



School  
Sharemarket  
Game

# Teacher's Notes

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# Learning outcomes: Lesson 1

## Introduction to the Sharemarket

### Students

- **Identify** the different legal business structures.
- **Outline** the role of the ASX as a marketplace that enables interaction between investors and companies.
- **Investigate** reasons for fluctuations in the price of shares.
- **Classify** different sectors within the economy.

Students work through lesson 1 and explore the different types of legal structures and the reasons why a business may enlist with the ASX. They learn how the price of shares fluctuates and how to research reasons behind the fluctuation which will enable them to make informed decisions about a company and whether to invest. They also are able to identify the different industry sectors within the sharemarket and the importance of diversifying their portfolio to manage risk.

### General Capabilities related to this lesson

- Literacy
- Information and Communication Technology (ICT) Capability
- Critical and Creative Thinking
- Personal and Social Capability

### Terminology (Skill Directives)

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Outline** – Sketch in general terms; indicate the main features of; Plan, collect and interpret data/information and draw conclusions about.

**Investigate** – Plan, inquire into and draw conclusions about.

**Classify** – Arrange or include in classes/categories.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 8

#### NSW

**Subject:** Commerce

- Option 2: Investing
- Option 4: Running a business

**Subject:** Business Studies – Preliminary

- Nature of Business

#### QLD

**Subject:** Business (General Senior Syllabus)

- Topic 1: Fundamentals of Business

#### VIC

**Subject:** Business Management (VCE)

- Unit 1: Planning a Business

#### SA & NT

**Subject:** Business Innovation

- Stage 1

#### WA

**Subject:** Accounting and Finance

- Year 12 – Unit 3

#### ACT

**Subject:** Business

- Changing Business Environment

### Glossary

#### Diversification

A strategy that mixes a wide variety of investments within a portfolio for the purpose of minimising risk.

#### Equity

The amount of money invested into a business by shareholders.

#### Fluctuate

When shares rise and fall irregularly in price.

#### Industries

A group of companies that are related based on their main business activities.

#### Investors

People who put their money into the share market with the expectation of earning an income.

#### Marketplace

Is a physical or internet-based location where buyers and sellers regularly gather for the purchase and sale of goods.

#### Partnership

A business structure made up of 2 or more people who work together to run a business.

#### Portfolio

A range of investments within the share market held by a person.

#### Private company

A legal structure that is separate from the owner, where only a limited amount of people may invest as it is privately owned.

#### Shareholders

An owner of shares in a company.

#### Sole proprietorship

A business that is owned and controlled by one individual.



# Learning outcomes: Lesson 1

## Solutions

### Activity 3

Sector	Sector Code	Activities conducted by companies in this sector	Examples of companies in this sector
Energy	(XEJ)	Company activities in this sector centre around oil, gas and coal such as drilling equipment, energy exploration and transportation.	<a href="#">Caltex Australia (CTX)</a>
Materials	(XMJ)	Company activities in this sector centre around commodities and related industries such as mining, forest products and construction materials.	<a href="#">BHP Group Limited (BHP)</a>
Industrials	(XNJ)	Company activities in this sector centre around producing and selling building materials, chemicals, fertilisers and agricultural commodities.	<a href="#">QUBE Holdings Limited (QUB)</a>
Consumer Discretionary	(XDJ)	Company activities in this sector centre around media, gambling and general retail (goods and services that consumers consider non-essential but desirable).	<a href="#">Harvey Norman Holdings (HVN)</a>
Consumer Staples	(XSJ)	Company activities in this sector centre around production and distribution of essential products such as food and beverages, household goods and hygiene products.	<a href="#">Woolworths Group Limited (WOW)</a>
Healthcare	(XHJ)	Company activities in this sector centre around on medical practice, pharmaceuticals, pathology, medical devices companies and biotechnology.	<a href="#">CSL Limited (CSL)</a>
Financials	(XFJ)	Company activities in this sector centre around banking, insurance, asset management and a range of other financial services.	<a href="#">Commonwealth Bank (CBA)</a>
Informational Technology	(XIJ)	Company activities in this sector centre around software development and IT consultancy.	<a href="#">Carsales.com Limited (CAR)</a>
Communication Services	(XTJ)	Company activities in this sector centre around telecommunication carriers, distributors and resellers.	<a href="#">Telstra (TLS)</a>
Utilities	(XUJ)	Company activities in this sector centre around electricity and gas retailing.	<a href="#">AGL Energy Limited (AGL)</a>
Real Estate	(XPJ)	Company activities in this sector centre around residential, commercial and industrial real estate management, construction, and sales.	<a href="#">Dexus (DXS)</a>



# Learning outcomes: Lesson 2

## How the Sharemarket works: the Primary and Secondary markets

### Students

- **Understand** the features of different legal business structures.
- **Outline** the differences between a private company and a public company.
- **Distinguish** between the primary and secondary markets.
- **Identify** how the ASX, laws, and governments work to minimize risk to investors.
- **Identify** how company announcements on the sharemarket may impact on supply and demand.

Students work through lesson 2 and explore how the primary and secondary markets work. As part of this they explore the features of the different types of legal structures and the influences of ASX, laws, and ASIC on companies. Finally, they then learn about how the market forces of supply and demand impact on share price.

### General Capabilities related to this lesson

- Literacy
- Numeracy
- Critical and Creative Thinking

### Terminology (Skill Directives)

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Outline** – Sketch in general terms; indicate the main features of; Plan, collect and interpret data/information and draw conclusions about.

