

Buying and Banking – An Island Life Game

Teacher notes

Buying and Banking is one of two island life games. As in the *Budgets and Exchange* there is an element of changing money, but the main emphasis in this game is to simulate the use of banks and credit cards.

Players are encouraged to use banks to prevent them having to carry large amounts of cash and they have to go to a cash machine to get the money that they earn during the game.

Players use credit cards and are charged a simplified form of interest as well as bank charges if they fail to pay their debts.

The mathematical skills needed are basic mental arithmetic, simple exchange rates (ratios) and some use of negative numbers (negative numbers can be used to record the credit card debt of players).

The game is ideally played with two or three players plus a banker. The banking role is best taken by an adult or an experienced player.

The game should last about 45 minutes but there is a shortened version and it can also be played to a time limit so that it can be fitted into a lunchtime maths club session or into an after school homework club slot.

The game is suitable for most key stage three pupils but is more likely to be beneficial to year 7 and 8. It can be simplified for those who cannot cope with exchange rates by using one currency on all three islands. It can be simplified even more by not using the bank initially and getting to know the other rules first (this is explained in the rules).

The rules for this game are slightly simpler than *Budgets and Exchange* so it's a good idea to start pupils with the simple rules of this game so that they get to know how to get around the board before starting on the second game.

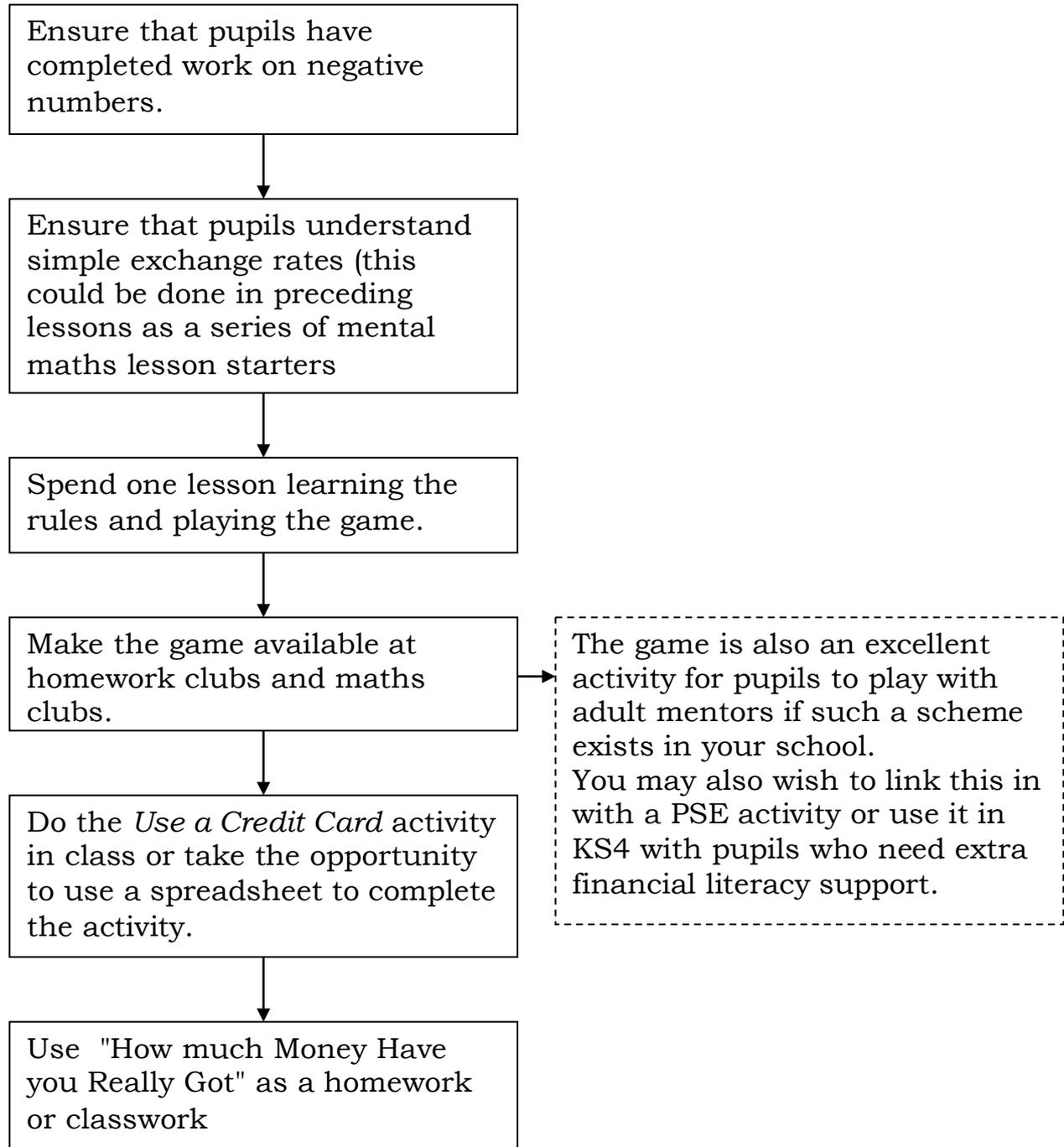
The rules seem quite involved initially but it should only take one session for pupils to master them and play the first game. As there is strategy involved it is suggested that pupils do play regularly and that they are encouraged to reflect on winning strategies.

