## Original lesson plans

Includes: Student lessons Teachers notes and answers

# ABOUT THE ASU SGHOOLS SHABEMARKI GIME 

## STUDENT LESSONS + TEACHER NOTES AND ANSWERS

These resources are intended to provide you with information and activities to help in teaching students about shares, the sharemarket and investing. The resources are not just about playing the ASX Schools Sharemarket Game, although a number of activities directly relate to the Game and will assist in Game participation.

The ASX Schools Sharemarket Game is played by students ranging from year 7 to year 12 and is played as part of a range of school subjects. The lesson plans have not been targeted at a particular age group or subject although years 9 and 10 commerce related subjects are probably the best fit. Some of the introductory lessons are quite simple whilst others are more advanced.

Flip through the lessons and make your own decision on which topics best suit your class. You might find that some of the early lessons are too basic for your class or some of the later lessons are too advanced. Also, please note that some lessons are longer than others so you may decide to split the material up into 2 lessons.

On the contents page we have included a brief description of what you will find in each lesson. We have also included on the contents page the answers to the lesson questions. This is so that they are not available to students should you hand the lesson sheets out.

As with all of our educational materials we welcome any feedback you might like to give us.
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COMPANY RESEARCH ASSIGNMENT
The assignment is intended to draw on the resources students

# INTRODUGION TO TH SHABEMART:T THRGHER NOTES ANDANSWERS 

## APPROACH

Activity One is intended to evoke student interest as most students will have been to a market and many will have been to an auction. Use the answers provided in this sheet to assist you when discussing the quiz answers.

Once you have established that the sharemarket is like any other market you can move on to explain what shares are and what a listed company does. Start from the students' own experience of a business as they all have had some association with a business, even if it is the local shop. Build on that knowledge by suggesting that a listed company is a business too but has many part owners. A listed company is different to the local corner shop in that the general public is able to buy shares in the company. Some listed companies start out as small enterprises and then expand, just like Harvey Norman Holdings Limited.

Students will have used products and services produced by listed companies but may not know it. Activities two, three and four will highlight some of the listed companies they may be familiar with.

## ANSWERS-LESSON ONE

## ACTIUITY ONE

1. High price.
2. Low price. Perhaps a fairly obvious exercise but it is worthwhile reinforcing the concept that higher/lower prices being attractive depends on whether you are a buyer or seller.
3. The price tends to be lower. This is intended to introduce the concept of variable supply having an impact on price.
4. Final price you will pay. Students may not fully understand this, however the purpose is to identify what are agreed terms between buyer and seller and what is up for negotiation. When all other terms are agreed the focus becomes price.
5. Be higher. Intended to convey the concept that higher demand will encourage higher prices, all other things being equal.

## ACTIVITY TWO

| COMPANY SLOGAN/JINGLE |  |
| :--- | :--- |
| 1. "Lowest Airfares Guaranteed" | ANSWER |
| 2. "Lowest prices are just the beginning." | Flight Centre |
| 3. "Australia's No. 1 Vitamin Brand" | Bunnings |
| 4. "Compare, select and save" | Blackmores |
| 5. "The New Source in Iron Ore" | iSelect |

## 1 ITTHODUATION TO THE SHAREMARKTI

## ACTIVITY THREE

| PRODUCT/SERVICE | ANSWER |
| :--- | :--- |
| 1. My Kitchen Rules | Seven West Media |
| 2. Funerals | Invocare |
| 3. Bushwalking gear | Kathmandu Holdings |
| 4. Pizzas | Domino's Pizza Enterprises |

## ACTIVITY FOUR

There is a range of industries covered by these companies. Some factors that might be relevant when students say it is a good business or not include:

- strong brand
- growing demand
- direction of commodity prices
- essential service
- ageing population

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# INTHODUATIONTO THE SHABEMTAKET 

## ACTIIITY ONE

## Quick sharemarket quiz

If you can answer the following questions, you already understand some of the basics of how the sharemarket works.

1. If you were selling a smartphone, would you rather sell at a high price or a low price?low pricehigh price
2. If you were buying a smartphone, would you rather buy at a high price or a low price?$\square$ low pricehigh price
3. At a fruit market what happens to the price of fruit when it is in season and there is a lot available?the price tends to be lowerthe price tends to be higherprices don't change
4. While you are bargaining for something, which of the following is unknown?number of items are you buyingfinal price you will paywhat you are buying
5. At a house auction, if there are many buyers who wish to purchase a house, the final sale price for the house is likely to?
$\square$ be higher $\square$ be lower
RATING SCALE
3-5 correct answers: congratulations, you've got the basics
2 correct answers: well done but be alert to our next lesson
$0-1$ correct answer: take the quiz again after our next lesson

## Learinahout...

WHAT IS A SHARE?
WHAT IS A LISTED COMPANY?

## DID YOU KNOW?

The Australian sharemarket is open for normal trading from 10 a.m. to 4 p.m. Sydney time each trading day. The US market trades from 11:30 p.m. to 6 a.m. when most of us are asleep.

ASK YOUR PARENTS, GRANDPARENTS, AND FRIENDS
Ask members of your family or friends whether they own shares and in which companies. Are the shares worth more today compared to when they were purchased? Have they learned any lessons from investing?

## HERE'S AN IDEA

Have a mini auction in the classroom. Bring in some items to sell and see which item/s fetch the highest price and then discuss why.
If this works well: Follow this on with another auction where different students (secretly) have different budgets for the auction. See how the different budgets affect bidding behaviour.

## 1 INTRODUOION TO THE SHARENARK:T

## WHAT IS A SHARE?

Do you know friends or family who own their own business? The business may be a one-owner business (sole proprietorship) or the business may be a partnership between two or more people.

Some businesses become so large they choose to become listed companies with many part owners or shareholders.

BHP for example has over 500,000 shareholders.
A share is a unit of ownership in a company. A publicly listed company means the shares in that company are available for purchase on a market such as the Australian Securities Exchange (ASX).

They are called listed companies because the original form of trading shares in companies involved the names of the companies being "listed" on large boards.

Shares in publicly listed companies are sometimes known as equities, stocks or securities.

On a typical day, there would be few Australians who do not buy or use the goods and services produced by one or more of the 2,000+ companies listed on ASX.

## ACTIUTYY TWO

Use the clues below to guess the names of some of these publicly listed companies.

## COMPANY SLOGAN/JINGLE

## ANSWER

## 1. "Lowest Airfares Guaranteed"

2. "Lowest prices are just the beginning."
3. "Australia's No. 1 Vitamin Brand"
4. "Compare, select and save"
5. "The New Force in Iron Ore"

## ACTIUITY THREE

Find out which listed companies are associated with the following products.

## PRODUCT/SERVICE

ANSWER

1. My Kitchen Rules
2. Funerals
3. Bushwalking gear
4. Pizzas

## DID YOU KNOW?

The actual price you pay per share is not an indication of whether the company is better compared to another less expensive company. Price is determined by demand and supply.

## ASK YOUR PARENTS,

 GRANDPARENTS, AND FRIENDSWhether they know the listed companies behind these popular brands

1. The Australian newspaper
2. Bunnings
3. Uncle Toby's
4. Mount Franklin water

## HERE'S AN IDEA

Have you or your friends ever thought of a business idea that earned you some money?

If the business was a success and you wanted to make it a bigger success how would you go about getting more money to grow the business?

## FAMOUS QUOTE

"Small opportunities are often the beginning of great enterprises."

Demosthenes (384 BC - 322 BC)

## 1 INTRODUGTION TO THE SHAREMARKET

## ACTIVITY FOUR

Pick one of the companies from the list below. Do you think it is a good business to be in? Give reasons.

Use www.asx.com.au as a starting point for your research.

- ARB Corporation
- CarSales.com
- Transurban Group
- Village Roadshow
- Blackmores

Company:
Reasons why it might be a good business:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Do your homework

Pick one listed company and find out what its main activities are.
What type of industry does it operate in? Visit the company website and list the products it produces.

A list of all companies can be found at www.asx.com.au

Use the Prices \& Research navigation area > Company information > view the complete list

You can also find lists of companies in the finance section of the newspaper.

## FAMOUS QUOTE

Warren Buffet, one of the world's famous investors gives his words of wisdom on investing.
"Rule No.1: Never lose money. Rule No.2: Never forget Rule No.1."

# HOWTHE SHAREMAK: WORKS: The Pillinivinilket 

 THIOHER NOTES AND ANSWERS
## APPROACH

Rather than be too ambitious and explain how the sharemarket works in terms of the primary AND secondary markets, it is better to start with the primary market and cement that concept first before moving on to the secondary market in lesson three. Keep focusing on the students' own experiences when teaching the concepts in this lesson.

For example, when introducing the concept of the primary market, ask students whether they have sold anything second hand. Buying goods new and then later selling them second hand highlights the concept that shares are issued "new" on the primary market and then can be subsequently sold to others on the secondary market. Similarly, when briefly explaining that ASX sets the rules for companies, ask students who sets the rules in their own school.

## ANSWERS-LESSON TWO

## ACTIUITY ONE

These are some examples of things that a company might need to tell everyone about, however, they are by no means the only possibilities. Different events affect companies differently.

The key yardstick is whether investors think that the matter will have a sufficient impact on the company to influence its current or future price sensitivity. Opinions can sometimes differ on this.

- Sales being a lot higher or lower than expected
- A natural disaster affecting a company's activities
- Important staff leaving or joining the company
- Signing important contracts that may have a significant affect on the company's income
- Merger, takeover or acquisition of a competitor
- Product approval by regulatory body
- Licensing deal


## ACTIVITY TWO

1. C
2. D
3. A
4. B

## ACTIIITY THREE

1. Candy Club Limited (CLB) - closed lower
2. EcoFibre Limited (EOF) - closed higher
3. Viva Leisure Limited (VVA) - closed higher
4. Trigg Mining Limited (TMG) - closed lower

## 2 HOW THE SHAREMARKET WORKS: PHINARY MARKEJ

## ACTIVITY FOUR

This is a dynamic page. You will need to check yourself for current upcoming floats

## HOMEWORK ACTIUITY

Divide the issue price by $\$ 1,000$ to establish how many shares would have been bought. Then multiply that number of shares by the current market price to determine the current market value. Compare this with the original amount.

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## HOW THE SHAREMRHET WORIS: THE PRIWMBYMIRKET

## WHAT IS THE SHAREMARKET?



Shares are bought and sold on the sharemarket.
The sharemarket is like any other market where buyers and sellers come together for the purposes of exchange. Fruit is bought and sold in a fruit market and shares are bought and sold in the sharemarket.
But shares need to be created before they can be bought or sold - so where do they come from?

## THE PRIMARY MARKET:

## Primary means first

The primary market is like a launch pad because it is usually used by companies to launch themselves on a new path of growth. They do this by raising capital (cash) by publicly issuing shares for the first time.
By listing on the sharemarket the company is saying, "if you give us some cash, we will give you part ownership in our company and as proof of your ownership we will provide you with shares".

## Learinahout...

THE PRIMARY SHAREMARKET
BECOMING A LISTED COMPANY

BUYING SHARES IN A FLOAT

## FAMOUS QUOTE

"One of the funny things about the stock market is that every time one man buys, another sells, and both think they are astute." William Feather

## DID YOU KNOW?

There are over 2,000 companies listed on the Australian Securities Exchange (ASX).

## KEY DEFINITION <br> THE PRIMARY MARKET:

Shares are first issued on the primary market. That's the starting point and from then on shares are traded on the secondary market. It's just like someone buying a new car and selling it a year later to someone else second hand.

## 

## BECOMING A LISTED COMPANY

Not every company can have its shares traded on the sharemarket.
The company must be large enough and have been operating successfully for a period of time to qualify. This is to give people some confidence but not a guarantee that the company is not a bad investment. Of course being listed on the sharemarket doesn't mean the company WILL be successful in the future.

Once a company is listed it has to obey certain rules.
One of these rules is to immediately tell the public about anything that would influence their decision to buy or sell shares in the company. Some examples include a change in the profits they expect, or buying a new business. Another example is the news that a mining company has discovered a new deposit of gold. This would certainly affect the share price as company profits are likely to rise in future and all investors would want to know about this.

## ACTIUITY ONE

Can you think of 3 examples of things that a company might need to tell everyone about? Write them below and explain how it might affect a company's share price.

## 3 things a company might need to tell everyone about

1. 
2. 
3. 

## BUYING SHARES IN A FLOAT

A float is when a company issues shares to the public for the first time. Think of a ship beginning to set sail for the first time. Another term you might hear is Initial Public Offering (IPO).

A company issuing shares for the first time must issue a Product Disclosure document (also known as a prospectus) describing its business and financial situation. A Product Disclosure document is an official document that has been lodged with and registered by the Australian Securities and Investments Commission (ASIC).

People apply for shares using a form included with the offer document. If there are many investors interested in the float, investors may receive only some of the shares they applied for (or even none at all). If this is the case then the investment money will be refunded to those who missed out.

Once the shares have been issued the shares begin trading on the secondary market. This is when those shares issued by the company can be sold to other investors. Some shares go up quickly after they are available for trading especially if a lot of people wanted shares and missed out on the float. Other shares don't do so well immediately.