**Explain** – Relate cause and effect; make the relationships between things evident; provide why and/or how.

**Distinguish** – Recognise or note/indicate as being distinct or different from; to note differences between.

**Analyse** – Identify components and the relationship between them; draw out and relate implications.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 8
- Year 9

#### NSW

**Subject:** Commerce

- Core 2: Economic and Business Environment
- Option 2: Investing
- Option 4: Running a Business

**Subject:** Business Studies – Preliminary

- Nature of Business

#### QLD

**Subject:** Business (General Senior Syllabus)

- Topic 1: Fundamentals of Business

#### VIC

**Subject:** Business Management (VCE)

- Unit 1: Planning a Business

#### SA & NT

**Subject:** Business Innovation

- Stage 1

#### WA

**Subject:** Accounting and Finance

- Year 12 – Unit 3

#### ACT

**Subject:** Business

- Changing Business Environment

### Glossary

#### Dividend

A sum of money paid by a company from its profits to its shareholders.

#### Capital Growth

An increase in the value of funds invested over time.

#### ROI

Return on investment

#### Cth

Corporations Act 2001

#### ASIC

Australian Securities and Investment Commission

#### Prospectus

Document that describes the activities (including financials) of a business to prospective investors.

#### Regulated

To control the activities of businesses by means of rules and regulations.

#### Investors

A person or business that puts money into the purchase of company shares with the expectation of financial return.

#### Float

The initial time a company issues shares in the Sharemarket.

#### Unlimited liability

When the owner of a business holds all legal responsibility for the financial performance of the business, particularly when the business has financial difficulties.

#### Broker

An organization or person used by a shareholder to manage the process of buying and selling of shares.



# Learning outcomes: Lesson 3

## Why do share prices change?

### Students

- **Predict** the impact on share price of various influences on the sharemarket.
- **Research** the current exchange rates.
- **Calculate** exchange rates against other currencies.
- **Investigate** influences on share price and are able to articulate this knowledge in written and oral form.

Students learn about the internal and external influences on share price, including economic influences. They learn how to calculate exchange rates relative to the Australian dollar and how this may impact on a business. Finally, they explore an area of interest to them on how investing has been impacted in various areas by the COVID-19 pandemic. They then have the opportunity to share this knowledge with others by creating a presentation based on their research.

### General Capabilities related to this lesson

- Literacy
- Numeracy
- Information and Communication Technology (ICT) Capability

### Terminology (Skill Directives)

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Predict** – Suggest what may happen based on available information.

**Calculate** – Ascertain/determine from given facts, figures or information.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 8
- Year 9
- Year 10

#### NSW

**Subject:** Commerce

- Core 2: Economic and Business environment
- Option 1: Our Economy
- Option 2: Investing
- Option 4: Running a Business

**Subject:** Business Studies – Preliminary

- Nature of Business

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**Subject:** Business (General Senior Syllabus)

- Topic 1: Fundamentals of Business

#### VIC

**Subject:** Business Management (VCE)

- Unit 1: Planning a Business

#### SA & NT

**Subject:** Business Innovation

- Stage 1
- Stage 2

#### WA

**Subject:** Accounting and Finance

- Year 12 – Unit 3 & 4

#### ACT

**Subject:** Business

- Business Opportunities
- Leading a Business

### Glossary

#### Corporate action

An action taken by a company that impacts its stakeholders and may include a corporate takeover, additional dividend payments, or any other important action that changes the structure of the company, requiring the board of directors to approve it before it being implemented.

#### Corporate takeovers

When one company tries to take control over another company by making an offer to buy a large amount of its shares.

#### Capital growth

The appreciation in the value of an asset over a period of time.

#### Importing

To bring in goods or services into a country from another country as part of the business process.

#### Exporting

To send out goods or services to another country for the purposes of selling them.

#### Infrastructure

The basic physical facilities needed by a country such as buildings, roads, power supplies, and ports needed for the operation of a society.

#### Commodity

A basic good that is produced by a country that is raw material used to manufacture finished goods. This could include basic farming products or mined materials.

#### Profitability

The money made left after all expenses have been paid from operating activities.

#### Destabilising

To upset the stability of an economy causing unrest.

#### Consumer confidence

The degree of optimism that consumers have regarding the economy when managing their financial affairs.

#### Mortgage

A type of loan with an agreement between a borrower and a lender that gives the lender the right to take the property if the owner fails to repay the money borrowed.



# Learning outcomes: Lesson 3

## Solutions

### Activity 1

Scenario	Rise	Fall
a. Fancy Fashions Ltd has signed a contract to supply dresses and jackets to a chain of retail stores in London.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A shock announcement to the press that the Managing Director of XYZ Ltd has fraudulently taken funds from the company for several years.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Sigma Medical Ltd has found a cure for baldness.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Eureka Ltd, a mining company has just released a drilling report stating that more oil than first anticipated had been found and is now being drilled.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Success Ltd 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Activity 2

#### Scenario

1. Research the current exchange rate. **Calculate** how much would a chair cost to the U.S. importer based on the current rate? Use the above as an example of how you would complete the calculation:

**Answer:**  $\$10 \times \text{Current exchange rate} = \text{cost of chair to US importer}$

2. **Calculate** the price of one chair if the Australian Dollar were to rise to USD \$1.05:

**Answer:**  $\$10.50 \text{ AUD}$

3. **Calculate** the price of one chair if the Australian Dollar were to fall to USD \$0.50:

**Answer:**  $\$5.00 \text{ AUD}$

4. Using your calculations, **identify** which of the above scenarios would lead to greater sales, and therefore profitability for Caro Ltd?