Pupils should be encouraged to play quickly so that they improve their mental arithmetic skills and it will ensure that their turn comes round sooner.

There are two activities that accompany the game. The first looks at credit card debt whilst the second is a short homework style exercise that uses negative numbers to calculate the total assets (or debt) of a person by looking at their credit card and bank accounts.

Incorporating Buying and Banking into your scheme of work

Example



The statement below is extracted from the DFES guidance for schools at Key Stages 3 regarding *financial capability through personal finance education* and is matched to the Island Life Buying and Banking game

"During key stage 3, pupils learn about what influences how we spend or save money and how to become competent at managing personal money in a range of situations including those beyond their immediate experience."

Using a Credit Card

Read this

When you buy something with a credit card you are borrowing money. The bank charges you interest for borrowing money and they will charge you extra if you do not pay the minimum amount back every month

This is the interest that West Bank charges per month:

Debt	Interest
£1-10	£1
£11-20	£2
£21-30	£3
£31-40	£4

.....and so on

The minimum you must pay per month is the same as the interest. If you do not pay this amount the bank will charge you £5.

Example:

Abby spends £20 on credit and pays £6 back a month.

Month	Debt	Interest	Pay	Calculation
1	£20	£2	£6	$20 + 2 - 6 = 16$
2	£16	£2	£6	$16 + 2 - 6 = 12$
3	£12	£2	£6	$12 + 2 - 6 = 8$
4	£8	£2	£6	$8 + 2 - 6 = 4$
5	£4	£2	£6	$4 + 2 - 6 = 0$

She pays back a total of £30 and it takes 5 months.

- 1 Find out how long it takes these three people to pay their credit card debt and how much it costs them.
(The final monthly payment may be less.)

Mahmoud spends £50 on credit and pays £15 back a month.

Ashleigh spends £50 on credit and pays £5 back a month.

Thomas spends £50 on credit, forgets to pay anything for two months and then pays £10 back a month.

- 2 Flashy Pete spends £50 on credit and pays nothing for 5 months. The bank threaten to take him to court unless he pays £20 a month. How much does he owe after a year? Comment on this.

Set out your work clearly. Explain your results.

Using a spreadsheet could save you a large amount of time.

How much money have you really got?

Read this

When you work out how much money you've got, you have to count the money in your pocket, the money in your bank and the amount of money that you owe.

Example

Charmaine has £50 in her purse, £35.60 in the bank and owes £63.21 on her credit card.

She has $50 + 35.60 - 63.21 = 85.60 - 63.21 = \underline{\underline{£22.39}}$

If she spends more than this, her debt will go up and if she spends less and pays off some of her credit card bill, her debt will go down.

- 1 How much can these people afford to spend without increasing their debt?

Shinda has £45.80 in his flat, £635.56 in the bank and owes £453.87 on his credit card.

Elaine has £15.71 in her purse, £12.10 in the bank and owes £23.21 on her credit card.

Jan has £250 in his wallet, £135.60 in the bank and owes £638.11 on his credit card.

Read this

You can also borrow money from the bank. This is sometimes called an overdraft and it is shown on your bank statement as a negative number.

- 2 All these people want to pay off their credit card debt and buy a new mobile phone for £129.99
Who will need an overdraft and how large will it be? (Remember that an overdraft is shown as a negative number.)

name	cash	bank account	credit card debt
Sonya	£39.56	-£46.20	£78.21
Iorwerth	£87.55	£16.61	£21.65
Alex	£36.98	£146.20	£64.13
Shinji	£72.36	-£77.22	£212.97
Nga	£11.82	£512.15	£260.19

There is an example on the help card if you're stuck.

Help card

Example

name	cash	bank	credit card
Sonya	£39.56	-£46.20	£78.21

Sonya has to pay off her credit card bill

She does this by increasing her overdraft

$$-46.20 - 78.21 = -124.21.$$

She uses her cash to pay for part of the mobile phone: $129.99 - 39.56 = £90.43$

She has to pay £90.43 from her bank account

$$-124.21 - 90.43 = -£214.64$$

So her new overdraft will be -£214.64