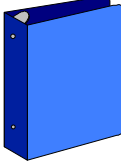
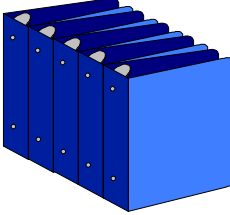
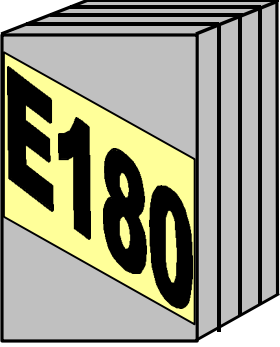
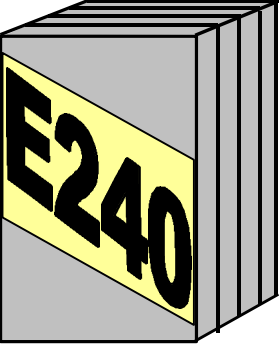
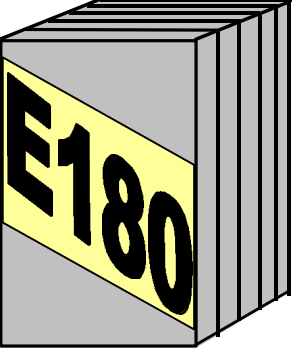






Best Buys

Data Sheet

Which is the best buy?

<p>Files</p> 		<p>Files 89 pence each Special Offer 5 for £4</p>
<p>Video Tapes</p>		
<p>4 pack 3 hour tapes</p>  <p>£4.99</p>	<p>4 pack 4 hour tapes</p>  <p>£7.99</p>	<p>5 pack 3 hour tapes</p>  <p>£7.49</p>
<p>Cola</p>		
<p>Bottle 3 litres</p>  <p>£1.89</p>	<p>Bottle 1.5 litres</p>  <p>£1.03</p>	<p>Pack of six cans 330 ml in each</p>  <p>£1.55</p>
		<p>Single can 330 ml</p>  <p>34 p</p>



Best Buys

Worksheet

Files Use the prices on the Data Sheet

How much is it per file if you use the special offer?

Which is the best buy – single files or the special offer?

Can you think of any reasons why someone might not use the special offer?

Video Tapes Use the prices on the Data Sheet

The 5-pack gives you a total of 15 hours of tape for £7.49.

Roughly how many hours of tape do you get for each pound?

What calculation would you have to do to get the answer more accurately?

$15 \text{ (hours)} \div 7.49 \text{ (£)} = 2.003 \text{ hours/£}$ to 3 decimal places – check that you get this.

What is the cost per hour of tape?

$749 \text{ (pence)} \div 15 \text{ (hours)} = 49.93 \text{ pence/hour}$ to 2 decimal places.

Complete the table to show all the lengths and prices of videotapes for the other packs.

Calculate the missing values in the last two columns. Use a spreadsheet if you wish.

Pack	Number of tapes	Length of each tape in hours	Total length of video tapes in hours	Price in £	How many hours of tape per £	Cost in pence of 1 hour of tape
1						
2						
3	5	3	15	£7.49	2.003	49.93

Which gives you the most video tape for your money?

What else do you consider when deciding what video tapes to buy?

Why might you choose not to buy those that give you most videotape for your money?

Cola Use the prices on the Data Sheet

Complete the table to show all the different volumes and prices of the cola.

You will need to remember that 1000 ml = 1 litre, so 330 ml = 0.33 litres.

Calculate the values in the last two columns. Use a spreadsheet if you wish.

Pack	Total volume of cola in litres	Price in £	How many litres of cola per £? (litres/£)	Cost in £ of 1 litre of cola (£/litre)
1				
2				
3				
4				

Which gives you the most cola for your money?

What else do you consider when deciding what cola to buy?

Why might you choose not to buy the one that gives you most cola for your money?

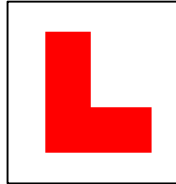


Best Buys

Further Questions

In each of the following find the best buy. Explain your reasoning.
Are there any reasons why someone might choose not to get the best buy?

1 **Driving Lessons**



Lessons – 1 hour each
£16 per lesson
Special Offer
£168 for 12 lessons

2 **File Paper**



A4 pads
80 pages for 99p
160 pages for £1.69
200 pages for £1.99

3 **Audio Tapes**



90 minute audio tapes
£3.25 for pack of 6
£4.99 for pack of 10
£7.50 for pack of 15

4 **Shampoo**



200 ml
£2.19



300 ml
£2.99



400 ml
£3.59



5



Chocolate Bars

Single Bar 35 pence
 Special Offer Buy two bars, get another one free.
 Pack of 5 £1.20

6 **Conditioner**



75 ml
89p



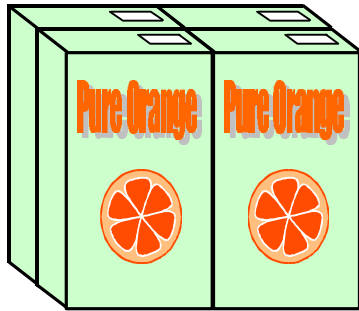
200 ml
£1.99



400 ml
£3.99

7 **Fruit Juice**

Pack of four
1 litre cartons



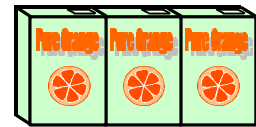
£2.35

1 litre carton



73 p

Pack of three
220 ml drinks



75 p

8



Toothpaste

50 ml tube 84 pence
 75 ml tube £1.19

Special Offer : Buy a 50 ml tube, get another at half price.