**Answer:** *When the Australian dollar falls to \$5.00 as it means they can buy more chairs from Caro Ltd.*



# Learning outcomes: Lesson 4

## Getting ready to invest

### Students

- **Calculate** rates of return on various investments.
- **Identify** opportunities to reduce discretionary spending and uses this information to create savings goals and make investment decisions.

This lesson has a strong numeracy focus with students learning about the importance of saving and investing. Students learn about the different types of investments available to them and the considerations they need to make when making investment decisions. They explore the ideas of risk and return with consideration of the importance of capital growth and return through dividend income.

### General Capabilities related to this lesson

- Numeracy
- Critical and Creative Thinking
- Personal and Social Capability

### Terminology (Skill Directives)

**Calculate** – Ascertain/determine from given facts, figures or information.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 7
- Year 8
- Year 9
- Year 10

**Subject:** Mathematics

- Year 7
- Year 8
- Year 9
- Year 10

#### NSW

**Subject:** Commerce

- Core 1: Consumer and Financial Decisions
- Core 2: Economic and Business Environment
- Option 1: Our Economy
- Option 2: Investing
- Option 7: Towards Independence

**Subject:** Stage 5 Mathematics

- 5.1: Financial Mathematics
- 5.2: Financial Mathematics

### Glossary

#### Investing

Using money to buy something that has the potential to make more money.

#### Savings

Putting money away and not spending it.

#### Realised loss

When an asset is sold for a price below the price it was paid for initially.

#### Tenants

People who have a right to use a property in exchange for a payment of rent.

#### Leases

Allowing someone to rent something, usually property and expecting a regular payment as a result for its use.

#### Budget

Is a personal plan for managing money including possible income and spending.

#### Risk

The possibility of losing money on an investment.

#### Credit union

A financial organisation, much like a bank but instead of being owned by shareholders, it is owned by its members who are usually its customers.

#### Diversification

A strategy that mixes a wide variety of investments within a portfolio for the purpose of minimising risk.

#### Inflation

The rise in prices of goods and services over time despite the inputs to those goods remaining the same.

#### Terms and conditions

The rules agreed to before the use of certain products or services.

#### Return

The amount of money made on an investment relative to how much the initial investment was worth.

#### Compounding

The process whereby the amount of money that is made on an investment is added to the initial investment, and then reinvested again to make even more money.

#### Reinvesting

Adding money made by an investment back into the investment.

#### ASIC

Australian Security and Investments Commission is the government organization responsible for overseeing financial transactions, investment, and business operations.



# Learning outcomes: Lesson 4

## Solutions

### Activity 1

Refer to the example above and then **calculate** the return if the \$605 is reinvested for a further year at a rate of 10%

**Answer:**  $\$605 \times 10\% = \$60.50$   $\$605 + \$60.5 = \$665.50$

**Identify** a savings goal. This should be a number figure.

**Example:** *I would like to save \$3,000 to buy a car when I turn 17 and get my car licence.  
I would like to save \$1,000 to invest in shares on the ASX.  
I would like to save \$5,000 to take a holiday to Thailand when I finish school.*

**Create** a budget to save for your future investment in shares:

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Income	\$800	\$230	\$560	\$160	\$480	\$250	\$750	\$310	\$80	\$165	\$390	\$760
Expenditure	\$600	\$250	\$220	\$420	\$240	\$140	\$260	\$120	\$120	\$160	\$280	\$190
Surplus/(Deficit)	\$200	-\$20	\$340	-\$260	\$240	\$110	\$490	\$190	-\$40	\$5	\$110	\$570

Total Surplus or Deficit for the year:

$\$200 + (-\$20) + \$340 + (-\$260) + \$240 + \$110 + \$490 + \$190 + (-\$40) + \$5 + \$110 + \$570 = \$1,935$

**Identify** the discretionary spending that can be reduced throughout the year to enable a greater surplus.

**Example:** *I will reduce the amount of money I spend at the canteen, clothing, going to the cinema and other fun activities.*

### Activity 2

Date	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22
Closing share price (\$)	\$92.90	\$81.15	\$79.59	\$81.15	\$86.67	\$80.80	\$81.71	\$88.26	\$78.45	\$71.76	\$67.70	\$70.47	\$68.02

1. **Calculate** the profit/loss in dollars and cents if 1000 ASX shares were purchased on 1 December 2021 and you then sold them on 1 December 2022?

**Answer:** *1,000 shares were purchased on 1/12/2021 for \$90.37 per share.  $1,000 \times \$90.37 = \$90,370$   
1,000 shares were sold on 1/12/2022 for \$70.58.  $1,000 \times \$70.58 = \$70,580$   
 $\$90,370 - \$70,580 =$  a loss of \$19,790*

2. **Calculate** the percentage of profit/loss based on the purchase of 1,000 ASX shares were purchased on 1 December 2021 and sold on 1 December 2022? (Answer to one decimal point).

