

CHAPTER 13 MERCHANDISE INVENTORY

Merchandise inventory includes all goods owned by the business and held for sale. The account used for Richard's Sales & Service's merchandise inventory is Account No. 12000, Merchandise Inventory.

PCA uses a perpetual inventory system. In a perpetual inventory system a merchandising business continuously updates inventory each time an item is purchased or sold.

Inventory calculations include FIFO, LIFO, and average cost methods. The FIFO (first in, first out) method assumes that the items in the beginning inventory are sold first. The LIFO (last in, first out) method assumes that the goods received last are sold first. The average cost method is the default that PCA uses for inventory items sold. The formula used is: $\text{Average Cost} \times \text{Quantity Sold} = \text{Cost of Goods Sold}$.

PCA tracks the inventory items that are purchased and sold. After you post, PCA automatically updates the cost and quantity of each inventory item. Generally, all of your inventory should use the same costing method.

Tracking inventory is a three-step process:

- Enter item information, including Sales account, Merchandise Inventory account, and Cost of Sales account.
- Use item codes when entering purchases and sales. PCA automatically calculates and tracks average cost, which is the default, using this to compute and enter the Cost of Goods Sold. You can change the cost method to LIFO (last in, first out) or FIFO (first in, first out). This chapter explains these inventory cost methods in detail.
- If necessary, enter inventory adjustments.

PCA does the rest automatically: adjusts inventory levels each time you post a purchase or sale of an inventory item, tracks the cost of each item, and makes a Cost of Goods Sold Journal entry at the end of the accounting period.

COST METHODS

PCA includes three types of cost methods for inventory: average cost, LIFO, and FIFO. Once you select the costing method for an inventory item, you cannot change it if transactions have been posted. Therefore, if you want to change the cost method for an item with posted transactions, you must enter the item again.

Average Cost

When students set up inventory items for Richard's Sales & Service, they selected the Average cost method. In Chapter 11, Richard's Sales & Service purchased four pairs of curtains from Ron Becker Fabrics at \$30 each. What happens when these curtains are sold? The journal entries would look like this:

Purchased four pairs of curtains from Ron Becker Fabrics at \$30 each. (This is Invoice 210, textbook page 390).

Account ID	Account Description, Inv. No. 201	Debit	Credit
12000	Merchandise Inventory	\$120.00	
20000/RBF08	Accounts Payable/Ron Becker Fabrics		\$120.00

Sold three pairs of curtains to Paul Martinez at \$100 each. (This is Invoice 103, textbook page 437).

Account ID	Account Description, Inv. No. 103	Debit	Credit
50500	Cost of Goods Sold-Wall	\$ 90.00	
1100/pm005	Accounts Receivable/Paul Martinez	324.00	
12000	Merchandise Inventory		\$ 90.00
40400	Sales-Wall		300.00
23100	Sales Tax Payable		24.00

You can see from these journal entries that the Merchandise Inventory account is constantly updated with each purchase and sale. After these transactions, the balance in Merchandise Inventory looks like the T-account shown on the next page.

Merchandise Inventory, Account No. 12000			
Purchased inventory	\$120	Sold Inventory	\$90
Balance	30		

LIFO (Last In, First Out)

The LIFO (last in, first out) method of inventory pricing assumes that the last goods received are sold first. LIFO assumes that cost is based on replacement and that the last price paid for merchandise is more accurate.

Accountants recommend that you select LIFO when you desire to charge the most recent inventory costs against revenue. LIFO yields the lowest amount of net income in periods of rising costs because the cost of the most recently acquired inventory more closely approximates the replacement cost.

FIFO (First In, First Out)

The FIFO (first in, first out) method of inventory pricing assumes that the items in the beginning inventory are sold first. FIFO costs your sales and values your inventory as if the items you sell are the ones that you have had in stock for the longest time.

Accountants recommend that you select FIFO when you desire to charge costs against revenue in the order in which costs occur. FIFO yields a higher amount of profit during periods of rising costs. This happens because merchandise was acquired prior to the increase in cost.

TYPES OF INVENTORY ITEMS

There are nine types of inventory items in PCA:

- **Stock item:** This is the default in the Item Class list. It is the traditional inventory item tracking descriptions, unit prices, stock quantities, and cost of goods sold. For stock items, you should complete the entire window. Once an item has been designated as a stock item, the type cannot be changed.

- Master Stock Item: PCA uses this item class as a special item that does not represent inventory stocked but contains information (item attributes) shared with a number of substock items.
- Non-stock item: PCA tracks the description and a unit price for sales. You can also track default accounts. You might use this type for service items such as hours where the unit price is set.
- Description only: PCA keeps track of the description of an Inventory Item. This saves time when entering purchases and sales because you don't have to retype the description. You might use this type for service items where the price fluctuates.
- Service: This is for services you can apply to your salary and wages account.
- Labor: This is for labor you can apply to your salary and wages account. You cannot purchase labor items but you can sell them.
- Assembly: You can specify items as assembly items and create a bill of materials for a unit made up of component stock or subassembly items.
- Activity item: To indicate how time is spent when performing services for a customer, for a job, or for internal administrative work. Activity items are used with the Time & Billing feature.
- Charge item: Expenses recorded by an employee or vendor when company resources are used for a customer or job.