## Do your homework

1. Below are 4 companies that floated in 2019 with the issue price for each of their shares. Look at the sharemarket tables in the newspaper or go to www.asx.com.au to find the latest share price for each of these companies.
2. If you had invested $\$ 1000$ in each of the companies below, how much money would you have gained or lost since the company floated?

## COMPANY / ISSUE PRICE

1. Next Science(NXS) $\$ 1.00$
2. ReadyTech Holdings (RDY) \$1.51
3. Powerwrap Limited (PWL) \$0.35
4. Whispir Limited (WSP) $\$ 1.60$

## WEBSITE/S TO VISIT

Visit ASX's website
www.asx.com.au for a list of recent and upcoming floats.

You can find them by clicking on Prices \& Research > Upcoming floats

## 2 HOW THE SHAREMARKET WORIKS: PAIMARY WARHKT

## ACTIVITY TWO

The first column in the table below lists some hypothetical quotes by four companies about to list on ASX. The quotes have been adapted from the Company's Product Disclosure document, and explain the reason why the company wishes to raise capital by listing on ASX. Match the reason for becoming a listed company (in the second column) with the quote in the first column.

The first answer has been done for you.
QUOTE ANSWERS EXPLANATION

1. "Our company has funds under management of approximately $\$ 300$ million as at December, which will increase to $\$ 400$ million with the successful capital raising for our new Property Securities fund."
2. "Growth opportunities exist to produce new and complementary specialty steel products..."
3. There are a number of priority targets ready for immediate drilling
4. "The company is seeking a listing as a way to invest some of the capital raised by this offer in quarries. This will strengthen the company's position as a premier reclamation and shore protection specialist."
A. Company involved in gold, nickel and diamond exploration requires funds to finance more drilling projects.
B. Singapore civil engineering and construction company, whose main business is land reclamation, seeks to list on ASX to continue developing this side of the business.
C. Investment Property Fund Company wishes to raise money to launch a new project.
D. Metals and Mining Company wishes to produce new steel products with the capital raised from the float.

## 2 HOW THE SHABEMARK:T WOARS: PAIWARYMARKT

## ACTIVITY THREE

The table below shows some companies that were floated on ASX in 2019. Find out if the company's share price ended 2019 higher or lower than its issue price. To do this, search the company market announcement on the ASX website around the date of its listing. Then check the price chart to see where it ended 2019.

| COMPANY NAME | ASX CODE | LISTING DATE |
| :--- | :--- | :--- |
| Candy Club Limited | CLB | February 2019 |
| EcoFibre Limited | EOF | March 2019 |
| Viva Leisure Limited | VVA | June 2019 |
| Trigg Mining Limited | TMG | October 2019 |

1. 
2. 
3. 
4. 

## ACTIVITY FOUR

Go to the Upcoming Floats page on the ASX website and complete the activity below.
i. Go to www.asx.com.au
ii. Click on the 'Prices \& Research' heading
iii. Click on 'Upcoming Floats'

List some companies that are scheduled to float on ASX and state what business they are in (to find out, click on the name of the company selected).
1.
2.
3.
4.
5.

## HOW THE SHAREMRKE WORLS:  TEMGHER NOTES AND ANSWERS

## APPROACH

The focus of this lesson is influences on prices, from the fundamentals of supply and demand to the influences on supply and demand. These influences can be input costs for the product or the effect of competition. On the demand side it is important for students to understand why people are prepared to pay more or less for a particular product. The differences can be quite tangible things such as quality and less tangible such as brand/fashion appeal or related to demand relative to supply.

It is important that students understand how any market works before launching specifically into how the sharemarket works. Some of your students may be familiar with eBay as well as the more traditional examples such as fruit and vegetable markets and trash and treasure markets. You could discuss how these markets are similar and how they are different. But ultimately it still comes down to a buyer and seller having to agree on a price for an agreed product or service.

A simple example of how the sharemarket works is given where you can see three buyers and three sellers interact and one buyer and a seller make a TRADE. Follow up the theory by getting students to complete Activity Two and then look at the actual market to see the system for placing orders in the real sharemarket. A significant learning outcome for students is that they must adjust their price if their bid or offer is not good enough to get the trade. "Here's an idea" suggests a useful way of fostering a discussion regarding the efficiencies of a computerised trading system.

## ANSWERS-LESSON THREE

## Quick quiz

## 1. A

2. Suggests that there was excess demand and that higher prices could have been charged. Some might argue that prices were already high and further price hikes may have undermined fan support (brand damage).
3. B. Could lead to discussion about flow on effect to general economic growth and the importance these days of China as a driver of growth in Australia.

## 3 HOW THE SHMREMMRKET WORKS: SEGONDMRY WARKET

## ACTIUITY ONE

1. Fashion increases demand for products and going out of fashion reduces demand. Reduced demand would either put downward pressure on prices for the less fashionable brand or at least provide resistance to increasing prices.

2a. Labour is an input cost in the production of clothes. Lower labour costs would mean jeans could be made more cheaply and thus sold at a lower price.
2b. All other things being equal, the cheaper jeans would provide competition to the local jeans which could force local suppliers to lower their prices or keep a lid on price increases.

Students may mention the possibility of lower quality, the premium price paid for fashionable brands or even the impact of exchange rates etc. as offsetting considerations.

2c. Labour costs tend to be cheaper in India, China, Philippines, Vietnam, some Eastern European countries, Africa and South America etc. Labour costs tend to be higher in Western Europe, America, Canada, UK, Australia and New Zealand.
3. Aviation fuel is a significant input cost and will cause the cost of flights to increase. Increased fares will lower demand.
4. This is a topic that could prompt a lot of discussion and some answers may be hard to identify as right or wrong. For example concerns about greenhouse gasses might be seen to be negative for companies associated with timber logging but on the other hand there is impetus to grow plantations to offset carbon emissions.

Some possible answers:

| ADVERSELY AFFECTED BY CLIMATE CONCERNS | BENEFIT FROM CLIMATE CHANGE CONCERNS |
| :--- | :--- |
| Agricultural companies reliant on irrigation | Water desalination companies |
| Companies heavily reliant on coal or oil for energy | Rainwater tank makers |
| Forest products companies (see note above) | Solar energy companies |
| Makers of fuel inefficient vehicles | Makers of fuel efficient vehicles |
| Garden sprinkler makers | Companies involved in recycling |
| Nurseries selling European plants | Manufacturers of hats, sun block, shade tents |

5. When companies are closing down they need to sell stock quickly. Higher prices might mean it takes longer to sell the stock.

## ACTIVITY TWO

A trade for DEF Company shares will take place as Buyer $\underline{A}$ and Seller $\underline{F}$ have agreed to trade the shares at a price of $\underline{50}$ cents per share. Buyer B wishes to buy the shares at 40 cents and Buyer C will purchase them for 41 cents. However, Seller $D$ and $E$ have different ideas as they wish to sell their shares at 51 and 54 cents respectively.
Both Buyer $B$ and $C$ will have to pay more per share if they wish to buy the shares or they will have to wait until a seller lowers their asking price to suit their expectations.

[^0]
## HOW THE SHIREMARET WORIS: THE SEGONDAM MABK:

## THE SECONDARY MARKET

After a company has listed on ASX and shares have been issued to investors through the primary market, the shares can be sold to other investors in the sharemarket.

Listing of companies on the market and the daily trading of their shares is the main activity of the Australian Securities Exchange.

## Market forces

Demand refers to how many people want to buy something and how much they are prepared to pay. Supply refers to how many people are prepared to sell something and the price they want for it.

The sharemarket is like any other market - price is decided by the forces of demand and supply.

When you are next shopping, take a look at the price of some of the goods and think about the factors that have determined the price for a particular item.

For example, if you are going to buy a pair of jeans you will most likely consider the following:

- The price of the jeans
- Fashion: do the jeans suit your particular taste? Are the jeans a popular brand?
- Price of other jeans or perhaps other pants. What do you think is the reason for the different prices of different pairs of jeans? Is it quality, size, extra features or perhaps brand popularity?
- How much money you have or your income. If you had less money which would you buy? If you had more money which would you buy?



## Learinahout...

## MARKET FORCES

THE SECONDARY MARKET

## QUICK QUIZ

1. What happens to the price of fruit when it is in season?
A. Prices fall
B. Prices rise
2. Tickets for some concerts sell out very quickly. Do you think this means that they could have charged higher prices? What are the reasons for and against charging higher prices for concert tickets?
3. If China experiences slower growth and as a result builds fewer houses, buildings and factories. What effect do you think this would this have on the price of iron ore?
A. Prices would go up
B. Prices would go down
C. No change

## KEY DEFINITION

THE SECONDARY MARKET:
Shares are first issued on the primary market. From then on shares are traded on what's called the secondary market.

## 

Now think of the supplier of jeans and what factors may have affected the decision to supply those particular jeans for retail sale. The supplier may have considered the following:

- Expectations of the price customers are prepared to pay for jeans both now and into the future. A higher price will encourage the supplier to supply more goods.
- Brands tend to go in and out of fashion.
- Production costs such as the costs of materials and labour to make the jeans. If production costs are too high, manufacturing the jeans may not be a profitable concern.
- Technological change may mean that jeans may be able to be produced more quickly with new and better sewing machines, reducing production costs.
- Whether the brand and type of jeans face a lot of competition particularly from imported goods.
- What price you might receive for producing another piece of clothing using the same resources.


## ACTIUITY ONE

1. Can you think of a consumer item that was very popular but is no longer as fashionable? How do you think this might affect the price a supplier could charge?
2. These days a lot of clothes are produced overseas in countries where labour costs are much lower.
(a) How do you think this will affect the cost of the clothes imported from overseas?
(b) What sort of impact would it have on the price of similar clothes produced here in Australia?
(c) Name some countries where you think clothes would be produced more expensively and also name some countries where you think they would be produced more cheaply.
3. What effect does an increase in the price of oil have on the price of plane tickets? What would this do to demand for overseas travel?
4. These days everyone is concerned about climate change. List some products or industries that might suffer lower demand as a result of these concerns and prepare a list of products or industries that might benefit from these concerns. You might like to prepare a list of those benefiting while a partner makes a list of those disadvantaged.
5. When a business is closing down, you often see prices heavily reduced. Why don't they increase prices to make more money before they close down?


## FAMOUS QUOTE

"A market is the combined behaviour of thousands of people responding to information, misinformation and whim."
Kenneth Chang

## HERE'S AN IDEA

Create some classroom chaos.
Make up pairs of buy and sell cards which contain:

1. the word "BUY" or "SELL"
2. the name of the company
3. the price the share will be bought or sold at (you can make this up if you like).

For example, if there are 20 students in a class, you may choose ten different companies. It is good to pick companies that you know and know what they do. For each company you will have one buy and one sell card, both with the name of the company and the same share price on each card to ensure a match or trade occurs.

Distribute the cards and find your perfect match by locating the student who is either buying or selling shares in the same company you have. Discuss why an electronic trading system would be much more efficient.

## MORE INFORMATION ON

how our electronic system works can be found on
www.asx.com.au
If you are all enjoying this activity you could come up with some news events that might have an affect on the companies and discuss how the price people would pay for shares in the company might change.

## 3 HOW THE SHREMARKET WORKS: SEGOUDMRY WARKET

## How the sharemarket works

Buyers and sellers in the sharemarket exchange shares foa particular price. When both buyer and seller agree on a price per share a trade takes place.

Let's take a simple example to show how shares are traded on the secondary market.
TABLE 1: COMPANY XYZ

| BUYER | BID PRICE | SELLER | ASK PRICE |
| :--- | :--- | :--- | :--- |
| Buyer A | $\$ 1.00$ | Seller D | $\$ 1.05$ |
| Buyer B | 99 cents | Seller E | $\$ 1.00 \rightarrow=$ Trade |
| Buyer C | 98 cents | Seller F | $\$ 1.06$ |

You can see from the Table 1 in this lesson that there are three buyers and three sellers of shares in XYZ Company. Buyer A is prepared to buy XYZ shares at $\$ 1.00$ per share. Buyer B and C prefer to pay less so Buyer $A$ has placed the highest "bid". For a trade to take place there needs to be a seller wishing to sell the shares at $\$ 1$ per share and that is Seller E.

The lowest price a seller is willing to accept for their stock is sometimes called the "Ask" price (because that is the price that the seller is "asking" for the stock).

Seller E has agreed to sell XYZ shares at the lowest price being \$1 per share. Seller D and F are expecting to sell their shares at a higher price so will either have to wait for a buyer to agree to buy the shares at that higher price or they will have to drop their asking price in order to sell the shares.

The price of shares on the secondary sharemarket is determined by demand and supply just like other markets. When the demand for a stock is greater than the number of shares available at a particular price, the price of the stock increases. When there is no demand for a stock at a particular price, the price falls.