**Answer:** *1,000 shares were purchased on 1/12/2021 for \$90.37 per share.  $1,000 \times \$90.37 = \$90,370$   
1,000 shares were sold on 1/12/2022 for \$70.58.  $1,000 \times \$70.58 = \$70,580$   
 $(\$70,580 - \$90,370) / \$70,580 = (-0.28) \times 100 = -28.0\%$  (loss)*

3. During 2021 ASX paid two dividends. In March it paid \$ 1.12 per share and in September paid \$1.11 per share. If 200 ASX shares are held, **calculate** how much dividend income would have been received in 2021 in total?

**Answer:** *March  $\$1.12 \times 200 = \$224$   
September  $\$1.11 \times 200 = \$222$   
Total for 2021 =  $\$224 + \$222 = \$446$*





# Learning outcomes: Lesson 5

## Benefits and Risks of Investing in the Sharemarket and the Importance of Diversification

### Students

- **Explain** the importance of diversification and other factors, to reduce risk when investing.
- **Recommend** role play being an advisor, recommending investment options, taking into account the financial circumstances of investors.
- **Analyse** table and graphs with financial information to make informed decisions.

This lesson has a strong numeracy focus with students learning about the benefits of investing in the sharemarket and the importance of diversification to minimise risk and maximise return. Students explore the ideas of risk and return, using scenarios, various graphs, research and their knowledge to make investment decisions based on different life stages and their appetite for risk while taking into account other considerations such as liquidity, diversification, and the importance of investment goals when making decisions.

### General Capabilities related to this lesson

- Numeracy
- Critical and Creative Thinking
- Personal and Social Capability

### Terminology (Skill Directives)

**Calculate** – Ascertain/determine from given facts, figures or information.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Explain** – Relate cause and effect; make the relationships between things evident; provide why and/or how.

**Recommend** – Provide reasons in favour.

**Analyse** – Identify components and the relationship between them; draw out and relate implications.

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- Year 10

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- Year 9
- Year 10

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- Option 7: Towards Independence

**Subject:** Stage 5 Mathematics

- 5.1: Financial Mathematics
- 5.2: Financial Mathematics

### Glossary

#### Investing

Using money to buy something that has the potential to make more money.

#### Saving

Putting money away and not spending it.

#### Market volatility

A high possibility that shares will move up and down dramatically in value.

#### Realised loss

When an asset is sold for a price below the price it was paid for initially.

#### Speculative stocks

Shares which have a high potential for dramatic success or failure.

#### Risk

The possibility of losing money on an investment.

#### Diversification

A strategy that mixes a wide variety of investments within a portfolio for the purpose of minimising risk.

#### Return

The amount of money made on an investment relative to how much the initial investment was worth.

#### Capital Gains Tax

The tax collected by government when selling an asset that has increased in value.



# Learning outcomes: Lesson 5

## Solutions

### Activity 1: Diversifying Risk – Industry

Analyse the above charts and fill in the below table:

Example:

Top Performing Industry 2020/21	Percentage Change
1. Telecommunications	28.46%
2. Financials	20.20%
3. Industrials	11.24%

Top Performing Industry 2020/21	Percentage Change
1. Energy	39.71%
2. Utilities	24.19%
3. Materials	4.79%

Using your knowledge and research skills, **explain** why there was a change in top performing industry from year to year?

**Example:** *There could be many reasons why there could a change in the top performing industry for the year. It may be that the return to work after COVID has led to fuels being more in demand, leading to an increase in demand and therefore prices in the energy sector.*

### Activity 2:

Experiment A: Starting cash \$10,000 (invested on only one company)

Example:

Company	No. of shares	Day 1 Price	Day 2 Price	Day 3 Price	Day 4 Price	Day 5 Price	No. of shares X Day 5 price = \$
ZZZ	238 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	$39.17 \times 238 = \$9,322.46$

Experiment B: Starting cash \$10,000 (invested over five companies within the one industry)

Example:

Company	No. of shares	Day 1 Price	Day 2 Price	Day 3 Price	Day 4 Price	Day 5 Price	No. of shares X Day 5 price = \$
ZZZ	47 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	\$1,840.99
TTT	2,002 shares	\$0.91	\$0.92	\$0.96	\$0.98	\$1.03	\$2,062.06
BBB	116 shares	\$17.18	\$17.76	\$18.01	\$18.32	\$18.28	\$2,120.48
CCC	166	\$11.81	\$11.78	\$11.87	\$12.01	\$12.04	\$1,998.64
DDD	16	\$124.54	\$123.77	\$122.14	\$122.16	\$118.99	\$1,903.84



# Learning outcomes: Lesson 5

## Solutions

Experiment C: Starting cash \$10,000 (invested over five companies from five different industries)

Example:

Company	No. of shares	Day 1 Price	Day 2 Price	Day 3 Price	Day 4 Price	Day 5 Price	No. of shares X Day 5 price = \$
ZZZ (Energy)	47 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	\$1,840.99
XYZ (Telecommunications)	88 shares	\$22.65	\$22.68	\$22.81	\$22.61	\$22.79	\$2,005.52
PQR (Financial)	873 shares	\$1.98	\$2.05	\$2.07	\$1.99	\$1.97	\$1,719.81
STU (Healthcare)	920 shares	\$2.15	\$2.18	\$2.54	\$3.11	\$3.13	\$2,879.60
VWX (Consumer Staples)	200 shares	\$9.77	\$9.65	\$9.67	\$9.44	\$9.72	\$1,944.00

Identify the experiment that performed the best over the one week period.

