



School
Sharemarket
Game

The ASX charts

Supplementary lesson 1

Includes: Student lessons
Teachers notes and answers

ASX Schools Sharemarket Game

Supplementary Teacher Notes: THE ASX CHARTS

The ASX charts

Introduction:

This lesson introduces students to the ASX charting tool.

It builds on Quickstart lesson 2: Company research where students learnt some of the basics of fundamental analysis.

The aim is to give students an introduction to technical analysis using the ASX charts. This will give them additional tools they can use when doing research.

Students will also learn how to compare company and sector performance.



Lesson Design:

Online lesson

Expected Learning Outcomes:

Students will:

- 1) Gain an understanding of what technical analysis is
- 2) Become more familiar with the charting tool on ASX
- 3) Be able to review the performance of shares
- 4) Make comparisons between companies and sectors
- 5) Understand a trend, a moving average and volume

Overview of Student Lesson:

In this lesson, students will learn more about how to use the ASX charts. There is a video introduction plus some practical ways students can use charts to help them with their research. They will need computer access to complete the lesson.

- 1) Read the introduction and section headed **'What can charts do for you'** (pg S.1).
- 2) Watch the video, either as a class or individually.
- 3) **'Chart types & trends'**: read and work through the exercises. (pg S.2 – S.3)
- 4) Read about **moving averages and volume** (pg S.4 – S.5) and work through the exercises.
- 5) **'Investigate'** (pg S.6 – S.7) can be done either in class or as homework.
- 6) Finish the lesson with a short quiz.



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QUIZ

1) What is one of the basic rules of trading?

Answer: Avoid trading against the trend.

2) What is one of your main aims when investing?

Answer: To sell shares at a price higher than they were bought for.

3) A downtrend is when...

Answer: There are lower lows and lower highs, so your line chart or bars are moving downwards.

4) A sideways market is...

Answer: Prices are trading in a range and not moving out of that range.

5) A moving average smooths out the volatility (ups and downs) of a company's share price – True / False

Answer: True

6) The best share to buy is one that has a low number of shares traded (volume) – True / False

Answer: False – If not enough volume, it may be difficult to sell shares at a fair price.

7) An upward trending market has higher highs and lower lows – True / False

Answer: False – Upward trends have higher highs and higher lows.

8) What is technical analysis?

Answer: Study of the past price movements of an individual share or the market as a whole.

ADDITIONAL RESOURCES

See [Teacher Resources page](http://www.asx.com.au/teacherresources) – www.asx.com.au/teacherresources

Company Quest: Helps students with understanding newspaper share tables.

No. 10: Technical Analysis online lesson – to access go to: www.asx.com.au/resources/shares-courses.htm

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Student Lesson: THE ASX CHARTS

The ASX charts

When you spend time discovering a company's story and looking at company numbers you are using what is called fundamental analysis. Many people who invest in the sharemarket use fundamental analysis to choose a company and then they use what is called technical analysis to decide when to actually buy and sell.

Technical analysis is the study of past price movements of an individual share or the market as a whole.

Charting is one of the main tools used in technical analysis. In this session you will learn how to use the ASX charts and what they can tell you about the share price of a company.

WHAT CAN CHARTS DO FOR YOU?

The first benefit of charts is that they convert a table of data into an easy to interpret line graph.

Take a look at figure 1: is it easier to see the share's recent price history by looking at the table or the graph?

Hopefully you said graph – because the graph provides a quick picture of how the company's share price has travelled over recent days.

Being able to read a chart can be very handy; for example, when you want to see how a company or a sector has performed or if you want to compare two companies against each other.