SOFTWARE OBJECTIVES: In Chapter 13, your students use the software to:

1. Enter inventory maintenance and default information.
2. Enter inventory item information, including Sales account, Merchandise Inventory account, and Cost of Sales account.
3. Enter item codes when recording purchases and sales.
4. Enter inventory adjustments.

5. Make three backups: two for Richard's Sales & Service; two for the end-of-chapter exercises.

WEB OBJECTIVES: In Chapter 13, your students did these Internet activities:

1. Used their Internet browser to go to the book's website.
2. Went to the Internet Activity link on the book's website. Then, selected WEB EXERCISES PART 3. Completed the third web exercise in Part 3— Accountant' World.
3. Used a word processing program to write summaries of the websites that they visited.

PCA TIPS, CHAPTER 13

- Chapters 11 and 12 must be completed before starting Chapter 13.
- In Chapters 11-13, Peachtree automatically uses the average inventory method.

LECTURE OUTLINE FOR CHAPTER 13

- A. Software Objectives, page 469
- B. Web Objectives, page 469
- C. Cost Methods, page 470
 1. Average Cost, pages 470-471
 2. LIFO (Last In, First Out), pages 471-472
 3. FIFO (First In, First Out), page 472
- D. Types of Inventory Items, pages 472-473
- E. Getting Started, pages 473-475
- F. Entering Inventory Item Maintenance Information, pages 475-477

- G. Backing Up Your Data, pages 477-478
- H. Inventory Adjustments, pages 478-480
- I. Additional Transactions, pages 480-482
- J. Printing Reports, pages 482-488
- K. Backing Up Chapter 13 Data, pages 488-489
- L. Internet Activity, page 489
- M. Summary and Review, pages 489-490
 - 1. Going to the Net, page 490
 - 2. Short-Answer Questions, pages 490-492
 - 3. Exercise 13-1, pages 492-493
 - 4. Exercise 13-2, page 493
 - 5. Chapter 13 Index, page 494

ANSWERS TO GOING TO THE NET

- 1. Perpetual inventory involves keeping records at both retail and cost. Purchases are added to the beginning inventory at retail, (with each invoice priced at the expected selling price), and all sales and markdowns are deducted. This results in a perpetual inventory at retail.
- 2. A physical count is necessary at least once a year to determine inventory shrinkage.

ANSWERS TO SHORT-ANSWER QUESTIONS: Answers will vary.

- 1. Tracking inventory is a three-step process:
 - a. Enter item information, including Sales account, Merchandise Inventory account, and Cost of Sales account.
 - b. Use item codes when entering purchases and sales. PCA calculates and tracks average cost, which is the default, using this to calculate and enter Cost of Goods Sold.
 - c. If necessary, enter inventory adjustments.

2. PCA uses a perpetual inventory system. In a perpetual inventory system a merchandising business continuously updates inventory each time an item is purchased or sold.
3. Merchandise inventory includes all goods owned by the business and held for sale.
4. The average cost method is the default that PCA uses for inventory items sold. The formula used is: Average Cost x Quantity Sold = Cost of Goods Sold.

The FIFO method assumes that the items in the beginning inventory are sold first.

The LIFO method assumes that the goods received last are sold first.

5. Anna Peters, Invoice No. 106, 2 doorknobs, \$324.
Diane Carlton, Invoice No. 107, 2 rolls of vinyl flooring, \$320.
Paul Martinez, Invoice 108, two pairs of curtains, \$216.
6. Purchased four pairs of curtains from Ron Becker Fabrics at \$30 each:

Account ID	Account Description	Debit	Credit
12000	Merchandise Inventory	\$120.00	
20000/RBF08	Accounts Payable/Ron Becker Fabrics		\$120.00

Sold three pairs of curtains to Paul Martinez for \$100 each:

Account ID	Account Description	Debit	Credit
50500	Cost of Goods Sold-Wall	\$90.00	
11000/pm005	Accounts Receivable/Paul Martinez	324.00	
12000	Merchandise Inventory		\$ 90.00
40400	Sales-Wall		300.00
23100	Sales Tax Payable		24.00

7. Service Invoice, Ben Berman, Invoice No. 109, repair, \$75.60.

Solution to Exercise 13-2 (1)