**Example:** *Experiment C was the most successful as there was a total of \$10,389.92 made for the week compared to Experiment A which produced \$9,322.46 and Experiment B \$9,926.01.*

Experiments A & B may have increased in value at a greater rate than Experiment C over the period of a week. If an investor had a longer period of time to invest, possibly over years, **explain** how this result may differ and why.

**Example:** *There are many factors impacting on share price. Short term capital growth is not an indicator of long-term capital growth. Short term a business may have had positive news to the market causing its share price to increase overnight, or an industry may be performing very well over one year but then poorly the next year. It is important that an investor regularly researches what is happening in the market and in the economy, has a clear strategy for their portfolio (eg. High risk or low risk, capital growth or dividend growth) and understands financial information such as financial reports while following what is happening in the market and to companies invested in via the media.*

### Activity 3

#### Scenario examples

1. Alec should invest in XYZ Ltd, ABC Ltd, and DEF Ltd as these companies are relatively newer to the market but have a lot of potential as they have discovered new minerals/ have found a cure for diseases/have designed new technologies which have a lot of potential to make a lot of money. Their share price is also quite low, meaning Alec can purchase more shares.
2. Maya should invest in GHI Ltd, JKL Ltd, and MNO Ltd as these companies have been around for many decades and have not really fluctuated in price when looking at the graphs over a period of 10 years. Their return on invest is high though, paying dividends at over \$1 each for the last few years. They have had solid profit results over the last 5 years despite instability in the economy.
3. Serene should invest in PQR Ltd, STU Ltd, and VWX Ltd as these are stable companies who have shown steady growth when reviewing their graphs and looking at their financial reports. They are focussed on growth, retaining much of their profits and reinvesting them into the company to continue their expansion globally. They are industries that are known to be relatively stable and have shown continuous capital growth.



# Learning outcomes: Lesson 5

## Solutions

### Activity 4: Personal Goal Setting

Example:

	Short-term Financial Goals	Long-term Financial Goals
Age 15 years	Eg. To buy a skateboard	Eg. To buy a new phone
Age 18 years	Eg. Buy a dress for my formal	Eg. Buy my first car
Age 21 years	Eg. Buy a new desk	Eg. Overseas holiday
Age 30 years	Eg. New furniture for home office	Eg. Deposit for my new home
Age 40 years	Eg. Pay school fees for children	Eg. Buy brand new mini-van
Age 50 years	Eg. Pay someone to repaint the house	Eg. Buy caravan to tour Australia
Age 67 years (retirement)	Eg. Pay for medical treatments	Eg. Enough money saved for retirement



# Learning outcomes: Lesson 6

## Why do businesses list on the ASX?

### Students

- **Research** and then **outline** the key features of a company recently listed on ASX.
- **Account** for the reasons why a company chose to be listed on ASX.
- **Describe** the company's listing experience.
- **Identify** key features relating to the listing including amounts raised during the listing process and any other interesting findings.
- **Contrast** and **define** the key financial of capital and liquidity and identify reasons why they are critical to the success of a business.

Lesson 6 is a research-based lesson where students investigate companies of interest to them and their reasons for listing on the ASX. This lesson allows students to develop their research and collaboration skills, increasing their capacity to critically think. This lesson allows development of literacy skills, both written and oral, as they develop a presentation harnessing their information and communication technology capabilities.

### General Capabilities related to this lesson

- Literacy
- Information and Communication Technology (ICT) Capability
- Critical and Creative Thinking
- Personal and Social Capability

### Terminology (Skill Directives)

**Account** – Account for: state reasons for, report on. Give an account of: narrate a series of events or transactions.

**Contrast** – Show how things are different or opposite.

**Define** – State meaning and identify essential qualities.

**Describe** – Provide characteristics and features.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Outline** – Sketch in general terms; indicate the main features of; plan, collect and interpret data/information and draw conclusions about.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 8
- Year 9

#### NSW

**Subject:** Commerce

- Option 2: Investing

**Subject:** Business Studies – Preliminary

- Nature of Business

**Subject:** Economics – Preliminary

- Topic Five – Financial Markets

#### VIC

**Subject:** Economics

- Unit 2: Contemporary Economic Issues

**Subject:** Business Management

- Unit 3: Managing a Business

#### TAS

- Unit 1: The Business Environment

### Glossary

#### Capital

A term that can be used to describe an asset with value or benefit to the owners. Capital is often referred to as money or cash. It is also the initial investment into a new venture.

#### Liquidity

A term that can be used to describe how easily an asset can be converted to cash. It is also the ability of business to pay their bills as they fall due.



# Learning outcomes: Lesson 7

## How to buy and sell shares?

### Students

- **Understand** the day-to-day operations of the ASX.
- **Learn** how to manage their share investments.
- **Understand** the terminology and strategies used by investors.

Lesson 7 is focused on how the ASX operates and how to buy and sell shares. Students learn how to get started in investing, where they can access important information, and explore stockbroking as a career. It allows students to understand the terminology around investing and how the system works. This lesson allows students to investigate careers relating to finance, accounting and business.

### General Capabilities related to this lesson

- Literacy
- Information and Communication Technology (ICT) Capability

### Terminology (Skill Directives)

**Describe** – Provide characteristics and features.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Outline** – Sketch in general terms; indicate the main features of; plan, collect and interpret data/information and draw conclusions about.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 8
- Year 9
- Year 10

#### NSW

**Subject:** Commerce

- Core 1: Consumer and Financial Decisions
- Core 2: Economic and Business Environment
- Core 3: Employment and Work Futures
- Option 1: Our Economy
- Option 2: Investing

### Glossary

#### Brokerage

The fee charged by stockbrokers to investors to act on their behalf in the buying of shares.

