Dialling Dilemma

You need ☑ a telephone book ☑ a classmate

Activity

The front pages of your telephone book include a section about making international calls. You are given the dialling code for each country and how many hours behind New Zealand time it is.
The times given do not allow for daylight saving.

The following questions are based on phone book information.
For example, India: Dialling code = 0091 Hours behind NZ = 6.5

For her birthday in April, Hirani's parents said she could telephone all her penfriends.

1. Hirani wants to ring each penfriend at 7 p.m. in their country's time.
   a. At what New Zealand time would she have to ring each person?
   b. Hirani's parents want her to be in bed between 9.30 p.m. and 7 a.m.
   Work out with a classmate other times that Hirani could make calls. (Her penfriends will need to be awake too!)
2. What instructions would you give someone trying to work out what the time is in another country?
3. Why is the time different in other countries?

Stacks of Money
(revised 2008)

You need ☑ toy money (optional) ☑ a ruler
☑ coins

Activity

A stack of five 10 cent coins is 8 millimetres high.

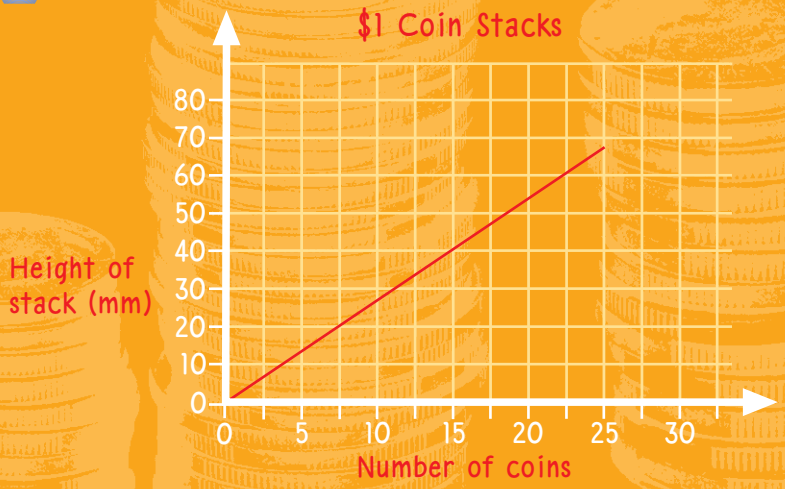
A stack of five 20 cent coins is also 8 millimetres high.

A stack of five 50 cent coins is 9 millimetres high.

A stack of five $1 coins is 13.5 millimetres high.

1. A stack of coins is 72 millimetres high.
   a. If the stack is made with 10 cent coins, how much is it worth?
   b. If the stack is made with 20 cent coins, how much is it worth?
   c. If the stack is made with 50 cent coins, how much is it worth?

2. Here is a graph showing the heights of stacks made with $1 coins:



Use the graph to answer the following questions:
   a. How high would a stack of thirty $1 coins be?
   b. A stack of $1 coins is 54 millimetres high. How many coins are in the stack?
   c. Why is the height of stacks shown by a straight line?

Investigation

Investigate stacks made with $1 and $2 coins.