## ACTIVITY TWO

Read Table 2 below and complete the answers in the paragraph below. TABLE 2: COMPANY DEF

| BUYER | BID PRICE | SELLER | ASK PRICE |
| :--- | :--- | :--- | :--- |
| Buyer A | 50 cents | Seller D | 51 cents |
| Buyer B | 40 cents | Seller E | 54 cents |
| Buyer C | 41 cents | Seller F | 50 cents |

A trade for DEF Company shares will take place as Buyer _ and Seller _ have agreed to trade the shares at a price of __ cents per share. Buyer B wishes to buy the shares at 40 cents and Buyer $C$ will purchase them for 41 cents. However, Seller D and E have different ideas as they wish to sell their shares at 51 and 54 cents respectively.

Both Buyer B and C will have to pay more / less (circle the correct answer) per share if they wish to buy the shares or they will have to wait until a seller lowers their asking price to suit their expectations.

## DID YOU KNOW?

Watching the news on TV you might see video of the stock exchange with people waving their arms and shouting. This is either archive footage or footage from overseas. These days trading on the Australian Securities Exchange (ASX) takes place on computers with all orders from around Australia all traded on one big electronic market. There is no trading floor in Australia.

## WEBSITES TO VISIT

Check recent company announcements at www.asx.com.au > Announcements.

Choose two company announcements and state what affect if any the announcement may have on the share price for that company. Test your theory by looking at the share price history over the last week to see if there have been any significant changes in share price (if the announcement doesn't seem very significant, choose another one).

## FAMOUS QUOTE

J.P Morgan, when asked what the sharemarket will do, replied: "It will fluctuate".

## KEY DEFINITIONS

## BID PRICE:

Price buyer is prepared to pay per share

## ASK PRICE:

Price seller is prepared to sell

## WHV IO SHARE PRIGES CHINCEP THMUHR NOTIS NIDAMSW:RS

## APPROACH

Lesson Four provides some of the major reasons why share prices change but it is worth noting the list is not exhaustive. There will be topical issues that you can draw on by looking at the business section of the newspaper in order to show the students how the theory learnt in this lesson does have a practical application.

Activity four is a great way of getting students to apply the theory they have learnt about why share prices change to practical every day examples in business. To draw the lesson together in a fun way you could take up the suggestion in "Here's an idea" and get students to build a board game incorporating all of the factors that affect share prices.

## ANSWERS-LESSON FOUR <br> ACTIVITY ONE

EXAMPLE RISE FALL
A. "A-One Clothing Company" has signed a contract to supply dresses and jackets to a chain of retail stores in London.

## 区

B. Shock announcement to the press that Managing Director of "Ace Company" has misappropriated (taken) money from the company for several years.
C. "More Hair Company" has found a miracle cure for baldness. $\boxtimes$
D. "Eureka Company" has just released a drilling report stating that more oil than first anticipated had been found and is now being drilled.
E. "Well Done Company" has just released its annual report showing record profit for the last financial year and projected profit in the next financial year is to be even better.

## ACTIVITY TWO

## 1. \$US 10.50

2. A falling Australian dollar will mean that "Exgo" wine can be imported by the USA at a lower cost, which may increase demand for the product and profitability. Note that there are many factors which may affect share price so we can only indicate the likely effect of a falling Australian dollar given there may be other factors that influence the price of wine and consumer demand.
3. A change in the Australian dollar may have an indirect impact on sales of domestically produced wine, due to the impact that a change in the exchange rate will have on imported wine. If the Aussie dollar rises and imported wine becomes cheaper, it may decrease demand for locally produced goods, and vice versa.

## 4 WHY DO SHIBE PBIGES GHANGEP

## ACTIIITY THREE

1. Companies that would benefit might include:

- Infrastructure companies that manage major projects
- Road and construction companies that build roads
- Construction materials companies
- Companies associated with signage, painting, road lines etc
- Road haulage companies that would transport goods on the new highways
- Businesses located on the new highways including shops, industries and petrol stations.

2. Companies that would be disadvantaged might include:

- Companies associated with alternative transport means such as rail transport
- Businesses located on roads by-passed by the new highways.

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# WHV DO SHIRE PRIGES GHNCEP 

## FACTORS INFLUENGING THE SHARE PRICE OF COMPANIES



You can rarely be certain why share prices rise and fall. The simple answer for a rise in price is "more buyers than sellers" and a fall in price is because "there are more sellers than buyers". But there is more to it than this. What causes there to be more buyers than sellers and vice versa?

There are many factors that can influence the price at which buyers and sellers are willing to exchange shares. Some factors might be related specifically to a company, others might be more general, broad market factors.

## IS THE COMPANY MAKING MONEY?

Companies regularly issue reports to the market on their activities. These reports include financial statements which report on whether they are earning income, whether costs are up or down and importantly, whether the company is making profits. Another important element of company reporting is providing comments on how they expect the company to perform in the future.

Companies that make favorable future profit projections or surprise the market with higher than expected profits often experience a rise in their share price. The opposite can trigger a fall in share price.

## Learinahout...

WHY SHARE PRICES CHANGE

## FAMOUS QUOTE

Famous American Investor, Warren Buffet talks about seeking excellent companies to invest in.
"In any business there are going to be all kinds of factors that happen next week, next month, next year, and so forth. But the really important thing is to be in the right business".

## FACT

Even when a company announces a profit to the market its share price can fall. This may be because the market had expected a bigger profit than was delivered.

## 4 WHV DO SHMRE PRIGES GUNNGE

## PEOPLE RUNNING THE COMPANY

The market's opinion of management within a company will have some effect on the price of its shares. For example, the news that a new managing director has been appointed to a company may influence a share price favourably if that person is considered to be the right person for the job.

## TAKING OVER OTHER COMPANIES

An individual company's share price may also change if another company tries to take it over by making an offer to buy its shares.

Generally companies launch takeover bids because they expect they will make more money by combining with the other company.

It is unusual for takeovers to succeed unless the company making the takeover bid offers more than the current market price for the other company's shares. So the target company's shares usually go up during a takeover bid.

## TECHNOLOGICAL INNOVATION

New ideas, new ways of doing things. A company's share price may change if there has been a technological breakthrough that suggests strong profit growth in the future.

## ACTIUITY ONE

Tick the appropriate box to indicate whether the share price of these companies is more likely to rise or fall.

| EXAMPLE | RISE | FALL |
| :--- | :--- | :--- |
| A. "A-One Clothing Company" has signed a contract to <br> supply dresses and jackets to a chain of retail stores <br> in London. |  |  |
| B. Shock announcement to the press that Managing <br> Director of "Ace Company" has misappropriated <br> (taken) money from the company for several years. |  |  |
| C. "More Hair Company" has found a miracle cure |  |  |
| for baldness. |  |  |
| D. "Eureka Company" has just released a drilling report |  |  |
| stating that more oil than first anticipated had been |  |  |
| found and is now being drilled. |  |  |
| E. "Well Done Company" has just released its annual <br> report showing record profit for the last financial <br> year and projected profit in the next financial year is <br> to be <br> even better. |  |  |

## HERE'S AN IDEA

You can find tables of exchange rates in the newspapers or on the internet. Type "currency converter" into a web search engine. Pick 3 different countries. Find out what the name of their currency is and find out the exchange rate with Australia.

Make sure the country is reasonably well known otherwise they may not be listed on the table.

Australia trades with some countries more than others. That means some changes in exchange rates are more important than others. An advanced task is to find out what the "trade weighted index" is. Find out which countries are the most important in this index.

## 4 WHY DO SHIRE PRIGES GHMNEEP

## TELLING THE MARKET ABOUT IMPORTANT INFORMATION

Information that might make the price of shares go up or down is called "price sensitive information".
Companies that have their shares traded on ASX (listed companies) must always inform the sharemarket of any activities that may affect the price of the shares on the market.

For example, if a gold company discovers a new deposit of gold the share price is likely to rise. A company's share price may change if a large contract to do more business has been won.

It is considered fair that all investors should have the same information when they are making their investment decisions whether to buy or sell shares in a company.

## FACTORS THAT MAY INFLUENCE THE SHAREMARKET AS A WHOLE

There are many factors that affect the sharemarket as a whole such as interest rates, exchange rates, government policies, overseas financial markets and our perceptions about how particular shares, or the sharemarket in general will perform. In recent times, international factors have had a big impact on the Australian sharemarket.

## INTEREST RATES

Interest is the money charged when you borrow money.
High interest rates can directly affect companies because they often borrow money to run their business. Increased interest rates would increase their costs. Some companies have a lot of debt and others have no debt so changes in interest rates will affect them differently.

For companies that have borrowed a lot of money, increased interest rates could reduce the company's profits.
High interest rates may also affect companies indirectly as other businesses review their future plans. A company with a lot of debt may need to spend less money which might have an affect on other companies that supply them with materials. Alternatively the company might cut back on other expenditure such as marketing. Interest rates also affect consumers.

Many people have borrowed money to buy a house. This is called a mortgage. If people have to spend more money paying off their mortgage they have less money to spend on other things.

Similarly, many people use credit cards to buy things. If interest rates rise, the charges associated with credit cards will go up. People often have to cut back their spending if interest rates rise - particularly on discretionary items (things people don't regard as essential). So you can see that interest rates can affect people's spending patterns - this is often referred to as consumer confidence.

## QUICK QUIZ: INTEREST RATES AND YOUR FAMILY

Does your family have a mortgage? Do they use credit cards? Ask your family how an increase in interest rates might affect them.

Discuss how their spending might change. What do they think are essential items and what do they think are things they can do without (discretionary spending)?

Can you think of any companies that might be affected by these changes in spending?

## EXCHANGE RATES

An exchange rate is the rate at which one currency may be converted into another. If you go to America you must buy U.S. dollars. The exchange rate determines how many Australian dollars you must pay to buy U.S. dollars.

Simple example: Assume that one Australian dollar converts into $\$ 0.75$ in United States currency.
Q: If I had \$A100, how much would I receive in US currency?
A: $100 \times 0.75=\$$ US75.00
Q: If I had \$US100, how much would I receive in Aussie dollars?
A: $100 \div 0.75=\$ A 133.33$

## 4 WHY DO SHARE PRIGES GHAYGEP

Exchange rates go up and down for various reasons. When they do, this can affect people who are buying goods from overseas (importers) and people who are selling goods to people overseas (exporters).

This next section can be a bit tricky to understand but it is very important if you ever go overseas.
A rising Australian dollar means you can buy more foreign currency with your Aussie dollar. So if you are buying goods from overseas this means the goods will be cheaper. This is because you spend fewer Aussie dollars. Companies importing goods from overseas, either to sell or as parts for their products, will benefit from a rising Aussie dollar. They can sell their goods more cheaply or enjoy higher profits if they sell at the same price.
The opposite situation is when the Australian dollar falls relative to other currencies. In this case, the Aussie dollar is worth less so you have to spend more Aussie dollars to buy a foreign currency. People selling goods overseas will benefit from this. Suppose you are a mining company selling iron ore overseas in U.S. dollars. When you get paid, you get U.S. dollars. You then convert the U.S. dollars into Aussie dollars. If the Aussie dollar has fallen, you will get more Aussie dollars than before.

Mining companies and other exporters such as agricultural companies benefit from a falling (or weaker) Aussie dollar because they can sell their products more cheaply making them more competitive. However, if you import goods from overseas those goods will now cost more because it will take more Aussie dollars to pay for the goods. It is easy to see how companies listed on the ASX will be affected differently as exchange rates go up and down.

In 2011, for the first time in many years the Australian dollar was worth more than the US dollar. This is called trading above "parity". When the Aussie dollar is worth more than the American greenback you would receive more than one US dollar in exchange for one Australian dollar. When the Australian dollar is worth less than the US dollar (trading below parity) you would receive less than one US dollar in exchange for one Australian dollar.

In 2014 and continuing into 2015, the Aussie dollar weakened and dropped below 'parity' with the US dollar. Big falls in commodity prices including iron-ore, coal and oil contributed to this fall. Since 2016 the Aussie dollar has ranged between $\$ 0.67$ and $\$ 0.80$ cents.

## ACTIVITY TWO

"Exgo" is an imaginary Australian listed company whose main business is exporting wine to the United States. Currently the price of a bottle of wine is worth ten Australian dollars ( $\$ 10$ AUS). If one Australian dollar was worth 75US cents a bottle of "Exgo" wine would export for \$US 7.50.

Let's imagine that the Australian dollar rises and one Australian dollar is worth 80 US cents. Given the revised exchange rate, a bottle of "Exgo" wine would now cost \$US 8.00. The American importing company will now have to pay 50 cents more for the same bottle of wine which may affect "Exgo's" sales, leading to reduced demand and therefore profitability.

Reduced company profitability could lead to a decline in the company's share price.

1. If the Australian Dollar rose to \$US 1.05, how much would a bottle of "Exgo" wine now cost in US Dollars (one bottle of wine is still worth ten Australian dollars)?

Answer
2. Explain how the fall in the Australian dollar may affect export sales for "Exgo" wine and therefore the profitability of the company.

Answer
3. Will the change in the value of the Australian dollar have any affect on sales in Australia (domestic sales)?

Answer

## GOVERNMENT POLICIES

Any changes to how companies are taxed will have a direct impact on the profitability of the company and therefore share prices. The tax that share investors must pay will have a direct impact on the investments they choose in future.

Government spending can also affect the sharemarket in general and certain companies in particular.

## 4 WHV DO SHARE PRIGES GUNNGE

## ACTIVITY THREE

Suppose the government decided to start a massive project to build new highways all around Australia.