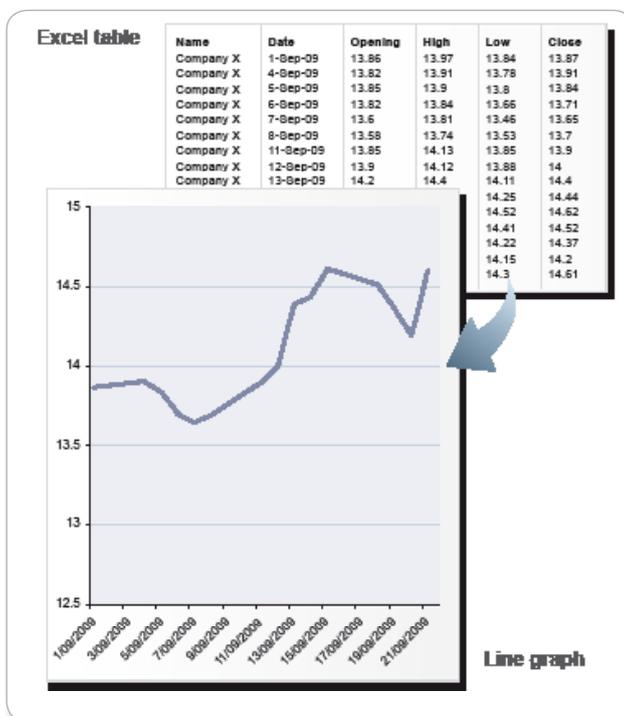


Figure 1

TO LEARN MORE ABOUT HOW TO USE THE ASX CHARTS

Read Charts intro: Part 1: https://game.asx.com.au/static/documents/18_asx_charts_intro.pdf
and Part 2: https://game.asx.com.au/static/documents/18_asx_charts_2.pdf



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Student Lesson: THE ASX CHARTS

Chart types & trends

Chart types

There are many different types of charts. Today we will look briefly at a line chart and a bar chart.

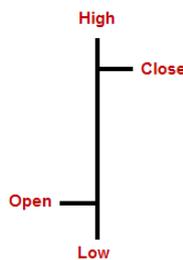


Figure 2

A line chart is the most common type of chart. It plots a series of prices (for example, end of day prices) and these are then joined to form a line. This type of chart is helpful in that it gives a simple picture of price direction (See figure 2).



Figure 3



A bar chart (figure 3) takes the information from the day's trading and plots that information on a vertical bar. The tab on the left side of the bar represents the open price of the day and the tab on the right of the bar represents the closing price of the day. The top of the bar represents the day's highest price and the bottom of the bar represents the day's lowest price. A bar chart is helpful in that it gives you additional information as to how the share price has moved each day.

'Tip'

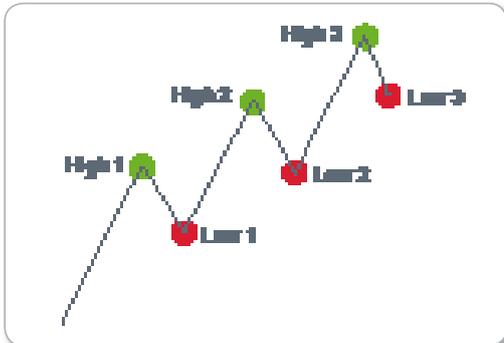
A line chart or a bar chart can be used as a general trend indicator.

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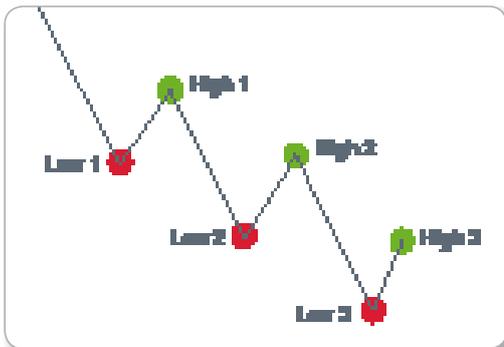
Student Lesson: THE ASX CHARTS

Trends

One of the basic rules of trading is to avoid trading against the trend. So it is always helpful to have a look at the trend of a share price before investing.



An **uptrend** must have both higher highs and higher lows – not just one of these, so the line will be heading upwards.



It is the opposite for a **downtrend** – lower lows and lower highs, so your line or bar chart will be trending downwards.

Sideways means that the prices are trading in a range and not moving out of that range – if share prices are neither going up or down significantly they are said to be trending sideways.