#### Equity

The amount of money invested into a business by shareholders.

#### Float

When a company issues shares to the public for the first time. This may also be referred to as an Initial Public Offering (IPO).



# Learning outcomes: Lesson 7

## Solutions

### Activity 1

Statement	True	False
a. An investor must physically go to the counter at the Australian Securities Exchange (ASX) and purchase shares directly from there.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. If an investor wants to receive advice about buying or selling shares on the secondary market they should use a full-service stockbroking firm.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. When an investor buys shares, they are buying them directly from the stockbroking firm who has a supply of them.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. The computerised trading system matches buy and sell orders and then trades them automatically.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. All information should be sought from the same source and at a local level.	<input type="checkbox"/>	<input checked="" type="checkbox"/>



# Learning outcomes: Lesson 8

## Making Informed Decisions about Investments

### Students

- Learn how to manage their share investments.
- Identify where to access the information needed to make wise decisions when investing.
- How to interpret data relevant to investing.
- Understand the terminology and strategies used by investors.

Lesson 8 allows students to build their capacity in managing share investments to ensure success. Students learn to understand the important terminology and strategies used in investing, as well as how to read and understand data relevant to investment, all essential skills in being a successful investor.

### General Capabilities related to this lesson

- Literacy
- Numeracy
- Information and Communication Technology (ICT) Capability

### Terminology (Skill Directives)

**Calculate** – Ascertain/determine from given facts, figures or information.

**Explain** – Relate cause and effect; make the relationships between things evident; provide why and/or how.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Justify** – Support an argument or conclusion.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 7
- Year 8
- Year 9
- Year 10

#### NSW

**Subject:** Commerce

- Core 1: Consumer and Financial Decisions
- Core 2: Economic and Business Environment
- Option 1: Our Economy
- Option 2: Investing

## Solutions

### Activity 1

#### Scenario

- Domino's Pizza (DMP) with a range of \$73.50
- \$42.15
- \$0.36
- Fortescue (FMG) at 2,695,436 shares traded
- The high dividend yield of 5.88 % for Fortescue (FMG) indicates that this may be a good company to invest in for a retiree as it offers a potentially solid level of income for the amount invested.
- 8.83
- The lowest share price in the year proceeding 23 December 2022 is \$31.67
  - The highest share price in the year proceeding 23 December 2022 is \$39.63

### Activity 3

#### Statement

True False

- | Statement  | True                                | False                               |
|--|-------------------------------------|-------------------------------------|
| a. Fundamental Analysis must be used in conjunction with other strategies to make it effective.                                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. A high P/E ratio may indicate that a share may be too expensive relative to the potential earnings through dividends.             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. Technical Analysis uses charts to track patterns to assist in predicting trends to identify the best time to buy and sell shares. | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Dividend yields are the best way to track the value of shares over the long term as they indicate ongoing high levels of profits. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. Shares that are fully franked are more attractive to investors because they then pay less income tax on them.                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f. Shares that are fully franked are more attractive to investors because they then pay less income tax on them.                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g. An overvalued share may be a reflection of a company's future potential.  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |





# Learning outcomes: Lesson 8

## Making Informed Decisions about Investments

### Glossary

#### Bull or Bear Markets

A bull market is a rising market as a “bull” tosses market prices up. A bear market is a falling market as a “bear” claws market prices down.

#### Franking Credits

Also known as imputation credits, many companies in Australia pay tax to the Australian Taxation Office (ATO) on their profits. This tax paid is often made available as a deductible benefit to shareholders as a franking credit, possibly reducing the tax investors need to pay on dividend income.

#### Company Tax

Taxes paid by companies on profits made, directly to the Federal government. Currently companies in Australia are taxed between 25% to 30% on profits, depending on the size of the company.

#### Capital Gains Tax

Is the tax paid on the increased value of an asset by an investor at the point in which they sell their asset. For example, if a person purchases \$1000 worth of shares and sells them in a year for \$1500, they may need to pay tax on the \$500 increase in value in the asset.

#### Clearing House Electronic Sub-register System (CHES)

A computer system used by the ASX to manage share transaction settlement and record shareholdings. Investors are given a Holding Identification Number (HIN) to easily identify their shares and to view all their shareholdings in one place.

#### Investing for Growth

Buying shares at a low price and selling at a high price, achieving capital growth.

#### Investing for Income

Investing in companies that pay high dividends.

#### Fundamental Analysis

This approach analyses the fundamentals of a company, the broader economy, industry sector, the management of the company, and the company's competitors. Fundamental analysis involves an in-depth analysis of the company, including the company's profits, dividends, its assets, and management. (Refer to Lesson 3 for information on influences relevant to fundamental analysis).

#### 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 to identify any patterns that can be used to predict future performance. It can be used to complement fundamental analysis in the determination of the best time to buy and sell shares. This approach to investing, looks at patterns and market trends to signal the best time to buy or sell a stock.

#### Dividend Per Share (DPS)

This indicates the dividend paid, expressed in cents per share. The last dividend in the company's financial year is classified as final and all others are classified as interim. The DPS is calculated by adding any interim dividends and final dividend payments. If a company increases its dividend substantially the stock will have greater appeal to investors who are looking to earn income from their investments.

