

Buying from a catalogue

Introduction

This task deals with discount, cash back and interest free credit when making catalogue purchases, including purchases on-line.

The task could be introduced by students exploring catalogues and discovering all the various aspects of catalogue purchasing.

Curriculum coverage	Functional Standards
<ul style="list-style-type: none"> ✓ Number and algebra 	<ul style="list-style-type: none"> ✓ Analysing <ul style="list-style-type: none"> ■ Processing and using the mathematics
Cross-curricular links	Every Child Matters
<ul style="list-style-type: none"> ✓ ICT <ul style="list-style-type: none"> ■ Making use of the Internet ✓ PSHE <ul style="list-style-type: none"> ■ Financial awareness in relation to best payment terms 	<ul style="list-style-type: none"> ✓ Economic well-being
Prior Knowledge	Vocabulary
<ul style="list-style-type: none"> ✓ Percentage decrease 	<ul style="list-style-type: none"> ✓ Total ✓ Percentage, percentage discount ✓ Interest free credit

Item	Price (£)
4GB MP3 player	129.00
Gents' classic quartz watch	26.99
All terrain skateboard	99.79
Street-X ramp combo (skateboard accessory)	89.99
Plush anti-bacterial pet duvet	17.99
Multi function savings bank	24.99
Mini silver keyboard	29.99
Learn@Home keyboard skills	14.99
13MP USB webcam with microphone	24.99
Pro dartboard	24.99
Darts set	7.99
Table tennis balls	3.99
Table tennis bat	4.79
Art box set	14.99
Sudoku touch screen game	19.79

Sam makes this list of items he wants to buy from a catalogue.

1 Sam chooses the skateboard and the skateboard accessory for his birthday.
How much do these items cost? (2 marks)

2 Sam's relatives give him a total of £200 for his birthday.
He decides to buy the MP3 player.
He then decides to buy the largest possible number of the other items that he can.
Write a list showing how Sam could spend his money. (2 marks)

Students should not choose the skateboard items as Sam has received these for his birthday. There are a number of possible 'solutions'. Encourage students to provide a list with the total price as close as possible to £200.

e 3 Ben wants to buy a games console.
He sees this entry in an on-line catalogue.

This table shows the interest free credit arrangements offered:



60GB Games console
+ 3 Games
£629.00
Extended Guarantee -
3 Years available for
£95.00

Time	Terms
20 weeks	Spread the cost of any item over 20 weeks interest FREE
40 weeks	Spread the cost of any item of £59.99 or more over 40 weeks interest FREE
50 weeks	Selected items and services are available over 50 weeks interest FREE

Ben buys the games console and the 3 year extended guarantee.
 He uses the 40 week interest free credit arrangement.
 A special offer means that Ben gets a 20% discount.
 How much does he have to pay each week?

(4 marks)

Encourage student to work on this one step at a time

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4 The catalogue company operates a cash back scheme.

Cash back

Cash back can be claimed in these ways:

Goods

For every £10 you pay, you can claim 15% cash back to purchase goods on-line.

A cheque

For every £10 you pay, you can claim 12.5% cash back sent to you as a cheque.

Ben completes the payments for the games console.
 He then claims cash back in the form of a cheque.
 Taking the cash back into account, how much does Ben actually pay for the games console?

(2 marks)

Discuss the idea of cash back. For example, make sure that students appreciate that on a payment of, say, £179.99, they only receive cash back on £170. The remaining £9.99 is added to their next purchase when working out the cash back for that.)

Answers and mark scheme

Question	Answers	Marks	Comments
1	(£)99.79 (+) (£)89.99	D1	
	£189.78	B1	
2	6 items totalling < £71	B2	B1 5 items totalling < £71
3	629 + 95	M1	
	0.8 × their 724	M1	oe
	their 579.20 ÷ 40	M1	
	£14.48	A1	
4	579.20 – 0.125 × 570	M1	or 71.25
	507.95	A1	

Common Errors

Look out for students who:

- use 100 in the wrong way when working with percentages
- fail to read the questions carefully
- offer unreasonable answers to their questions.

Extension Questions

- 1** Anna buys three items from Sam’s list.
- She makes the purchases on–line.
 - She gets a 20% discount.
 - Anna pays for her purchases using 20 weeks interest free credit.
 - She pays £2.59 per week.
- What did Anna buy?
- 2** Tim has bought a HD Ready Digital LCD TV from the catalogue for £699.99
 He uses the cash back from this to help him buy a DVD recorder for £319.99
 He decides to order the DVD recorder on–line.
 Tim gets a 20% discount.
 He pays for the purchase using 40 weeks interest free credit.
- a** How much does he pay each week?
- After paying for the recorder, Tim claims cash back in the form of a cheque.
- b** How much cash back does he receive?
- c** How much does Tim actually pay for the recorder?
- d** What percentage is this of the original price?
- 3** Buying from a catalogue might not be the cheapest option even after discount and cash back.
 Use the internet to check prices from a variety of sources.
 For example, choose a particular brand and model of TV.
 Compare these internet prices with the price in a catalogue.
 Don’t forget:
- To compare the real costs when buying by credit.
 - The costs of ‘necessary’ extras such as TV stands and guarantees.
- Investigate further. (2 marks)

Extension Answers

Question	Answers
1	Payment = £2.59 × 20 = £51.80 This represents 80% of cost before 20% discount Without discount = £51.80 ÷ 0.8 = £64.75 She bought: Gents’ watch (£26.99) Sudoku game (£19.79) Pet duvet (£17.99)
2a	Cash back on TV = £0.15 × 690 = £103.50 Discounted price = (319.99 – 103.50) × 0.8 = £173.19 Weekly payment = £173.19 ÷ 40 = £4.33
2b	Cash back = £170 × 0.125 = £21.25
2c	Actual cost = £173.19 – £21.25 = £151.94
2d	Percentage = 151.94 ÷ 319.99 × 100 = 47.5% (1 d.p.)
3	The task might be developed by looking at different interest free credit arrangements and working out the true cost of these.