



## UNDERSTANDING EXCHANGE RATES

### A BEGINNERS GUIDE TO NEW ZEALAND'S EXCHANGE RATES & TRADE Social Sciences, Mathematics and Language Activities

#### CURRICULUM STRANDS AND LEARNING

#### OUTCOMES

##### Social Sciences: The Economic World

- exploring and understanding basic economic concepts of: money; goods and services; supply and demand.
- using the context of our exchange rate to explore the economic effects this has on our country and in particular, our farmers.
- understanding reasons for buying and using other currencies.
- examining and identifying some of the reasons that our dollar changes its value against other world currencies.
- gaining a basic understanding about how exchange rates affect the way we trade with the rest of the world.

##### Mathematics: Number and Statistics

- using an economic context to think in mathematical and statistical ways

**Links:** English – Speaking, Writing, Viewing, Presenting

**Levels:** 3-4 (Years 6-10)

#### TUNING IN TO MONEY

- Pose the following questions to discussion groups and report back answers to the class.
  - *how do we get money?*
  - *where does money come from?*
  - *what do we use money for?*
- Tell students that we use money to buy 'things' that we want and that we call these things goods or services.
- Have students identify some of the jobs or tasks that they carry out at home or at school each week, eg
  - washing dishes, mowing lawns, taking out the rubbish ...
- Explain that when we 'do things' for other people we are carrying out a service and most people get paid for doing this. Brainstorm a list of working jobs that people carry out as a service, **eg**
  - *nursing, baggage handling, teaching, driving, waiting tables ...*
- Introduce the idea that people who produce things or objects you can see and touch are producing goods. Brainstorm a list of goods that are made or produced to sell to other people, eg
  - *food items, sporting goods, clothing, power tools, games ...*
- Brainstorm a list of occupations and have groups classify them as either producing goods or providing services.

#### BARTERING, TRADING, SUPPLY & DEMAND

- Can the students think of any way that people can get goods and services they want without any money changing hands? eg
  - they could swap goods with each other
  - they could carry out a service for each other in exchange for another services or goods
- Tell students that this is called bartering or trading.

- Can they come up with any recent personal examples of when they have exchanged goods or services with someone else? This could be as simple as swapping sandwiches at lunchtime! Introduce the idea that in ancient times, before money was used, this is just exactly what people did – they traded goods or services with each other.

#### AN ANCIENT TRADING SOCIETY

##### DISCUSSION SCENARIO

*You are good at trapping wild animals for meat. You eat lots of meat but are getting a little sick of it. You notice another person in the village is good at catching fish. He also likes meat (and you like fish) so you are both pleased to exchange fish for meat. This works well for a while but you find your house needs some repair and you are not good at house repairs. You try to trade meat with a good builder but he doesn't like meat or fish – he likes bread. How do you overcome this problem?*

- Help students see that as more and more people in the village join in the trading, the more complicated it will become. Tell students that ancient societies invented money to overcome this problem – but first they had to agree on what every good and service was worth, eg
  - *1 dinosaur steak = 6 rock arrowheads*
  - *1 fish = 3 hours of crop planting*
- What do the students think would happen to the price of fish if fish became a very popular food and/or they became harder to catch? What would happen to the price if people became tired of eating fish or they became very easy to catch?
- Introduce the idea that the invention of money made it possible to trade with people in other villages and the price of goods and services depended upon how much people wanted them or how easy they were to get (supply and demand).

#### NEW ZEALAND TRADES WITH OTHER COUNTRIES

- Conduct a quick survey to find the country where common classroom and school equipment was made. How many different countries are represented? Introduce the idea that trading with other countries is a good thing because it gives us a chance to buy things we don't produce in New Zealand and lets us concentrate on producing and selling the goods and services we are best at producing.
- Introduce the idea that our climate, fertile soils and efficient farming methods mean that we are very good at producing high quality agricultural and forestry products other countries want to buy.