Remember, one of your main aims in investing is to buy shares and then sell them at a higher price. Therefore, to make a profit you want the share to be trending upward.



TO DO:

Now that you know a little bit more about charts see if you can find 3 different charts – one that shows an uptrend, one that shows a downtrend and one that is moving sideways.

To find your examples: You might already know that a company has been doing well which suggests their chart is in an upward trend; or that another company has been doing poorly suggesting a downward trend.

Alternatively, you can just type in the codes of some companies and see how they look. Use the company list in the Game to find their ASX code, copy the charts you want to use then print and paste them into your workbook or journal.

'Tip'

To get to the charting tool, log into the Game, go to the Game play menu and select 'Charts'.

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Student Lesson: THE ASX CHARTS

WHAT IS A MOVING AVERAGE AND HOW CAN IT HELP YOU?

A moving average chart helps to smooth out volatility (movement up and down) of a company's share price. The average of a series of prices is used each time rather than individual prices.

The ASX charts include moving averages. You can use a 5, 10, 20 and 30 day moving average. A 5 day moving average means that each point on the chart represents the average price of the share over the last 5 days; the 10 day chart means that each point on the chart represents the average price of the share over the last 10 days etc. The lower the moving average, the closer it will be to the actual share price as it uses a smaller number of days in the calculation and therefore will be a closer reflection of the actual price. Using a 30 day moving average will take a lot of the short term peaks and big dips out of the chart.

A moving average can be used to identify the trend.



TO DO:

Using the **Game charting tool**, choose a company and create a chart where the moving average is moving close to the actual share price. Then create a chart where the moving average is further away from the share price.

- Can you have both of these showing on the same chart?
- Which moving averages did you use?
- Why do you think there is such a difference between them?

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Student Lesson: THE ASX CHARTS

WHAT STORY DOES VOLUME TELL?

Volume is important as it shows you how many shares have been traded over a certain time frame, usually a day. Volume can help in a number of ways.

- 1) If there is a strong move up or down, volume can give you an idea as to how strong the move is. If the volume is high this means there are a lot of buyers or sellers stepping in and trading, so it is a strong move. If the volume is low, the move is weaker as there are not a lot of buyers and sellers involved.

You may see that there is a downturn in the price of a share that you have bought; however, when you look at the volume, you see that it is fairly low. This suggests the downturn is fairly weak and may not last. So you might consider holding onto the stock for the present rather than selling it.

- 2) Volume is also important because it gives you an idea of how many buyers or sellers are currently in the market. If there are not many buyers (low volume), it may be difficult to sell your shares at that time or for the price you want.

So if the trading volume is low and the market is fairly volatile, you might decide to not buy these shares as a quick exit may be difficult.

Having said this, the companies in the Game are all quite actively traded so this should be less of a problem.



'Tip'

Another way to view the volume of a company
In the Game, go to the company list, select the company you want to view, click on the code and you can see volume in the Share price table.

Vol *
5,261,233
5,001,939
4,061,704
3,228,263
4,176,380

An example of high volume

Vol *
4,141
5,706
7,837
4,270
3,692

An example of low volume

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Investigate: Company research

Once you are logged into your Game pages, go to the Game play menu and select Charts. This will take you to the charting tool. Choose 2 companies and look at the daily prices over 6 months and answer the questions below:

- 1) How does each company compare with the movement of the ASX 200? For example, do they move in the same direction as the indices or similar to it?

Company 1

Company 2

- 2) These companies are part of a sector – compare each company against its sector. How closely does it follow the movement of the sector? (To find what sector a stock is in go to the 'Company detail' page.)

Company 1

Company 2

- 3) How has each company performed over the past 6 months, 12 months, 2 years?

Company 1

Company 2

- 4) Is the company in a downtrend, an uptrend or moving sideways?

Company 1

Company 2

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Investigate: (CONTINUED)

5) What is the volume of each company like? Is there a lot of volume or very little?

Company 1

Company 2

6) Give a short summary of what the charts tell you about each company.

Company 1

Company 2