1. Which companies might benefit from this?

Answer
2. Which companies might be disadvantaged?

Answer

## COMMODITY PRICES

The price of certain commodities (e.g. gold, oil, wool, grain, sugar, and iron ore, copper) on the world market may affect share prices. For example, a company engaged in gold mining is unlikely to achieve exceptional profit results if the price of gold is low.

Approximately 30 percent of listed companies on the ASX are in the resource sector, so energy and metal prices can have a dramatic affect on the sharemarket. Of course not all companies on the ASX are mining companies but a booming mining sector can spill over and encourage higher prices in other areas of the market.

## OTHER FINANCIAL MARKETS AND ECONOMIES

There is a saying that "if America sneezes Australia catches a cold". This was meant to explain that the health of the Australian economy and the Australian sharemarket is closely tied to how things are going in America. This is less the case now than previously, particularly as Australia's trade with other countries increases. However, it is certainly still true that Australia's economy is highly dependent on our exports to overseas countries. Therefore, a downturn in other economies may affect the willingness of other companies overseas to buy our products, affecting profitability and therefore share prices in the longer run.

Movements in overseas share markets can influence the Australian sharemarket. If we wake to hear news that the Dow Jones Index in New York has dropped a significant number of points overnight, there may be a reaction to this when the Australian sharemarket opens. The effect may in part be psychological as some investors begin to worry that share prices on the Australian sharemarket are likely to fall and sell shares to avoid any further losses. Also, big investors that have money invested all around the world might decide to sell shares on the Australian market after big falls overseas.

Uncertainty about economic recovery, concern over debt, a slowdown in the economy in any of the major countries, e.g. USA, Europe, China can all have an impact on the market.

Terrorist attacks, while not economic in their nature can also have a negative effect on confidence.

## Do your homework

Check the share price history charts for the following stocks by going to www.asx.com.au

Click on the Prices \& Research menu item and choose charting. Note whether share prices in general increased or decreased during the last 6 months for the following stocks:

- Australian and New Zealand Bank (ANZ)
- Bega Cheese (BGA)
- News Corporation (NWS)
- Newcrest Mining (NCM)


# THE ROLE OF THIE ASX TEMGIER NOTES AND ANSWERS 

## APPROACH

It is important to understand the role of ASX in how the sharemarket works. It might be helpful to draw a line and place the various activities undertaken by ASX along the line so that students get an understanding of the sequence of these activities.

A similar exercise could be done for the school environment. Who admits students to the school? What is the main activity of the school? Who administers the rules etc.? What happens if the rules are not properly enforced - school standards decline, bad reputation results, parents send their children to other schools etc.?

Once you have cemented the concept of the range of activities undertaken by ASX it may be useful to give students an international comparison so they understand the size of the Australian sharemarket, compared to other sharemarkets around the world. Students may like to complete the "Do your homework" exercise which involves them checking the newspapers or searching the internet to find the main market indicators for sharemarkets overseas.

Once students have the basic concept that ASX organises the market you can look at ways that ASX specifically does this. The quick quiz can be done after students have read about ASX's role which allows companies to list and raise capital as well as the role played in providing the infrastructure to make the sharemarket work such as our computerised trading system.

Activity One provides company announcements examples, which were made by three companies, and asks the students to explain why it was crucial that the company communicated these announcements to the market via ASX. Follow this up with the exercise where students look at recent company announcements on ASX's website. Finally, recap all the information in this worksheet by completing Activity two, which is a crossword puzzle.

## ANSWERS-LESSON FIVE

Do your homework
New York: Dow Jones Index, NASDAQ
London: FTSE 100
Hong Kong: Hang Seng
Tokyo: Nikkei Dow

## Quick quiz

1. False
2. True
3. True
4. False
5. False

## 5 THE ROLE OF THE AUSTRHIINT S:GURIIIES EMGHANGE

## ACTIUITY ONE

## COMPANY 1

The two companies operate in the same field. A merger is likely to result in cost savings and greater market share for Company 1.

COMPANY 2
By being able to market its products in Europe investors would expect increased sales and profitability.

## COMPANY 3

Major impact on revenue and reptuation, may create less conficence in the company. The share price is more than likely to fall.

## COMPANY 4

As this is a significant discovery, yes it is price sensitive. The price is more than likely to rise.

## ACTIVITY TWO

| ACROSS | DOWN |
| :--- | :--- |
| 1. ASX | 1. ASIC |
| 2. Capital | 3. Announcement |
| 4. Alert | 5. Listed |
| 7. System | 6. Insider |
| 8. Surveillance |  |
| 10. Exchange |  |
| 11. Market |  |
| 12. Index |  |
| 13. Down |  |
| 14. COH |  |

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# THE ROLE OF THE AUSTRAIIAN SECUATIIIES EXHINCG: 

## WHAT DOES THE AUSTRALIAN SECURITIES EXCHANGE [ASK] DO?



ASX is one of the world's top 10 listed exchange groups.

## ASX ACTIVITIES INCLUDE:

1. Reviewing applications by companies to be listed on ASX. This includes reviewing the company's history and finances. Each company must agree to obey the ASX Listing Rules.
2. Supervising companies after they are approved to make sure they obey the rules.
3. Making the shares in listed companies available for trading on a network of computers in an electronic market.
4. Reviewing applications by stockbrokers to be ASX Market Participants.
5. Giving approved stockbrokers access to the sharemarket so they can buy and sell shares for themselves and customers.
6. ASX also operates a system for keeping a record of ownership of shares.

## Learinahout..

THE SIZE OF THE AUSTRALIAN SHAREMARKET

WHAT ASX DOES

## KEY DEFINITION

## SECURITIES MARKET:

The market in which securities are issued and traded. Securities is another word for shares.

## DID YOU KNOW?

"Bourse" is the French word for stock exchange. The name came from the Dutch noble family Van Bourse who allowed tulips to be traded at their offices in the 17th century. Tulip bulbs were traded in much the same way that shares are traded today.

## 5 THE ROLE OF THE AUSTRMIMN SEGURITIES EMGHNCE

## ASX PERFORMS MANY ROLES

Within your own school, the principal and teachers run the school. They set rules and see they are adhered to, develop courses, organise school activities, teach and report on student progress, amongst a host of other things. Now, let's look at what ASX does to ensure the sharemarket runs smoothly and efficiently.

## 1. ASX ALLOWS COMPANIES TO RAISE FUNDS (CAPITAL)

ASX is Australia's largest stock exchange allowing companies and trusts to issue securities (such as shares) to the general public in order to raise funds (to set up a new business or expand an existing business). Once listed on ASX, investors can trade their securities.

## 2. ASX PROVIDES A MARKET FOR SECURITIES TO BE TRADED

The sharemarket is made up of buyers and sellers wishing to exchange securities. ASX provides an electronic trading system. Buyers and sellers do not physically meet to buy and sell shares as their orders are entered electronically. Prior to the introduction of the computerised trading system in 1987, ASX had a physical location known as the trading floor and before that there were separate exchanges with their own trading floors in capital cities around Australia.

## 3. ASX PROVIDES A SYSTEM TO TRANSFER OWNERSHIP OF SECURITIES

ASX also provides a computerised system to transfer legal ownership of the securities between buyers and sellers as well as the transfer of money for these securities.

## 4. ASX SETS LISTING RULES FOR COMPANIES TO FOLLOW

An example of a rule affecting listed companies is the rule of "continuous disclosure" where listed companies must inform ASX of any information that may affect their share price. For example, if a listed company is going to merge with another company, release a financial report, announce a technological breakthrough or change in company management, ASX must be informed so it can immediately release this important information to the market.
Another important area covered by the listing rules is how a company can issue shares and who they can be issued to.

There are over 2,000 companies listed on ASX. This seems like a large number but there are over 1.5 million companies registered in Australia from big companies to very small companies.

## Do your homework

Every day in the news there is information about how overseas sharemarkets have performed.

In Australia we use the S\&P/ASX indices and to a lesser extent, the All Ordinaries Index as a barometer to check the overall direction of the Australian sharemarket. Check the business section of the newspaper to find out the names of the indicators used in New York, London, Hong Kong and Tokyo.

## 5 THE ROLE OF THE AUSTRHIIN SEGURITIES EXGHANGE

## ACTIUITY ONE

The table below lists 4 example company announcements. Read the announcements and then answer the following questions.

| COMPANY | ANNOUNCEMENT |
| :--- | :--- |
| 1. Company 1 | This major health care company announces that it will acquire <br> another major health care company. |
| 2. Company 2 | This company announces to the market that it has received approval to market their <br> leading product in Europe. |
| 3. Company 3 | A very reputable health care company, announced that it was undertaking a voluntary <br> recall of a major product range. |
| 4. Company 4 | A resources company announces that it made a discovery of major reserves of Nickel <br> Copper Ores. |

1. Why do you think Company 1 needed to let the market know about this acqusition?
$\qquad$
$\qquad$
2. How would approval by European authorities affect Company 2?
$\qquad$
$\qquad$
3. What impact do you think a major recall would have on Company 3?
$\qquad$
$\qquad$
4. Would this be a price sensitive announcement for Company 4? Is the price likely to rise or fall?

## 5 THE ROLE OF THE AUSTRHIIAN SEBURIIILS EXHANGE

## ASX SETS MARKET RULES

ASX also sets the Market Rules to regulate how trading may take place on ASX.
Among other areas, the rules cover

- How buyers and seller of securities must be treated. For example, if you wish to buy or sell shares you must use a broking firm to complete the transaction. The broking firm must enter orders into the market as soon as they are received. Why do you think this would be important?
- How brokers must behave so that the integrity (honesty) of the market place is maintained.


## ASIC SUPERVISION AND SURVEILLANCE

The price of securities and the quantity bought and sold (volume) changes continually. The Australian Securities and Investments Commission (ASIC) monitors the market to detect any trading that falls outside the normal pattern.

This is referred to as surveillance. A computer system monitors trading information and picks up any unusual price or volume movements and puts out what is called an alert. For example, if a share jumps up by a lot more than it normally does or if shares are traded a lot more than usual, the system will generate an alert. An analyst will then assess the market conditions that caused the price or volume movements and will investigate further if necessary.

## ALERTS

Most alerts turn out to be explainable, as a company may have made an important announcement or there may have been a favourable newspaper report about the company. However, there may be the possibility of market abuse, in which case the matter is investigated.

The main concern is that someone knew some important information that everyone else didn't know when they were trading.

## INSIDER TRADING

People who know confidential information (not available to the public) that might affect the share price are not supposed to buy or sell shares until the market has been informed. People who do this are breaking the law and might be charged with "insider trading".

## QUICK QUIZ

After completing this lesson, test your knowledge by doing this quick quiz. State whether the following statements are true or false.

1. You can visit ASX and see the trading floor in operation today.
2. Shares are traded through a network of computers.
3. Once a company or trust becomes listed, investors can buy and sell securities in that company.
4. Once a listed company is established, what it does is its own business and there is no obligation to report any news about the company to ASX.
5. If the share price of a company increases dramatically without any justifiable explanation, it is up to ASIC to investigate.

## 5 THE ROLE OF THE AUSTRHIIN SEGURITIES EMCHANCE

## ACTIVITY TWO

Read all the information in this lesson to complete this crossword puzzle. Use the clues below to help you fill in the blanks.

| 1 |  |  |  |  |  | 2 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## ACROSS

1. What is the abbreviation for the Australian Securities Exchange?
2. What do companies raise when they issue shares?
3. An $\qquad$ is generated if a share price moves unusually.
4. Trading no longer takes place on the trading floor. It takes place via a computer $\qquad$ .?
5. What is the name of the activity for monitoring the market to detect unusual trading?
6. Another term for the stock market is the $\qquad$ ..?
7. What is the word for a place where shares are bought and sold?
8. All Ordinaries $\qquad$ ?
9. A company recall announcement would likely cause its share price to go ....
10. The ASX code for listed company Cochlear

DOWN

1. Which organisation has responsibility for monitoring unusual trading activity?
2. If a company has something important to tell the market it makes an $\qquad$ ..?
3. A company with shares traded on the share market is called a $\qquad$ company?
4. If a person who buys or sells shares has confidential information they might be charged with $\qquad$ trading.
5. Fill in the missing word: The $\qquad$ York Stock Exchange

# GEINDG RADDY TO LIUEST TEMGUER NOTESAND ANSWERS 

## APPROACH

This lesson is probably more suited to older students.
As many senior students work part time it is worth introducing the concept of putting aside a set amount of money for future use, even if it is only a small amount. Once students understand the importance of saving, you can progress to introducing the concept of investing and complete Activity one, which explores some personal attitudes to saving and investing.

Activity two looks at a more unusual form of investing - collectibles and asks the student to think of the problems that might be involved with collectibles.

After briefly examining investment alternatives you can zoom in on the rewards and risks associated with share investment. Activities three and four are designed to show students that there are points in time where you can make a capital loss and times when you can make a capital gain depending on your timing. Activity three could be used as a homework exercise, however students will need to access ASX's website to complete the activity.