#### Dividend Yield

This measures the return on money invested. It is calculated through the formula:

$$\frac{\text{Dividend per share} \times 100}{\text{Share price}} = \text{Dividend Yield}$$

It is used to compare the income generated from dividends compared to other investments. Investors should consider that this ratio will change depending on

the dividend paid by a company year-to-year and may be difficult to predict.

#### 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 the growth in earnings from one year to the next and the relative size of earnings to dividends.

#### Price Earnings Ratio (P/E ratio)

This ratio is commonly used to ascertain a stock's relative value, to ascertain if it is 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:

$$\text{P/E ratio} = \frac{\$2.00}{20 \text{ cents}} = 10.0 \text{ times}$$

A high P/E ratio indicates the company's share price is high relative to its earnings. This may be because investors have confidence in the future growth of the company. It may also indicate that a company is too expensive. P/E ratios tend to be higher when the economy is booming. P/E ratio comparisons between companies have more relevance when in the same industry i.e. comparing the P/E ratios of NAB with the Commonwealth Bank.

#### Net Tangible Assets (NTA)

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. If the NTA figure is higher than the share price, it may mean that the company is undervalued. This may make it more likely to be involved in a corporate take-over. 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.



# Learning outcomes: Lesson 9

## ESG – What is it and why is it important?

### Students

- **Understand** the three major aspects of ESG – Environmental, Social, and governance.
- **Recall** personal experiences from the perspective of a consumer relating to ESG.
- **Examine** how policies relating to ESG are embedded into the practices of an organisation.
- **Understand** the role of the United Nations 17 Development Goals in developing ESG policies.
- **Justify** the importance of ESG policies to a company.

Lesson 9 has a strong focus on ethical understanding as students learn about the importance of environmental, social, and governance policies on the reputation and operation of a company. This lesson allows them to consider the context of an organisation and the different ways organisations can be better global citizens. It also encourages a student to develop their own opinions about ethics and social justice and articulate these ideas by justifying them using supporting information.

### General Capabilities related to this lesson

- Critical and Creative Thinking
- Ethical Understanding
- Intercultural Understanding

### Terminology (Skill Directives)

- Classify** – Arrange or include in classes/categories.
- Examine** – Inquire into.
- Justify** – Support an argument or conclusion.
- Outline** – Sketch in general terms; indicate the main features of; plan, collect and interpret data/information and draw conclusions about.
- Recall** – Present remembered ideas, facts or experiences.

### Links to Curriculum

#### Australian Curriculum

- Subject:** Economics and Business
- Year 8
  - Year 10

#### NSW

- Subject:** Commerce
- Core 1: Consumer and Financial Decisions
  - Option 1: Our Economy

#### **Subject:** Business Studies – HSC

- Operations
- Finance
- Human Resources

#### **Subject:** Economics – Preliminary

- Topic 2: Consumers and Business
- Topic 5: Financial Markets

#### **Subject:** Economics – HSC

- Topic 3: Economic Issues
- Topic 1: The Global Economy

#### **Subject:** Legal Studies – HSC

- Option 2: Global Environmental Protection

#### QLD

##### **Subject:** Business (General Senior Syllabus)

- Unit 1 Business Creation – Topic 1: Fundamentals of Business
- Unit 4 Business Evolution – Topic 1: Repositioning a Business

##### **Subject:** Economics (General Senior Syllabus)

- Unit 2 Modified Markets – Topic 2: Case Options of Market Measures and Strategies – Case Option B: Environmental Economics

#### VIC

##### **Subject:** Economics

- Unit 1: Contemporary Economic Issues

##### **Subject:** Business Management

- Unit 1: Planning a Business
- Unit 3: Managing a Business

#### SA & NT

##### **Subject:** Business Innovation

- Stage 1
- Stage 2

#### WA

##### **Subject:** Accounting and Finance

- Year 11 – Unit 1 & 2
- Year 12 – Unit 3 & 4

#### ACT

##### **Subject:** Business

- Business Opportunities
- Business Finance and Planning

#### TAS

##### **Subject:** Business Studies

- All Units

### Glossary

#### Capital Growth

An increase in the value of funds invested over time.

#### Capped Executive Compensation

Limiting the amount of bonuses and salaries paid to executives.

#### Dividend

A sum of money paid by a company from its profits to its shareholders.

#### Ethical

The morals, or interpretation of right and wrong in terms of company practices.

#### Operations

The functions that make up the day to day running of a business.

#### Social Justice

Fairness in society in terms of giving everyone access to human rights and opportunities.

#### Strategic Goals

Relating to the vision, this is how an organisation will achieve the desired outcome through the goals it sets.

#### Transparency

How open organisations are in their operations to ensure that there is clear communication and accountability.

#### Vision

The purpose of the organisation with consideration to how they would like to be seen by its stakeholders.



# Learning outcomes: Lesson 10

## Celebrating Indigenous Involvement in the ASX

### Students

- **Explore** the relationship between Indigenous culture and the ASX.
- **Understand** the importance of ESG to a company in achieving a competitive environment.
- **Reflect** on Indigenous culture and its complexities and relationship with business and the wider Australian community.

Lesson 10 is a celebration of Indigenous culture and its relationship to the corporate environment and the ASX. This lesson looks at a pioneer Indigenous business leader and the impact he has made in the business context despite personal adversity, hoping to inspire students. It also allows for students to learn about how businesses are able to achieve a competitive advantage by harnessing diversity and embedding ESG into their business practices. This lesson has a strong focus on literacy with comprehension and research tasks aligned to the theme of celebrating Indigenous involvement in the ASX.