9 **Crisps**

Single 34.5 gram packets for 25 p each
 150 gram packets for 55p each
 6-pack of 31 gram packets for £1.09
 10-pack of 25 gram packets for £1.25
 12-pack of 24 gram packets for £1.79.



Teacher Notes

Unit Foundation Level, Managing money

Skills used in this activity:

Finding 'best buys' using

- division of money
- conversion of units
- using decimals to make comparisons

Preparation

For the class you need:

- a copy of the data sheet (page 1) for each student
- a copy of the worksheet (page 2) for each student (optional)
- a copy of Further Questions (pages 3 and 4) for each student

Notes on the Activity

The data sheet contains three examples of varying difficulty. This can be used for class discussion or alternatively used with the worksheet by students working individually. The Further Questions give more practice in the methods involved.

Alternatives/Extensions

Students could use a spreadsheet for this activity. After completing the activity students should be ready to attempt the 'best buys' requirement for their Coursework Portfolios. Ideally they should be asked to decide on things they would like to buy (which are available in different quantities) and do their own research to find out the prices.

Answers to Worksheet

Files

Special offer is equivalent to 80 pence per file.

Special offer is best buy.

Someone may choose to buy a single file if this is all they need and they have no use for extra files.

Video Tapes

The 5 pack gives roughly 2 hours tape per £.

Pack	Number of tapes	Length of each tape in hours	Total length of video tapes in hours	Price in £	How many hours of tape per £	Cost in pence of 1 hour of tape
1	4	3	12	£4.99	2.405	41.58
2	4	4	16	£7.99	2.003	49.94
3	5	3	15	£7.49	2.003	49.93

The first pack (4 three hour tapes for £4.99) gives more tape for your money.

You also consider the length of the tapes and what you wish to tape on them.

Eg You may decide to buy 4 hour tapes rather than 3 hour tapes if you wish to tape films that are less than 2 hours long.



Cola

Pack	Total volume of cola in litres	Price in £	How many litres of cola per £? (litres/£)	Cost in £ of 1 litre of cola (£/litre)
1	3	1.89	1.59	0.63
2	1.5	1.03	1.46	0.69
3	1.98	1.55	1.28	0.78
4	0.33	0.34	0.97	1.03

The 3 litre bottle gives the most cola for your money.

Eg If you wish to take a drink with you on an outing you may prefer to buy a can.

Cola may go flat in a larger bottle if it is not drunk quickly.

Answers to Further Questions**1 Driving Lessons**

Choice	Price per lesson
Single lesson	£16
Special Offer	£14

Special Offer is best buy.

Eg £168 is a lot to pay at once.

May require extra single lessons after a course of 12.

2 File Paper

Pad	No of pages	Price in pence	No of pages per pence	Cost of 1 page in pence
1	80	99	0.808	1.238
2	160	169	0.947	1.056
3	200	199	1.005	0.995

200 page pad is the best buy.

Eg May like the smaller pad because it is less heavy.

3 Audio Tapes

Pack	No of tapes	Price in pence	Cost in pence of 1 tape
1	6	325	54.2
2	10	499	49.9
3	15	750	50

Pack of 10 is best buy.

(N.B. There is no need to involve the length of 90 minutes since all tapes are the same.)

Eg Buyer may not require as many as 10 tapes.

4 Shampoo

Bottle	Total volume in ml	Price in pence	No of ml per pence (ml/p)	Cost in pence of 1 ml (p/ml)
1	200	219	0.913	1.095
2	300	299	1.003	0.997
3	400	359	1.114	0.898

400 ml bottle is the best buy.

Eg May prefer the convenience of a smaller bottle.

5 Chocolate Bars

Choice	Price per bar
Single bar	35 pence
Special Offer	23.3 pence
Pack of 5 bars	24 pence

Special Offer is best buy.

Eg May want only one bar or 5 bars (rather than 3 or 6).



6 Conditioner

Bottle	Total volume in ml	Price in pence	No of ml per pence (ml/p)	Cost in pence of 1 ml (p/ml)
1	75	89	0.843	1.187
2	200	199	1.005	0.995
3	400	399	1.003	0.998

200 ml bottle is the best buy.

Eg May prefer the convenience of a smaller bottle to take on holiday.

7 Fruit Juice

Pack	Total volume of juice in litres	Price in £	How many litres of juice per £? (l/£)	Cost in £ of 1 litre of juice (£/l)
1	4	2.35	1.702	0.588
2	1	0.73	1.370	0.73
3	0.66	0.75	0.88	1.136

The 4 litre pack is the best buy.

Eg If you want drinks for packed lunches you may prefer to buy a pack of three 220 ml drinks.

8

Tube	Total volume in ml	Price in pence	No of ml per pence (ml/p)	Cost in pence of 1 ml (p/ml)
Small	50	84	0.595	1.68
Large	75	119	0.630	1.59
Special offer	100	126	0.794	1.26

Special offer is the best buy.

Eg May only want one tube and wish to spend as little as possible.

9 Crisps

Packet	Total amount in grams	Price in pence	No of grams per pence (g/p)	Cost of 1 gram in pence (p/g)
1	34.5	25	1.38	0.725
2	150	55	2.73	0.367
3	186	109	1.71	0.586
4	250	125	2	0.5
5	288	179	1.61	0.622

The 150 gram packet is the best buy.

Eg You may not want to eat as many crisps at once – they do not keep well in an open packet.