This lesson also explores risk and it is important to note that all forms of investment carry some risk. For example, leaving your money in your purse can contain some element of risk as you might lose your money or it may be stolen. It is important to establish that losses can be made in the sharemarket but there are also ways to minimise risk through a longer-term view and diversification. Activity five tries to show how different attitudes and circumstances might affect a person's approach to investing.

Activity six explores the concept of life stage investing where short and long term goals will change according to our age and lifestyle.

## ANSWERS-LESSON SIK ACTIUITY ONE

1. You earned more in the second year due to compound interest. Your initial $\$ 500$ earned $\$ 50$ interest in the first year so you had $\$ 550$ to invest and earn interest on in the second year rather than just $\$ 500$.
2. The writer's grandfather established a savings pattern but unfortunately did not achieve growth in his money as he did not invest.

## ACTIVITY TWO

1. Original paintings by well known Australian and international artists can rise significantly. Like shares you must pick the right ones.
2. You have to be careful about damage and theft and may have to insure the works.

- They are often sold off early in times of economic stress.
- Paintings by very popular artists are likely to be able to be sold fairly quickly but less easily than shares.
- Vintage wine such as Grange Hermitage has been a very successful investment. However, you should store it in special rooms to protect its quality.
- Vintage cars are popular with some people but storage may be an issue.
- Sporting memorabilia, say a bat or cricket cap by Sir Donald Bradman will go up in value due to its rarity. Again care needs to be taken to keep the item safe. To get the best price the item may need to go into a special auction.
- A glove owned by the late pop singer Michael Jackson was sold for over $\$ U S 350,000$. It is not certain that this glove will continue to rise in price or even be worth this much in the future, if people lose interest in Michael Jackson.


## 6 AETIING READY TO RNUEST

## ACTIVITY THREE

1. Dec $2018 \$ 58.18 \times 1000=\$ 58,180$

Dec 2019 \$78.41 x $1000=\$ 78,400$
$=\$ 20,220$ profit
2. Feb $2019 \$ 67.72$

Oct 2019 \$78.41
$78.41-67.72=10.69 / 67.72 \times 100=15.78 \%$
3. March 2019 dividend: $\$ 1.14 \times 200=\$ 228.00$

September 2019 dividend: $\$ 2.43 \times 200=\$ 486$
Total $=\$ 714$

## ACTIVITY FOUR

## CASE STUDY 1

Harry is prepared to accept a high level of risk. He has a short-term time frame and prefers to invest in more volatile stocks.

## CASE STUDY 2

Sandy is prepared to accept a low level of risk. She cannot invest for the long term as she needs her money to go overseas and is personally not willing to risk losing any of her money so perhaps Sandy should look at other forms of investment than just the sharemarket.

## CASE STUDY 3

Kim is aware of the risk associated with investing in the sharemarket. She is comfortable with a certain level of risk. She aims to reduce her risk by diversifying her portfolio and taking a long investment time line.

[^1]
# CEIING RADIV TOTNIEST 

## SAVING AND INVESTING



You may have a part time job or have some way of earning money each week while you're still at school. So if you earn an income, it's time to learn about savings and investment.

Have you ever thought about "paying yourself first" by putting aside 10 percent of your earnings/allowance before paying your other expenses? Putting aside money on a regular basis for future use is called saving.

If you are saving, you're on the right track but it's also worth thinking about using the money you have saved to make more money. When you invest you decide to commit your money for a certain time period in the hope that it will GROW in value.

## Investment alternatives

There are many different types of investments to choose from.

1. Cash investments You may choose to simply put your money into a savings account where you loan your money to the bank and in return receive interest. Savings accounts are low risk investments and the interest paid is relatively low compared to other investments. There are other products such as Cash Management Trusts and Term Deposits so check with your bank or credit union to find out more about these investments.
2. Collectibles These are items that are relatively rare in number such as works of art, sporting memorabilia, antique furniture etc. Some of these investments can rise by large amounts. For example, the Australian Government bought the painting called 'Blue Poles' by the American artist Jackson Pollock in 1973 for $\$ 1.3$ million. This was regarded as a huge amount of money at the time. Experts say the painting would now be worth more than 25 times the price paid for it.

## Learinahout..

IMPORTANCE OF SAVING AND INVESTING

INVESTMENT ALTERNATIVES
RISKS \& REWARDS ASSOCIATED WITH SHARE INVESTMENT

ESTABLISHING INVESTMENT OBJECTIVES

## KEY DEFINITION

 DIVERSIFICATION:Spreading investments over a variety of investment categories to reduce risk.

## FAMOUS QUOTE

"An investor without investment objectives is like a traveller without a destination." Ralph Seger

## 6 AETINQ READY TO INUEST

3. Property You may purchase land and/or a building in the hope that you will sell it at a higher price and make a profit. You can also invest in property through the sharemarket using a listed property trust. People often talk about the property market as if it is just one thing. But remember that different parts of the property market can move in price just like different shares can move at varying rates. For example, a house by the harbour in Sydney might change in price differently to a house in a small country town. Property prices in Perth increased a lot due to the mining boom but in other places prices did not rise so quickly, and in some places, have even fallen.

Property investment appeals to a lot of people because they can see it - bricks and mortar. There can also be some tax advantages for investors. On the other hand, property costs a lot of money compared to other investments and may not be so easy to sell quickly if you need to.
4. Shares are another investment alternative. We will look at some of the risks and rewards involved when investing in shares.

## ACTIUITY ONE

You're never too young to start saving and investing. In fact there are some great financial rewards to be had if you start investing at an early age.

1. For example, if you invest $\$ 500$ today for one year earning $10 \%$ per cent per year, your investment will have earned you $\$ 50$. You can either take $\$ 550$ at the end of the year or reinvest that $\$ 550$ for another year and if it still earns 10 percent you'll have earned another $\$ 55$. Your initial $\$ 500$ will now be worth $\$ 605$ ( $\$ 50$ in the first year and $\$ 55$ in the second year). Explain why you earned more money in the second year than the first?

Answer
2. Here's an interesting story: "My grandfather knew the importance of saving but didn't really know about investment. He saved all his coins in a tin under the house for years. Unfortunately the rain got into the tin and the coins were rusty. He was still able to use his rusty savings but didn't actually increase the value of his money. In fact, he might have been better off spending his money considering inflation occurs when the price of goods and services rise."

What does the writer mean by stating that her grandfather "knew the importance of saving but didn't really know about investment"? Ask your own parents or grandparents about their attitude towards saving and investing.

## Answer

## ACTIVITY TWO

1. Can you think of some collectibles that have gone up in value by a large amount?

Answer
2. What might be some of the problems in having these investments?

Answer

## 6 AETING READY TO INUEST

SHARE INVESTMENT - RISKS AND REWARDS
Australian share price movements


As you can see the sharemarket has been a profitable investment over the long term. But it has ups and downs and of course not all shares go up at the same time. While many may be going up some will still be going down. Suppose the market was rising but you owned shares in a copper mine and copper prices were falling. Your shares might be going in the opposite direction to most of the market. Something else to consider is when you buy and sell. Suppose you bought your shares at a market peak and then sold them when the market had fallen? Your investment will have done much worse than if you bought during a low period and then sold at the top of the market. Investing is about timing your buying and selling just as much as deciding what to buy and sell.

The performance of companies can vary too. Even the biggest companies can have periods when their share price falls. The saying "don't put all your eggs in one basket" can also apply to investing in shares. If you drop the basket - you lose all your eggs. If you have invested in just one or two companies and their prices fall by a lot, then you are likely to be in more financial trouble than if you spread your risk across a range of companies in a range of industries.

## 6 GEIING READY TO INUEST

## ACTIVITY THREE

Capital gain ASX monthly share price chart and table, December 2018 to December 2019.


| Date | Dec 18 | Jan 19 | Feb 19 | Mar 19 | Apr 19 | May 19 | Jun 19 | Jul 10 | Aug 19 | Sep 19 | Oct 19 | Nov 19 | Dec 19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Closing share price (\$) | 58.18 | 61.84 | 67.72 | 68.91 | 73.50 | 74.74 | 81.27 | 87.17 | 85.16 | 81.07 | 82.32 | 81.71 | 78.41 |

1. The above table and chart tracks the share price history for ASX from December 2018 to December 2019

Question: What would your profit/loss in dollars and cents be if you had bought 1000 ASX shares in December 2018 and sold them in December 2019?

Answer:
2. What would be your percentage profit/loss have been if you bought in February 2019 and sold in October 2019? Round your answer to one decimal point.

Answer:
3. During 2019 ASX paid two dividends. In March it paid \$1.14 per share and in September paid $\$ 2.43$ per share. If you owned 200 ASX shares how much dividend income would you have received in 2019?

Answer:

## 6 GETING READY TO INUEST

## TAX BENEFITS

If you sell shares at a price higher than what you initially purchased the shares for you will have made a capital gain and will pay capital gains tax. However, if you hold shares for 12 months or more you qualify for a $50 \%$ discount in capital gains tax payable.

If you hold shares you can also gain income if the company pays its shareholders a dividend that may also be subject to tax. However, companies that have already paid tax on their profits may give tax credits known as franking credits that may reduce the tax payable by you on other income.

## DIVERSIFICATION

"Don't put all your eggs in one basket" - What does this mean?
Obviously eggs are fragile and could break easily. So, by spreading your eggs across several baskets you are reducing the risk of breaking all your eggs at the one time. Get it?

It's the same with investment.
No one knows for certain how different types of investments are going to perform in the future. Selecting a range of investment options reduces the risk of losing all your money (breaking all your eggs at the one time). If one of your investments performs badly you may still have gained from your other investments.

At the beginning of this lesson we introduced the concept of different investment types such as property, cash and sharemarket investments.

Property provides scope for diversification between residential and commercial property. It is important to consider diversification between different locations within a town and between different states.

On the Australian sharemarket there are over 2000 companies to choose from so there is certainly plenty of opportunity for investors to diversify within the sharemarket. These companies are involved in a wide range of industries covering most sectors of the economy including financial services, industrials, healthcare, mining, telecommunications and energy.

Sectors are industry classifications. In general, companies in the same sector will have the same market influences working on them, although every company is different. For example, gold prices and gold mining companies, retailers and consumer spending, agricultural companies and the weather.

Of course you don't want to take this too far by having just a few shares in a lot of companies which might happen if you don't have a lot of money to invest. Plus you would end up paying a lot of money in brokerage (the fee you pay a stockbroker to buy and sell your shares). Opinions differ on what is a good number of companies for spreading your risk and it depends on whether they are doing similar activities. Some people are comfortable with 5-10 different companies while others might want to increase to 20 the number of different companies they invest in.

## 6 GETIING READY TO INUEST

When markets are in a general decline most prices will fall however by spreading your shares across different industries you spread your risk. The table below shows how different sectors performed over 2017/18 and 2018/19.

SHARE INVESTMENT - RISKS AND REWARDS

| 29 DECEMBER 2017 TO | PERCENTAGE |  |
| :--- | :--- | :--- |
| 31 DECEMBER 2018 | CHANGE |  |
| XDJ | Consumer Discretionary | $-10.67 \%$ |
| XEJ | Energy | $-10.87 \%$ |
| XFJ | Financials | $-14.78 \%$ |
| XHJ | Health Care | $17.33 \%$ |
| XNJ | Industrials | $-3.82 \%$ |
| XIJ | Information Technology | $5.50 \%$ |
| XMJ | Materials | $-2.28 \%$ |
| XSJ | Consumer Staples | $1.04 \%$ |
| XTJ | Telecommunications | $-21.38 \%$ |
| XUJ | Utilities | $-10.12 \%$ |
| XAO | (All Ordinaries) | $-7.42 \%$ |


| 31 DECEMBER 2018 TO | PERCENTAGE |  |
| :--- | :--- | :--- |
| 31 DECEMBER 2019 | CHANGE |  |
| XDJ | Consumer Discretionary | $19.14 \%$ |
| XEJ | Energy | $18.24 \%$ |
| XFJ | Financials | $7.39 \%$ |
| XHJ | Health Care | $41.23 \%$ |
| XNJ | Industrials | $22.62 \%$ |
| XIJ | Information Technology | $31.81 \%$ |
| XMJ | Materials | $22.09 \%$ |
| XSJ | Consumer Staples | $17.98 \%$ |
| XTJ | Telecommunications | $22.30 \%$ |
| XUJ | Utilities | $10.09 \%$ |
| XAO | (All Ordinaries) | $-1.12 \%$ |

## 6 AETING READY TO INUEST

## ACTIVITY FOUR

Conduct an experiment over the next week. Imagine you've been given $\$ 10,000$ to invest for one week. Choose one company and invest $\$ 10,000$ (experiment A). At the same time invest roughly $\$ 2,000$ in five companies from different sectors of the sharemarket (experiment B).

EXPERIMENT A: STARTING CASH \$10,000 (INVEST IN ONLY ONE COMPANY)

| Company | No. of <br> shares | Day 1 price | Day 2 price | Day 3 price | Day 4 price | Day 5 price | No. of Shares $X$ Day 5 price $=\$$ |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |

EXPERIMENT B: STARTING CASH \$10,000 (INVEST IN FIVE COMPANIES)

| Company | No. of <br> shares | Day 1 price | Day 2 price | Day 3 price | Day 4 price | Day 5 price | No. of Shares X Day 5 price = \$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

NEED HELP? To help you choose from different sectors of the sharemarket go to www.asx.com.au, locate the 'Company info page' under the navigation area 'Prices \& Research'. Select 'All companies' and you will find that the industry group for each company is listed next to the share. If you click on the three letter code for that company, you can find the closing share price from the previous day to help you fill in this table.