### General Capabilities related to this lesson

- Literacy
- Information and Communication Technology (ICT) Capability
- Ethical Understanding
- Intercultural Understanding

### Terminology (Skill Directives)

**Analyse** – Identify components and the relationship between them; draw out and relate implications.

**Define** – State meaning and identify essential qualities.

**Discuss** – Identify issues and provide points for and/or against.

**Explain** – Relate cause and effect; make the relationships between things evident; provide why and/or how.

**Identify** – Recognise and name; Establish or indicate who or what someone or something is.

**Outline** – Sketch in general terms; indicate the main features of; plan, collect and interpret data/information and draw conclusions about.

### Links to Curriculum

#### Australian Curriculum

**Subject:** Economics and Business

- Year 7
- Year 8
- Year 9
- Year 10

**Subject:** English

- Year 7
- Year 8
- Year 9
- Year 10

**Subject:** Geography

- Year 7
- Year 8
- Year 9
- Year 10

### NSW

**Subject:** Commerce

- Core 1: Consumer and Financial Decisions
- Core 2: The Economic and Business Environment
- Core 3: Employment and Work Futures
- Option 1: Our Economy
- Option 2: Investing
- Option 3: Promoting and Selling
- Option 4: Running a Business
- Option 8: School Developed Option

**Subject:** Business Studies – HSC

- Operations
- Finance
- Human Resources

**Subject:** Business Studies – Preliminary

- Business Management

**Subject:** Economics – Preliminary

- Topic 1: Introduction to Economics
- Topic 3: Markets

**Subject:** Economics – HSC

- Topic 3: Economic Issues
- Topic 1: The Global Economy

**Subject:** Legal Studies – HSC

- Option 2: Global Environmental Protection
- Option 4: Indigenous Peoples

### QLD

**Subject:** Business (General Senior Syllabus)

- Unit 1 Business Creation – Topic 1: Fundamentals of Business
- Unit 2 Business Growth – Topic 2: Entering Markets

- Unit 4 Business Evolution – Topic 1: Repositioning a Business

**Subject:** Economics (General Senior Syllabus)

- Unit 2 Modified Markets – Topic 2: Case Options of Market Measures and Strategies
- Case Option B: Environmental Economics
- Case Option C: Inequality

### VIC

**Subject:** Economics

- Unit 2: Economic Issues and Living Standards – Area of Study 2

**Subject:** Business Management

- Unit 1: Planning a Business – Area of Study 2, Area of Study 3

### SA & NT

**Subject:** Business Innovation

- Stage 1
- Stage 2

### WA

**Subject:** Accounting and Finance

- Year 11 – Unit 1 & 2
- Year 12 – Unit 3 & 4

### ACT

**Subject:** Business

- Business Opportunities

### TAS

**Subject:** Business Studies

- Unit 1: The Business Environment – Ethical Behaviour in Business



# Learning outcomes: Lesson 10

## Solutions

### Activity 1

#### Student answers may include

**1. What is meant by Welsh's statement, "preparedness meets opportunity"?**

Welsh means that to take advantage of an opportunity, you need to be ready for it by preparing yourself for it. In this instance, it was his having the qualifications, skills and work experience to be able to do the job.

**2. Define the concept of custodianship of the land**

To have a responsibility to look after the environment for future generations. This is especially true of Indigenous culture where there is a spiritual relationship with the land and what it represents.

**3. In the article, Welsh is said to be from the Indigenous Muruwari tribe. Explain what is meant by this.**

Aboriginal and Torres Strait Islander Australia is made up of many different and distinct groups, each with their own culture, customs, language and laws. They are the world's oldest surviving culture; cultures that continue to be expressed in dynamic and contemporary ways (AIATSIS, 2022 <https://aiatsis.gov.au/explore/map-indigenous-australia>).

**4. Welsh refers to Indigenous culture as being a 'high context culture'. Outline what he means by this.**

Meaning it is made up of a longstanding and shared culture embedded with its own spirituality, customs, language, and laws.

**5. What does it mean to "separate the signals from the noise"?**

To look beyond what is apparent, in this instance meaning financial statements. Instead, an informed and skilled investor should look at the values, mission, vision, integration of ESG, the people employed by the organisation and their overall culture.

### Glossary

**Cash Flow**

The money coming into and leaving a business.

**Chief Executive Officer (CEO)**

The highest position in an organisation and is responsible for ensuring the fulfilment of the vision, mission, and values of an organisation through strategic planning, leadership management.

**Competitive Advantage**

Having a distinct advantage over other businesses based on measures such as market share, profitability, sales.

**Environmental, Social, and Corporate Governance (ESG)**

A term used to describe a company's commitment to ensure that they contribute positively to the world community through their policies and day-to-day operations. This may be achieved by addressing the issues of climate change through their corporate policies and operations, or how they manage relationships with their stakeholders such as employees, suppliers, customers, and the wider community. They go beyond legal requirements, ensure transparency, ethical actions, and social justice.

**Float**

This is when a company issues shares to the public for the first time. Another term used is Initial Public Offering (IPO).

**Managing Director (MD)**

Includes the responsibilities of that of the CEO and also a representative of the shareholders on the Board of Directors.

**Stakeholder**

Someone holding a concern or interest in a business.

**Values**

Things held in the highest regard in an organisation and are central to all decision making.