Student Name Service Merchandise Cash Receipts Journal For the Period From Jan 1, 2005 to Jan 31, 2005					
Filter Criteria includes: Report order is by Check Date. Report is printed in Detail Format.					
Date	Account ID	Transaction Ref	Line Description	Debit Amnt	Credit Amnt
1/9/05	11000 10200	Invoice 101	Invoice: 101 Alan Currier	255.00	255.00
1/13/05	11000 10200	Invoice 102	Invoice: 102 Bob Bruno	450.00	450.00
1/16/05	40200 50000 12000 40400 50500 12000 10200	Cash	Two hardware sets Cost of sales Cost of sales Two tool kits Cost of sales Cost of sales Lee Louden	100.00 60.00 470.00	300.00 100.00 170.00 60.00
1/17/05	40400 50500 12000 10200	Cash	Two tool kits Cost of sales Cost of sales Kathy Williamson	60.00 170.00	170.00 60.00
1/29/05	11000 10200	Invoice 103	Invoice: 103 Reva Nichols	900.00	900.00
1/30/05	40400 50500 12000 40200 50000 12000 10200	Cash	Twenty tool kits Cost of sales Cost of sales Eighteen hardware sets Cost of sales Cost of sales Cash sales	600.00 900.00 4,400.00	1,700.00 600.00 2,700.00 900.00
				<u>4,400.00</u>	
				<u>8,365.00</u>	<u>8,365.00</u>

Solution to Exercise 13-2 (2)

Student Name Service Merchandise Purchase Journal For the Period From Jan 1, 2005 to Jan 31, 2005						Page: 1
Filter Criteria includes: Report order is by Date. Report is printed in Detail Format.						
Date	Account ID Account Description	Invoice/CM #	Line Description	Debit Amount	Credit Amount	
1/2/05	12000 Merchandise Inventory 20000 Accounts Payable	480CP	tools Carl Pierce Tools	300.00	300.00	
1/5/05	12000 Merchandise Inventory 20000 Accounts Payable	SJH52	copper hardware Sharon Jacobson Hardware	400.00	400.00	
1/6/05	12000 Merchandise Inventory 20000 Accounts Payable	VCM480CP	tools Carl Pierce Tools	60.00	60.00	
1/27/05	12000 Merchandise Inventory 20000 Accounts Payable	732CP	tools Carl Pierce Tools	240.00	240.00	
				1,000.00	1,000.00	

Solution to Exercise 13-2 (3)

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**Student Name Service Merchandise
Cost of Goods Sold Journal
For the Period From Jan 1, 2005 to Jan 31, 2005**

Filter Criteria includes: Report order is by Date. Report is printed in Detail Format and with Truncated Long Descriptions.

Date	GL Acct ID	Reference	Qty	Line Description	Debit Amount	Credit Amount
1/6/05	12000	101	4.00	Four tool kits		120.00
	50500		4.00	Four tool kits	120.00	
1/6/05	12000	102	3.00	Three hardware sets		150.00
	50000		3.00	Three hardware sets	150.00	
1/6/05	12000	103	6.00	Six hardware sets		300.00
	50000		6.00	Six hardware sets	300.00	
1/9/05	12000	CM101	-1.00	Returned one tool kit	30.00	
	50500		-1.00	Returned one tool kit		30.00
1/16/05	12000	Cash	2.00	Two hardware sets		100.00
	50000		2.00	Two hardware sets	100.00	
	12000		2.00	Two tool kits		60.00
	50500		2.00	Two tool kits	60.00	
1/17/05	12000	Cash	2.00	Two tool kits		60.00
	50500		2.00	Two tool kits	60.00	
1/30/05	12000	Cash	20.00	Twenty tool kits		600.00
	50500		20.00	Twenty tool kits	600.00	
	12000		18.00	Eighteen hardware sets		900.00
	50000		18.00	Eighteen hardware sets	900.00	
Total					2,320.00	2,320.00

Solution to Exercise 13-2 (4)

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**Student Name Service Merchandise
Inventory Adjustment Journal
For the Period From Jan 1, 2005 to Jan 31, 2005**

Filter Criteria includes: Report order is by Date. Report is printed in Detail Format and with Truncated Long Descriptions.

Date	GL Acct ID	Reference	Qty	Line Description	Debit Amount	Credit Amount
1/28/05	12000		-2.00	tools		60.00
	50500		-2.00	Two damaged tool kits	60.00	
Total					60.00	60.00

Solution to Exercise 13-2 (5)

Student Name Service Merchandise General Ledger Trial Balance As of Jan 31, 2005			
Filter Criteria includes: Report order is by ID. Report is printed in Detail Format.			
Account ID	Account Description	Debit Amt	Credit Amt
10200	Portland Bank	45,279.91	
10400	Downtown Savings & Loan	14,300.00	
12000	Merchandise Inventory	13,310.00	
13000	Supplies	1,000.00	
14000	Prepaid Insurance	2,400.00	
15000	Furniture and Fixtures	3,500.00	
15100	Computers & Equipment	5,500.00	
15500	Building	85,000.00	
20000	Accounts Payable		240.00
27000	Long-Term Notes Payable		10,000.00
27400	Mortgage Payable		60,000.00
39009	Student Name, Capital		96,450.00
39010	Student Name, Drawing	400.00	
40200	Sales-Hardware		4,350.00
40400	Sales-Tools		2,295.00
50000	Cost of Goods Sold-Hardw	1,450.00	
50500	Cost of Goods Sold-Tools	870.00	
59500	Purchase Discounts		12.80
70000	Maintenance Expense	120.00	
71000	Office Expense	139.82	
73500	Postage Expense	37.00	
76000	Telephone Expense	41.07	
	Total:	<u>173,347.80</u>	<u>173,347.80</u>