At the end of the week calculate what your $\$ 10,000$ is now worth.
Question: Were you better off diversifying?

Question: You may have made more money in experiment A by not diversifying, but explain why this might not be the right strategy to adopt in the long run.

## 6 AETINQ READY TO INUEST

## FLEXIBILITY

You can buy and sell shares quickly. You can sell shares and generally have access to your money in no more than three days. Other investments often take longer to sell and get your money back. This concept is known as liquidity. (Liquid investments have the benefit of greater flexibility). Bear in mind that some shares trade more actively than others. If you are concerned about being able to sell quickly and easily, look at the trading history of the shares to assess the trading volumes.

## SHARE INVESTMENT - RISKS

If we say someone is volatile we usually mean they are changeable, unpredictable.
The market can go up and down quite a lot in the short term. This is referred to as market volatility.
Individual stock prices can go down as well as up. Some stocks are more volatile than others - you can usually tell this by looking at a chart of their share price movement.

It is important to monitor your shares' performance and to regularly re-evaluate whether they continue to be a good investment for you.

Some investors reduce the risk of losing money through diversification. Investors can also reduce risk by investing in certain types of shares.

Well-established companies with historically stable performance are known as blue chip companies. You may choose a blue chip company in the expectation of greater reliability or security, or consider shares in one of the more speculative stocks if you are prepared to take greater risks with your capital for the potential to make greater returns. Remember that past performance is no guarantee of future performance.

## ACTIVITY FIVE

Read the first three case studies and mark on the scale below the level of risk you think each investor is prepared to take. Give reasons for your answer.

Low Risk
High Risk

Case study 1: Harry has just turned eighteen and has \$5,000 to invest.
He wants to achieve a very high return and will keep his shares for at least two years.
Harry asks his adviser to recommend three companies and says that he would like to take a chance and invest in more speculative stocks. Harry's adviser suggest three stocks which promise to have potential but warns Harry of the possibility of losing some of his $\$ 5,000$ nest egg.

Harry is prepared to sacrifice security for the potential of a greater return. He is not relying on the $\$ 5,000$ to buy a car or go on a holiday and realises the risks involved.

Answer 1

## 6 GETING READY TO INUEST

Case study 2: Sandy is familiar with share investment because her parents started a share portfolio for her when she was eight years old and she watched it grow.

Sandy has $\$ 10,000$ to invest for one year only as she plans to use the money to carry out her dream and go overseas.

The thought of Sandy's \$10,000 nest egg decreasing even slightly as a result of her shares decreasing in value makes Sandy feel nervous and worried.

Answer 2
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Case study 3: Kim has just finished school and has \$3,000 to invest in the sharemarket.

She learnt about the sharemarket at school and has a keen interest in developing her own portfolio while minimizing risk through careful stock selection.

Kim believes investment in good sound companies with a proven track record will help minimize risk and is prepared to invest over a five to ten year period.

While Kim has a working knowledge of the sharemarket and tries to stay informed she realises the market will fluctuate but believes her long term approach to investment will reduce the potential for risk in the end.

Answer 3
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## QUOTE

Alan Hull, author of personal investment books says:
"The only advantage of not having a plan is that you will never know when you've failed."

## 6 AETING READY TO INUEST

## SETTING YOUR INVESTMENT GOALS

Before investing in shares it is advisable to ask yourself a series of questions to ensure this type of investment is right for you.

- What do you want to achieve from your investments? Do you want a return in the form of income (such as dividends) or capital growth (buying shares at a lower price than you paid for them)?
- Are you prepared to risk some of your investment capital for the opportunity to make higher returns?

Your age and time frame for investing may affect your long term and short term goals.

For example, a single person with no dependants may be willing to accept more investment risk in return for higher growth. Retirees are often very concerned about not losing their savings.

It is important to identify your goals so you can plan towards achieving them.

## ACTIVITY SIX

Fill in the table on the next page and discuss your short term and long term goals with your classmates. We are talking here about what you would like to own, how financially secure you want to be etc.

A short term goal may be that you wish to buy some clothes or a computer game and a long term goal may be that you wish to purchase a car by the time you are 18. It's pretty hard to imagine what your goals will be when you are 50 years old so try to put yourself in the role and perhaps think of others the same age and what they are doing. If your long term goal is to live on a tropical island and not work for the rest of your life you had better start planning now.

## 6 GETING READY TO INUEST

|  | SHORT TERM GOALS |  |
| :--- | :--- | :--- |
| Teenager - now |  |  |
|  |  |  |
| When you finish <br> school |  |  |
| When you turn 21 |  |  |
| When you turn 30 |  |  |
| Whetirement |  |  |

# HOWTO BUY AND SEIL SHRAES 

## 

## APPROACH

This lesson provides the basics on how to buy and sell shares without going into detail about the paper work involved when trading shares. We assume it is better to give students an overview of the process and keep unnecessary detail to a minimum to maximise student interest.

There are some common misconceptions students might have that can be ironed out in this lesson. It is important that students realise that if they purchase shares they need a broker to facilitate the transaction, but they are not actually buying shares from a broker. If shares are being traded on the secondary market and not through a float, it is also important that you highlight that shares are being bought from a seller in the market. Some students also think that ASX must have a supply of shares or that the companies themselves sell shares to the buyer on the secondary market.

Reading this lesson and completing Activity one can address these common misconceptions.
Activity two is designed to show students how electronic trading works and it is worth noting that prior to 1987, shares were traded using the open outcry system. Students sometimes see footage on television of a trading floor in operation, giving them the impression that this type of trading still exists.

Finalise the lesson with the written interview with two advisors from the fictitious stockbroking firm Canterbury Stockbroking and complete Activity three questions. The interview will at least give students some insight into the day-to-day operations of a stockbroking firm, and also touches upon careers within a stockbroking firm.

## ANSWERS-LESSON SEVEN

ACTIUITY ONE
A. False
B. True
C. False
D. True
E. False

## ACTIVITY TWO

A. Six
B. Nine
C. 404,308 - The volume includes all shares on offer at $\$ 4.19$ and those on offer at $\$ 4.16$ because the seller at $\$ 4.16$ will be happy to receive the higher price of \$4.19.
D. 93,427 The volume includes all bids at $\$ 4.12$ and the bid at $\$ 4.15$ because the buyer at $\$ 4.15$ will be happy to pay the lower price of $\$ 4.12$.
E. Yes, this is fair as this buyer is willing to pay more than any other buyer for the share. The market matches orders on a price then time priority so a better price will always beat a worse price no matter when the order is entered.

## 7 HOWTO BUY AND SEIL SHARES

## ACTIVITYTHREE

A. The sharemarket opens at 10 am Sydney time.
B. Advisers start the day with a meeting to discuss what happened on overseas markets, any newspaper articles of the day and recommendations on particular stocks.
C. The name of the person who enters orders into the trading system is called the Designated Trading Representative or DTR.
D. There are no formal qualifications but it is usual that an adviser has a tertiary education. The adviser must also receive accreditation to advise from the Australian Securities and Investment Commission (ASIC).
E. Analysts research listed companies and write reports on their research findings.

# HOW TO BUY AND SEILSHIRES 

## HOW TO BUY AND SELL SHARES

A market is where buyers and sellers come together for the purpose of exchange. What is being exchanged or traded in the sharemarket are shares. There are a few differences though in how the sharemarket operates compared to your local food or craft market.

- The Australian sharemarket does not have a physical location such as a trading floor any more. Trading occurs via a computerised trading system linking stockbroking firms around the country.
- You need an agent, called a stockbroker to buy or sell shares on your behalf. There are over 90 stockbroking firms authorised to buy and sell shares on ASX. Some of these firms are called full service brokers. Other firms are non - advisory they simply buy and sell shares after being given your instructions.
- Setting up an account with a broker requires completion of paperwork and the broker will often require a minimum amount of money to be placed into an account before you can buy shares.
- Brokerage is the fee charged by the stockbroking firm for buying and selling shares on your behalf.
- When buying or selling shares your order is entered into a computerised trading system at a stockbroking firm. The trading system finds a seller in the market that is prepared to sell shares for the price you are willing to purchase them for.
- Within three days of your broker executing your order, payment will be made. If you have sold shares you must provide access to the shares you have sold so they can be transferred to the new owner.
- If you are purchasing shares in a 'float' or 'Initial Public Offering' you can still organise this through a stockbroking firm. For more details on buying shares in a float see Lesson Two.
- To buy and sell shares you must be over 18 years of age although arrangements can be made for adults to buy shares on your behalf.


## ACTIVITY ONE

Read the following statements and note whether they are true or false.
A. If you wish to buy shares you must physically go to the counter at the Australian Securities Exchange (ASX) and purchase them directly from there. True/False
B. If you wish to receive advice about buying or selling shares on the secondary market you must use a full service stockbroking firm. True/False
C. When you buy shares you are buying them directly from the stockbroking firm who has a supply of them. True/False
D. The computerised trading system matches buy and sell orders and then trades them automatically. True/False
$E$. There is no charge for buying and selling shares on the secondary market. True/False

## Learinahoult.

HOW TO BUY AND SELL SHARES

ASX COMPUTERISED TRADING SYSTEM

STOCKBROKING FIRMS

## DID YOU KNOW?

Trading shares has become much cheaper in recent years as stock brokers have made use of new technology to provide a better service to you. Buying and selling shares can cost as little as $\$ 15$ for a transaction-only service. You may need to pay more if you want advice and/or access to research on a company.

## FAMOUS QUOTE

"Seventy years ago the stock market was a rich man's game.
The average investor put his money in the bank or under the mattress. Today, the stock market has become everyone's best hope for a strong retirement income" Diana Henriques

## 1 HOWTO BUY AND SEIL SHARES

## COMPUTERISED TRADING SYSTEM

All share trading on ASX takes place via computer. Members of the public do not have access to the trading system but place orders by contacting their broker. A snap shot of the trading system can be seen below.

The most common order used on the market is an "at limit" order. This is when you instruct your broker to buy or sell a security at a given price or better. If you want to buy, that means a given price or lower. If you want to sell, that means a given price or higher. If there is more than
 one order at the same price, the order that was placed first takes precedence.
Large orders have no priority over small orders. Once you have instructed your broker to buy or sell shares the order is immediately entered into the trading system by a person called a 'Designated Trading Representative' (DTR).

Let's now look closely at the screen shot above of the computerised trading system ASX operates.
You can see there are 2 orders in the market willing to buy XYZ for $\$ 4.15$. The quantity of shares to be purchased at this price is $93,227(83,227+10,000)$. If there is more than one buyer at a price the number of shares each buyer wishes to purchase at this price is often added together to show a combined total. The lowest price any seller is willing to sell XYZ shares for is $\$ 4.16$ and the quantity of shares to be sold at this price is 199,999 . The order depth screen shows there is only one order at this price. So, this is how the market works, we have buyers wishing to buy XYZ for $\$ 4.15$ but a seller will only sell at $\$ 4.16$.

What will need to happen for a trade to take place? Both buyer and seller will need to agree on a price. Buyer/s will need to pay one cent more per share or seller/s may accept being paid one cent less for XYZ shares just to sell their shares.

Remember that if someone offers to buy shares at a price higher than the current offer they may take all the quantity for sale at the best price and then have access to shares on offer at the next best price. Similarly, if someone offers to sell at a price lower than the current best price, they will move to the top of the queue and have the first opportunity to sell their shares.

## ACTIVITY TWO

Use the screen shot above to answer the questions.
A. How many bids or buyers are there in the market wishing to purchase XYZ shares at $\$ 4.10$ ?
B. How many offers are there to sell XYZ shares at $\$ 4.20$ ?
C. How many XYZ shares are available to buy at $\$ 4.19$ ?
D. How many XYZ shares can be sold at $\$ 4.12$ ?
E. If a buyer comes into the market wishing to buy XYZ shares at $\$ 4.16$, they will jump the queue ahead of buyers who are only willing to buy shares at $\$ 4.15$. Do you think that is fair? Give a reason for your answer.

## ACTIVITY THREE

## A DAY IN THE LIFE OF A STOCKBROKING FIRM

Read the following interview with two advisers from the fictitious stockbroking firm Canterbury Stockbroking. Answer the following questions.
A. At what time does the sharemarket open in the morning?
B. Why do you think it important that advisers might start the day with a meeting?
C. What is the name of the person who inputs the orders into the computerised trading system?
D. What educational qualifications do you require to become an adviser?
E. What role do analysts play in stockbroking firms?

## 1 HOW TO BUY ANI SEIL SHARES

James, an adviser for ten years with the company Canterbury Stockbroking arrives at work at 7:45 a.m. to read the morning papers and catch up on movements on overseas markets overnight. It's then time to attend the morning meeting at 8:30 a.m. There are 25 advisers (also called dealers) and four analysts working in the firm. They all meet to discuss what is happening in the marketplace before it officially opens for trade at 10:00 a.m. (Sydney time). At 9:00 a.m. James arrives back at his desk fully informed about the upcoming floats and several companies that he might recommend to his clients that day. In between the constant phone calls from clients wishing to buy or sell stock, James manages to answer some questions.

