trading is illegal.	



## Exit card

NAME: \_\_\_\_\_

Something that I learned today about the stock market that will help me is...

I used to think...but now I believe...

Something in today's class that really helped my learning was...

I am still confused about...

NAME: \_\_\_\_\_

Something that I learned today about the stock market that will help me is...

I used to think...but now I believe...

Something in today's class that really helped my learning was...

I am still confused about...