- Brainstorm and list some of these products, eg
  - timber
  - beef, lamb, veal & venison
  - kiwi fruit
  - butter & other milk products
  - wool
  - fruit, vegetables, flowers ...
- Do the students know that agriculture and forestry is so big it earns about 20% of all the money New Zealand makes every year (GDP) and about 189,000 people (12%) have jobs relating to our agriculture and forestry industries?

## OVERSEAS MONEY AND EXCHANGE RATES

- Help students understand that when we travel overseas we have to change our money into the money (currency) of that country. When people and companies sell products overseas, the money they are paid has been changed at a bank from their currency to New Zealand dollars. Introduce the idea that different countries, (eg USA and Australia who also use dollars) place different values on their dollars, eg
  - what their dollar is worth compared to our dollar
  - governments and people who invest or trade in money decide how much their dollar is worth compared to ours
- Tell students that this is called the exchange rate and it can go up and down.
- As an introduction to exchange rates, tell students that they are going on holiday to Australia and America and have \$200 NZ pocket money to spend in each country. Have them calculate how many dollars they would then have to spend in each country after they had exchanged our dollar for theirs. Use an online currency converter at [www.xe.com/ucc](http://www.xe.com/ucc).

## LET'S DO SOME CALCULATIONS

- Maths Challenge 1. The students see a digital camera advertised on an American website that they would like to buy. It will cost US\$100. If the exchange rate is \$NZ 0.66 (66 cents) to US\$1.00, how can they find out how much this will cost them in New Zealand currency, **eg**  
**Total price in \$US, divided by current NZ exchange rate or \$100 \$0.66 = \$151 NZ**
- Have students complete a range of calculations where the exchange rate varies from 50c to 65c. Can they say what happens to the price of the camera when the exchange rate goes both up and down?
- Maths Challenge 2. An American student wants to buy a NZ merino woollen jacket he sees on a NZ Website that costs \$100 NZ. Calculate the costs if the exchange rate of the American dollar varies from \$US1.51 to \$US1.66, **eg**  
Total price in \$NZ divided by current \$US exchange rate or \$100 NZ \$1.51 = \$66.22 US

## IMPORTING AND EXPORTING

- Using discussion and dictionaries, help students understand the difference between an importer and an exporter, **eg** a simple definition could be:
  - an importer buys goods from overseas and sells them in New Zealand
  - an exporter sells New Zealand goods overseas
- Have students calculate the following:
  - an importer is going to buy several containers of bananas from Australia to sell in New Zealand
  - it will cost \$10,000 Australian dollars
  - how much will it cost in New Zealand dollars if the exchange rate is NZ: 85c = Aust: \$1.00
  - how much will it cost if the exchange rate is NZ 81c = Aust \$1.00
- Calculate the following export example:
  - an Australian supermarket chain wants to buy \$NZ 10,000 worth of butter from a New Zealand exporter. How much will the exporter pay at the following exchange rates \$1.13 NZ = \$1.00 Aust and \$1.21 NZ = \$1.00 Aust
- Have students compare the results of their calculations. What 'wise statements' can they write about how the exchange rate affects importers and affects exporters such as farmers? How will it affect the amount of money New Zealand makes overseas?

## CURRENCY WATCH

- Divide the class into groups corresponding with some of the countries we trade with such as – Australia, USA, Europe, Japan, China ... Each group keeps a daily or weekly watch on the exchange rate to see how much \$10,000 NZ is worth in each currency. Graph results and report back. Is there a trend?
- Keep a media watch currency bulletin board using the financial sections of newspapers.

## KEEPING ON TRADING

- Introduce the following ideas for discussion.
  - In recessionary times, some countries may stop buying (importing) goods from each other (in an effort to provide more jobs by producing these goods and services for themselves) even though they cannot make or provide the good or service as cheaply as the imported one. The problem with this idea is that these goods and services will cost the people of the country more money and that they will be worse off financially than when they imported them.
  - at times like this, countries would be better to concentrate on the things that they can produce better than other countries and trade with each other so each country and everyone who lives there gets the best deal and the country and its people have more money to spend.