## HOW DID YOU FIRST BREAK INTO THIS INDUSTRY?

'I started as a messenger and then worked in the back office which handles all the paper work associated with share transactions. After that I became an operator, or as they say these days a "Designated Trading Representative" (DTR). As a DTR I was responsible for buying and selling shares using the ASX trading system. This is a computer network, which allows an operator to trade securities at the push of the button. The adviser fills in an order form and the operator places this into the system. I gradually moved from this to advising clients.'
WHAT QUALIFICATIONS DO YOU NEED TO BECOME AN ADVISER?
'Educational qualifications differ depending on the stockbroking firm but ideally to become an adviser, a degree in either finance, business, economics, accounting, law, mathematics, actuarial studies or a related discipline is desirable. The Stockbrokers Association of Australia offers training courses for people working or wanting to work in the stockbroking industry. Our firm itself requires a licence to operate, and as their representative, has provided me with an "authority to trade" so I can advise clients. I have also been accredited by the Australian Securities and Investment Commission (ASIC) and am also required to undertake further professional development each year to ensure my knowledge is up to date.' James takes another phone call from a client wanting to know more about a new share issue so I speak with another adviser, Julie, who has worked with Canterbury for three years.'

## WHY DID YOU BECOME AN ADVISER?

'I sold my business in the hospitality and tourism industry and my accountant suggested I invest in the sharemarket. I developed a keen interest in the market through developing my own share portfolio and this led to a whole new career.'

## WHAT DO YOU LIKE MOST ABOUT ADVISING?

'It's not like work to me. Keeping up to date with what's happening in the market is stimulating and I enjoy looking after clients. If you work hard the rewards are there.'

## HOW DO YOU STAY INFORMED OF MARKET TRENDS?

'A team of analysts work at Canterbury. The analysts provide invaluable research on listed companies, keeping us fully informed through written reports and discussions at our morning meetings. I also attend company presentations where the Directors of various listed companies outline the profitability and future direction of their business. Of course reading the newspapers and journals also helps to stay fully informed.'

WHAT IS THE SECRET TO BECOMING A SUCCESSFUL ADVISER?
'It's not just the right advice that clients want - it is also the service to back up the advice. Keeping in touch with the client and regularly reviewing their share portfolio is important.'

Normal trading finishes at 4 p.m. Julie has an appointment with a client who prefers to do business face to face instead of on the phone. James attends a company presentation. The operators and administrators in the back office busily attend to the paperwork arising from the day's business. Both advisers conclude the day with an informal chat and can testify that the All Ordinaries was indeed up on the previous day's trading.'

## ASK YOUR PARENTS, GRANDPARENTS, AND FRIENDS?

Ask your parents, grandparents and friends whether they remember how trading used to occur in Australia before the introduction of the computerised trading system in 1987.

# KREPNG TRIGK OF MOUR SHMETNUESTMENIS TEAGHER NOTES AND ANSWERS 

## APPROACH

This lesson is all about finding relevant sharemarket information and looking at the different strategies investors use to pick stocks.

Start with Activity one which teaches students to read the newspaper share tables and make note of the fact that this information can be easily found online at the ASX website or other finance websites. You could follow up with a homework exercise by cutting out a section of the newspaper share tables and creating more questions, perhaps getting students to draw a bar chart of the 52-week high and low share price for shares they are interested in. Investors not only want to find share price information for particular stocks but they might also want to know how the sharemarket on average is performing. You could then ask students how close the current share price for that particular stock is compared to the 52week high share price.

The section on investment strategies endeavours to teach students that there are many different approaches to picking stocks but the most respected are fundamental and technical analysis. This section only touches on these two approaches briefly.

## ANSWERS-LESSON EIGHT <br> ACTIIITY ONE

1. DMP
2. \$12.96
3. -.08 cents
4. FMG
5. a. $10 \%$ b. rises
6. 18.20
7. a. $\$ 4.01 \quad$ b. $\$ 5.25$

## Quick quiz-investment strategies

1. False
2. True
3. False
4. True
5. True

Last updated: January 2020
These Teacher Resources are intended for educational purposes only. The information in this booklet and on the ASX website is general and is not intended as investment advice and must not be relied upon as such. You should obtain professional investment advice tailored to your specific circumstances prior to making any investment decisions. To the extent permitted by law, no responsibility for any loss arising in any way (including by way of negligence) suffered by anyone acting or refraining from acting as a result of this material is accepted by ASX.

# K:EPING TRAGU OF YOURSHRRE INTESTMENIS 

## WHERE TO FIND SHARE PRICE INFORMATION



Information on shares and listed companies is readily available.
Summaries of the day's market action are often provided on radio and television news reports. You can track share prices and investment performance on the internet and in newspapers. The ASX website, other finance sites and many stockbroker sites allow you to keep a file of your favourite stocks and their current value.

## UNDERSTANDING NEWSPAPER SHARE TABLES

Newspapers provide daily information on share prices, sales in the market and overall market trends.

When you first look at the tables you might be overwhelmed by the amount of information and the small print but it's OK once you get used to them. You also need to watch out when you look in different newspapers because the format might change slightly. However, they are usually very similar.

You will find a table marked Table A at the end of these notes. It can be printed off separately. The table is an example of how a share table may be displayed.
Shares are listed in alphabetical order according to the name of the company. Industrial and mining shares are often listed separately. This means you need to know whether the company you are looking for is an industrial or a mining stock.

## Learinahout...

## WHERE TO FIND SHARE

 PRICE INFORMATION MARKET INDICATORS INVESTMENT STRATEGIES IN BRIEF
## DID YOU KNOW?

Getting stock prices these days is a lot easier than it used to be. Global information company, Reuters, first used pigeons to fly stock prices between Aachen and Brussels in 1849.

## LOOKING FOR PRICES

The traditional way to check share price information is in the business section of the newspaper.

You can also access this information online at www.asx.com.au

## 8 KEEPING TRAGK OF YOUR SHIRE INUESTMENTS

## ACTIUITY ONE

Use the share price table at end of these notes for this activity.

1. Name the company that had the widest range in its share price over the 52 week period?
2. The price the share was sold for in the last sale of the day. What was the last sale or closing price for Suncorp shares?
3. The amount by which the last sale price is up or down on the previous day's close. This is expressed as cents per share. What was the move, in cents, in the price of Tassal shares from the previous day's trading?
4. Turnover or volume refers to the number of shares traded (bought and sold) that week. Which was the most actively traded share from the table on 31 December 2019?
5. The Dividend Yield is calculated by dividing the dividend per share by the current share price.
$\frac{\text { Dividend per share }}{\text { Share price }} \times \frac{100}{1}=$ Dividend Yield
The dividend paid by the company is expressed as a percentage of its current share price (so the yield changes when the share price changes). If you purchased shares in ASX at the closing price of $\$ 36.63$, based on the annual dividend paid, you would expect a return of $4.86 \%$ for every share you hold.

If the dividend stays the same and the price of the share rises, the dividend yield falls.
Dividend yields are important for people who are buying shares primarily for the purpose of earning income from dividends. A lot of people who have retired do this. If they put their money in the bank they know they can earn a certain amount of interest. They can compare bank interest to the dividend yield of the shares. But remember shares go up and down in price.
A. Assume the dividends for company XYZ in a year are 85 cents and the share price is $\$ 8.50$. What would the dividend yield be?
B. If the dividend stays the same and the share price falls, what happens to the dividend yield?
6. Price Earnings Ratio is calculated daily by dividing the share price by the earnings per share (earnings per share is net profit divided by number of shares in the company issued).

Investors use p/e ratios as a measure of how expensive a company is compared to others.
When using p/e ratios it is best to use them when comparing similar companies in similar industries.
What is the p/e ratio of JB Hi Fi on 31 December 2019?
7. The highest and lowest sales recorded during the past year of trading. The measure includes the last 52 weeks; it is not confined to a calendar year.
A. What was the lowest price for Tassal for the 52 weeks up to 31 December 2019?
B. What was the highest price for Tassal for the 52 weeks up to 31 December 2019?

## MARKET INDICATORS

An index is a way of measuring the performance of a group of similar things. The consumer price index measures the price of a basket of items. Although the price of some items in the index might go up and others might go down, movement in the CPI gives an overall view of the change in prices relevant to consumers. The CPI is a common measure of "inflation".

The All Ordinaries Index or "All Ords"" as it is sometimes called is used to indicate whether the sharemarket is going up or down. The All Ords ${ }^{\circ}$ measures the price movements of approximately 500 companies listed on ASX (there are over 2,000 companies listed on ASX). The All Ords ${ }^{\circ}$ therefore provides a good indication of market performance given those 500 companies represent approximately $98 \%$ of the domestic market. But remember a rising or falling index doesn't mean that all share prices in the index have risen/fallen.

While the All Ords ${ }^{\circ}$ continues to be reported in the newspaper and on television, it is the S\&P/ASX 200 that is really the main market indicator these days.

## 8 KEEPING TBAGK OF YOUR SHIRE INUESTMENTS

## ACTIVITY TWO

1. Look at the poster illustrating the history of share prices in Australia which can be viewed or downloaded from the ASX website - www.asx.com.au > Education > Download brochures > Australian share price movement chart.
2. Pick five points in the chart, which either show an extreme rise or an extreme fall. Write down the reason in the third column of the table below. An example of a major downturn/fall in the sharemarket has been recorded in the first column to get you started.

| YEAR/S | MAJOR RISE | MAJOR FALL |
| :--- | :--- | :--- |
| 1915  World War 1 Shortage of imports restricting <br> industrial activity <br> -1916   <br>    <br>    <br>    |  |  |

## OTHER AUSTRALIAN INDICES

There are a range of other indices, or indexes to measure various aspects of the market. There are indices to measure a group of the top 20 , top 50 , and top 100 stocks. Changes in these indices give you an idea how the biggest companies are faring. As you know the market can be generally divided between industrial companies and resource companies. So there are indices for industrial companies and for companies involved in metals and mining.

In these notes you might already have read about different market sectors. Sectors reflect particular industries or types of business activity. There are indices to measure the performance of these sectors too.

## WEBSITES TO VISIT

It is as important to diversify your information sources, as it is to diversify your portfolio. If you take investment seriously you will want local, national and international views on the markets. These might be difficult to get from a single newspaper.

Check the newspaper in your state but also make sure you read the national newspapers for a comprehensive insight. International papers also have online international editions.

National newspapers include:

- The Australian
https://www.theaustralian. com.au
- Australian Financial Review www.afr.com


## QUICK QUIZ

Find the websites for the following international publications

- Financial Times
- The Times
- New York Post
- Wall Street Journal


## FAMOUS QUOTE

"After we buy a stock, we would not be disturbed if markets closed for a year or two; we don't need a quote on our position...to validate our well being."
Spoken by famous American investor, Warren Buffett

## 8 KEEPING TRAGK OF YOUR SHIRE INUESTMENTS

## ACTIIITY THREE

Look in the newspaper or go to the "Indices" section of the ASX website under the Prices \& Research section. Write down the name of an index showing the overall performance of smaller companies.

List the indices for 3 market sectors.
1.
2.
3.

## BULLS AND BEARS

The sharemarket is full of specialist words that not every one might understand. This is called jargon.
One of the most common terms you might hear is people referring to bulls and bears or bull markets and bear markets.
Some say that these terms came about because a bull market is a rising market. A "bull" tosses market prices up. A bear market is a falling market. A "bear" claws market prices down. There are other theories too. Do a search and see what you can find.

## INVESTMENT STRATEGIES

Buying at a low price and selling at a high price is what all share investors would like to achieve. There is a wide range of strategies used to predict which stocks will perform well.

Some investors follow Elliot's Wave Principle, studying changes in investor psychology to predict market trends. Fibonacci followers base their strategy on Leonardo Pisano's famous series of numbers to forecast the sharemarket cycles.

There are many more strategies that have been used to predict the market.
Two approaches that are widely recognized and respected are the fundamental and technical approach to stock selection. Some investors use both approaches when selecting companies to invest in. For example, some investors use fundamental analysis to help them in deciding which stocks they are interested in. They then use technical analysis to help them decide when to buy and sell shares in those companies.

## FUNDAMENTAL ANALYSIS

As the name suggests this approach looks at the fundamentals of a company. The analysis includes the broader economy and how that might affect the company's prospects, how the industry sector the company is in is going and then looks at how the company itself is run as well the company's competitors.

Fundamental analysis involves taking an in-depth look at the company, assessing the company's profits, dividends, its assets and how the company is run. More specific information on these factors can be found in lesson four which covers why share prices change.

## TECHNICAL ANALYSIS

Technical analysis (also known as charting) involves looking at past movements in share price and the volume of shares traded in a particular company in order to identify any patterns that can be used to predict the future performance. It can be used to complement fundamental analysis in the determination of the best time to buy and sell particular shares.

Serious technical analysts are only concerned with what is happening on the market. That is why they just look at charts. The charts can be of a share price index or the price of an individual company. Chartists believe that these charts show the mood of the market. They argue that markets tend to repeat certain patterns of behaviour. As a result changes in market trends, in their view, can be a signal to buy or sell a stock.

## 8 KEEPING TBAGK OF YOUR SHIRE INUESTMENTS

## QUICK QUIZ - INVESTMENT STRATEGIES

Read the information on investment strategies to determine whether the following statements are true or false.

1. If you use fundamental analysis as your main approach to stock selection, charting or technical analysis will be of no use to you.

## True / False

2. Fundamental analysis involves studying a particular company to determine its value by investigating company profits, dividends paid and the assets of the company.

## True / False

3. Those that use technical analysis will check share price charts and if the share price is rising they will definitely know it will continue to rise.

## True / False

4. Chartists wait for an upward movement in share price (trend) before they act so they may not be able to benefit from the first part of the movement in share price.

## True / False

5. Fundamental analysts make use of market ratios to help assess the value of a particular company. True / False

## ACTIVITY FOUR

| MARKET RATIO | EXPLANATION |
| :--- | :--- |
| 1. Dividend Per <br> Share (DPS) | This indicates the dividend paid usually expressed in cents <br> per share. The last dividend in the company's financial year <br> is classified as final and all others are classified as interim. <br> The DPS is calculated by adding any interim dividends and <br> final dividend payments. You will often find that if a company <br> increases its dividend substantially the stock will have greater <br> appeal to investors who are looking to earn income from their <br> investments. <br> Companies that are involved in activities like mining |
| exploration are less likely to pay dividends if they don't have a |  |
| regular income and steady profits. |  |\(\left|\begin{array}{l}Another word for yield is return. Farmers talk about yields <br>

from their crops or orchardists about the yield from their fruit <br>
trees. <br>
Yield\end{array} $$
\begin{array}{l}\text { To calculate the dividend yield, divide the most recent } \\
\text { dividend by the current share price and multiply by 100 to } \\
\text { achieve a percentage figure. } \\
\text { Dividend payments are the equivalent of interest payments } \\
\text { on a bank deposit or rent received on an investment } \\
\text { property. Like bank interest rates, they can be expressed as a } \\
\text { percentage return on the original capital investment. } \\
\text { When assessing the dividend yield you should note that } \\
\text { it is based on a dividend that has been paid and the same } \\
\text { dividend may not necessarily be paid in the future }\end{array}
$$\right|\)

## QUESTIONS/ACTIVITIES

Go to www.asx.com.au, Prices \& Research > Dividends.

Find out the 2 most recent dividends for the following companies:

- ASX (ASX)
- Westpac (WBC)
- Telstra (TLS)
- BHP (BHP)

Can you think of any advantages and disadvantages of earning income by buying shares or by putting money in the bank?

## 8 KEEPIUA TRAGK OF YOUR SHARE INUESTMEVTIS

## MARKET RATIO EXPLANATION

## QUESTIONS/ACTIVITIES

3. Earnings Per Share (EPS)

Earnings per share are calculated by dividing the net profit of the company by the total number of shares issued. A history of the EPS paid by a particular company shows at a glance the growth in earnings from one year to the next and the relative size of earnings to dividends.
4. Price Earnings

Ratio
(P/E ratio)
5. Net Tangible

Assets (NTA)

This ratio is commonly used to ascertain a stock's relative value, that is, whether it is expensive or overpriced. It is calculated by dividing the current share price by the earnings per share (EPS). For example, for a company that has earnings of 20 cents per share when the share price is $\$ 2.00$ :

P/E ratio $\$ 2.00=10.0$ times
20 cents
If a company has a high $p / e$ ratio it means the company's share price is high relative to its earnings. This might be because investors have a lot of confidence about the future growth of the company. This is why companies with high P/E ratios are often regarded as "growth stocks". Others might think the company is too expensive and will look elsewhere.
$P / E$ ratios for stocks in general tend to be higher in boom times and lower in bear markets.

P/E ratio comparisons between companies have more relevance when you compare those that are involved in the same industry i.e comparing the P/E ratios of NAB with the Commonwealth Bank.

NTA gives an indication of what each share in a company is worth if all the assets were liquidated (sold) and all debts were paid and the proceeds were distributed to ordinary shareholders on a per share basis. NTA is frequently referred to as the asset backing per share.

Investors sometimes use the NTA to assess the desirability of a share. Compare the NTA with the share price and if the figure is greater, opportunities may exist to buy into an undervalued company. It is also possible that a take-over offer may eventuate. If the NTA is less than the share price then the market may be overvaluing the company or it may be a reflection of the company's future potential.
A) Find a newspaper with share price tables.

1. Look through the tables and list 3 companies with $P / E$ ratios above 15 .
2. List 3 companies with $P / E$ ratios below 10.
B) Can you think of any reasons in favour of buying a stock with a high P/E ratio?
C) Can you think of any reasons for buying a stock with a low P/E ratio?

TABLE A - PRICES AS AT 31 DECEMBER 2019

|  | Close or <br> Last Sale \$ |  | Turnover or Volume | Dividend Yield \% | P/E Ratio | 52 Week High \$ | 52 Week Low \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fortescue (FMG) | 10.69 | -. 19 | 5,952,346 | 4.45 | 10.35 | 11.10 | 4.34 |
| Domino's Pizza (DMP) | 52.36 | -1.58 | 163,012 | 2.14 | 40.56 | 55.22 | 35.29 |
| JB Hi Fi (JBH) | 37.67 | -1.68 | 250,044 | 2.67 | 18.20 | 39.82 | 20.47 |
| Suncorp (SUN) | 12.96 | -. 24 | 2,147,720 | 7.00 | 78.99 | 14.57 | 12.48 |
| Tassal (TGR) | 4.16 | -. 08 | 322,997 | 4.32 | 12.89 | 5.25 | 4.01 |

## GOWPANY RESEABHU ISSIHNWENT GUIDENOENOLES

To help answer these assignment questions, use the use the Prices \& Research navigation area on the left of the home page of www.asx.com.au. Most of the information you will need can be found from the Company Information page.

Q1. What does the company do?
Locate the "principal activities" of this company and for further details visit the company's website (you'll often find some companies have an "about us" section which may be useful).

If possible provide pictures of goods and/or services this company produces.
Q2. When did the company first become a listed company?
Check the "official listing date" under the company details table. The official listing date is the date this business first became a public company.

Q3. (A) Describe the general trend in the company's share price over the last six months.
Locate the "price history chart" on the asx website and read the key at the top of the chart. The red line shows the company's share price over the last six months. Print out this chart and circle the MAJOR high and low points in the chart. Now that you've pinpointed the major peaks and troughs (lows) in share price and when they occurred, write a couple of sentences describing the trend.
(B) Describe the general trend in the S\&P/ASX200 in the last six months.

The S\&P/ASX 200 is a market index. It measures the share price movement of the largest 200 companies on ASX. It is similar to the All Ordinaries Index or "All Ords" as it is sometimes called.

When you feel unwell sometimes a thermometer is used to check your temperature. The S\&P/ASX 200 and All Ords ${ }^{\circledR}$ Indices. They are like thermometers and are used to check the overall health or performance of the Australian sharemarket.
(C) Describe the performance of this company's share price compared to the S\&P/ASX200 over the last six months. The blue line on the chart shows the S\&P/ASX200 over the last six months. When you describe the overall trend or movement look for extreme highs and lows in the chart. Your description should include facts stating what the index was at a particular time when it had reached its lowest or highest point.

Try to use adjectives to describe the highs and lows rather than just saying "it went up" or "it went down". Listen to a finance report on the news. Do you notice how they use different words for up and down?" Here are some words to help you out.

Words to describe upward trend: Peaked, climbed, surged to, shot to, strengthend, gained, advanced.
Words to describe downward trend: reached its lowest point, declined, dropped to, weakened, fell, receded
Words to describe no or little change: remained constant, remained steady, held firm

Q4. Check the company's last announcement to the market and describe why you think it might have been important for the company to make that announcement.

Locate "company announcements". You may use the headline but for further details of the announcement click on the PDF.

ASX requires companies to disclose (make known) any information that may affect share prices or influence investment decisions. For example, a company will make an announcement when it releases its annual report. An annual report will contain information on the company's profit or loss that may cause investors to buy or sell those shares. Other

## GOMPNUY RESERRGH ASSICNWENT

examples of when announcements may occur is when a company is a takeover target, new technological breakthroughs occur or if there is a change in the top people who run the company.

In addition, companies are obliged to make reports which investors might regard as administrative. For example, issues examples of when announcements may occur is when a company is a takeover target, new technological breakthroughs occur or if there is a change in the top people who run the company.

In addition, companies are obliged to make reports which investors might regard as administrative. For example, issues of shares as a result of dividend reinvestment plans, new office addresses etc. It is useful for students to differentiate between announcements that might have market impact and those that won't affect the share price.

Q5. Is your company due to pay a dividend in the future and if so how much?
Go to "Dividends". Dividends are received when the company you own shares in decides to distribute part of its profits to shareholders. Dividends are expressed as cents per share. If you have 100 shares and the dividend is 15 cents you will receive a dividend cheque for $\$ 15$.

## Q6. What GICS industry group does your company belong to?

Go to "GICS Industry Group". GICS stands for Global Industry Classification Standard. Companies can be put into groups or categorized according to their main business activity. For example, Caltex Australia Limited's (CTX) principal activity is purchasing, distributing, and marketing petroleum products. The GICS industry group it belongs to is ENERGY.

Q7. Now that you know the industry group your company belongs to, write a brief paragraph about how this sector of the market has performed over the year.
To answer this question, go to the home page - www.asx.com.au
Prices \& Research > Charting. Now that you know the GICS Industry Group your company belongs to, locate the index group from the drop down menu, select the time period and type of chart ( a line chart will do) and click on "create chart". You can see at a glance whether the index has increased or decreased.

When discussing how a company has performed, you can use either relative or absolute performance. If you are considering the change in value or performance of a share or sector over the past year, not compared with anything else, this is called absolute performance.However, if you were to compare how a share performed against something else, for example the S\&P/ASX 200 index, this is called relative performance. You create a chart comparing your company against others in its GICs sector or against the whole market

Relative performance can sometimes be a difficult concept to grasp. Perhaps an analogy of the weather might help. If you are in winter what is a hot day? In summer what is a hot day? Our expectations and how we measure things often depends on the performance of other things around us. Shopping is another good example. Suppose I buy some new jeans. I might be happy with the price I paid until I walk past a shop which has the jeans for sale at a lower price.

If I own shares that fall a little bit when other share are tumbling down. I might think I have been quite lucky. I might be disappointed if my shares go up by a small amount when the whole market is booming.

Investment fund managers are often measured by how their funds under management have changed in value compared to a bench mark index. They are compared on the basis of relative performance rather than absolute performance. Suppose their benchmark index is the ASX/S\&P 200 and suppose this index rises by $3 \%$ over the measurement period. Suppose also that their funds under management have risen in value by $4 \%$. They will say they have outperformed the market. In a downturn a fund that had fallen by $5 \%$ will be considered to have done quite well compared to a fund that fell by say $10 \%$. It is the same in the ASX Sharemarket Game. The winner might have lost money if the market was falling and everyone else has lost even more!

## A NOTE ABOUT INDICES

An index is a way of measuring the performance of a market over time. Think of an index as a tool to help gauge how a particular market is performing. "Indices" or "indexes" are both words that are used when referring to more than one index. The ASX Code for the S\&P / ASX 200 is XJO and for the All Ordinaries index it is XAO.

Last updated: January 2020
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## GOWPANY RESEAROH ASSICNMENT

There are over 2,000 companies listed on the Australian Securities Exchange (ASX). Pick one company to research and answer the assignment questions below. To assist you in answering the questions, use our website - www.asx.com.au.

Present your assignment on poster, paper or as a report, complete with charts and other vital information about the company you have chosen. A complete list of companies listed on ASX can be found on - www.asx.com.au > Prices \& Research > Company information.

By completing this assignment you will learn

- What your chosen company does
- How the company's share price has performed
- How to check the performance of a particular sector of the market
- How to check important company announcements and whether your company is going to pay a dividend in the future


## Assignment questions

1. What does the company do?
2. When did the company first become a listed company?

3a. Describe the general trend in the company's share price over the last six months.
3b. Describe the general trend in the S\&P/ASX 200 in the last six months.
3c. Describe the performance of this company's share price compared to the S\&P/ASX 200 Index over the last six months.
4. Check the company's last announcement to the market and describe why you think it might have been important for the company to make that announcement. If you think the most recent announcement wasn't significant, pick an earlier announcement you think was significant. Explain why you think the announcement was significant.
5. Is your company due to pay a dividend in the future and if so how much?
6. What market sector does your company belong to? Look for the GICS industry group.
7. Now that you know the sector your company belongs to, write a brief paragraph about how this sector of the market has performed over the last 12 months. You will need to look at some charts to answer this question.

How has this sector performed compared to the market as a whole? Can you think of any significant events that might have affected performance? For example, commodity prices, natural events affecting costs or demand, new technology breakthroughs etc.


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