Accounting 2303 Week 9

Chapter 6- Inventory

Hello everyone! This week the resource will be walking through ways to account for inventory. Additionally, I will be providing Accounting group tutoring sessions from 6:30-7:30pm on Tuesdays over Microsoft Teams each week. If you would like to attend those sessions or want to schedule a 1-on-1 appointment with one of our fantastic accounting tutors, please visit www.baylor.edu/tutoring to make an appointment!

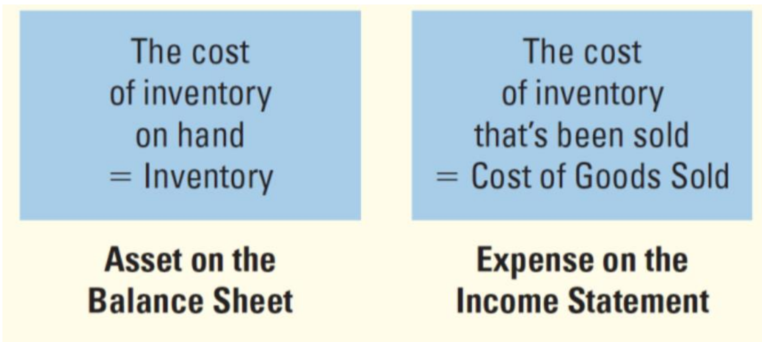
-Jerry

How do we account for Inventory?

Before inventory has been sold, we recognize the cost of these items as inventory (asset account) on the balance sheet.

After inventory is sold, it is viewed as an expense and is ushered under the Cost of Goods Sold account.

The following graphic illustrates this:



(Pearson Education 2015)

We will use the following formulas to calculate the balance of inventory accounts and cost of goods sold accounts:

Inventory:

$$\boxed{\begin{array}{c}\text{Inventory}\\ \text{(balance sheet)}\end{array} = \begin{array}{c}\text{Number of units of}\\ \text{inventory } \textit{on hand}\end{array} \times \begin{array}{c}\text{Cost per unit}\\ \text{of inventory}\end{array}}$$

(Pearson Education 2015)

Cogs:

$$\boxed{\begin{array}{c}\text{Cost of goods sold}\\ \text{(income statement)}\end{array} = \begin{array}{c}\text{Number of units of}\\ \text{inventory } \textit{sold}\end{array} \times \begin{array}{c}\text{Cost per unit}\\ \text{of inventory}\end{array}}$$

(Pearson Education 2015)

What journal entries do we use to account for inventory?

Purchase of Inventory:

DR: Inventory

CR: Accounts Payable/Cash

Sale of Inventory:

Sale Portion

DR: Accounts Receivable/Cash

CR: Sales Revenue

Expense Portion

DR: COGS (Expense)

CR: Inventory

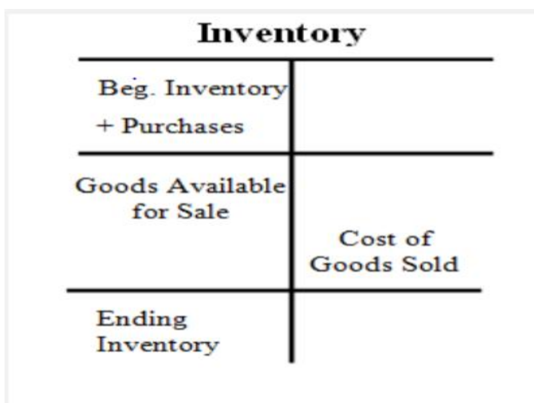
How do we value purchases and COGS using T-Accounts or Formulas?

The following image gives the formula for purchases:

Purchase price
+ Freight in
+ Insurance while in transit
+ Fees/taxes to get inventory ready to sell
- Less returns, allowances, and discounts
= Total Cost of Inventory

(Pearson Education 2015)

The following image gives the t-account formula for COGS:



(Pearson Education 2015)

What are the inventory costing methods and how do we use them?

There are four major inventory costing methods in accounting: specific unit, average cost, LIFO, and FIFO. These methods are used to calculate ending inventory and COGS for a given period.

Specific unit- inventory and COGS are valued using the costs of s particular unit. Typically used for companies with unique products

Average cost- the average price of inventory over the period is used to calculate ending inventory and COGS. This method uses the following formula to calculate the average costs:

Average Cost= Cost of Goods available (see example for how to calculate this)/Number of goods

FIFO (First in First out)- This method applies the unit costs of inventory at the beginning of the accounting period to calculate ending inventory and COGS first (then we move into the later costs)

LIFO (Last in First Out)- This method calculates COGS and ending inventory using the unit costs during the later part of the period first.

Note: Under each method increasing or decreasing costs impact COGS and Ending Inventory based on the method used. The following charts illustrate this:

PANEL A—When Inventory Costs Are Increasing

	Cost of Goods Sold (COGS)	Ending Inventory (EI)
FIFO	FIFO COGS is lowest because it's based on the oldest costs, which are low. Gross profit is, therefore, the highest.	FIFO EI is highest because it's based on the most recent costs, which are high.
LIFO	LIFO COGS is highest because it's based on the most recent costs, which are high. Gross profit is, therefore, the lowest.	LIFO EI is lowest because it's based on the oldest costs, which are low.

(Source: Pearson Education 2015)

PANEL B—When Inventory Costs Are Decreasing

	Cost of Goods Sold (COGS)	Ending Inventory (EI)
FIFO	FIFO COGS is highest because it's based on the oldest costs, which are high. Gross profit is, therefore, the lowest.	FIFO EI is lowest because it's based on the most recent costs, which are low.
LIFO	LIFO COGS is lowest because it's based on the most recent costs, which are low. Gross profit is, therefore, the highest.	LIFO EI is highest because it's based on the oldest costs, which are high.

Example:

Acme Paper Company wants to know the effect of different inventory valuation methods on its financial statements. Given below are data concerning its inventory and purchases for 20x1.

Jan.	1	Beginning inventory	2,000	$10.00	$20,000
April	4	Purchase	1,500	10.30	15,450
July	23	Purchase	3,400	10.75	36,550
June	9	Sale	(1,000)		
Oct.	31	Sale	(2,400)		
			3,500		

FIFO Method:

COGS: (1000*$10)+(1000*$10)+(1400*$10.30)= $34,420

Ending Inventory: (100*$10.30)+(3400*$10.75)= $37,580

LIFO Method

COGS: (1000*$10.75)+(2400*$10.75)= $36,550

Ending Inventory: (2000*$10)+(500*$10.30)+(1000*$10.75)= $35900

AVG Method:

AVG Cost: ((2000*$10)+(1500*$10.30)+(3400*$10.75))/6900= 10.43

COGS: 3400*$10.43= $35,462

Ending Inventory: 3500*$10.43= $36505

The following videos provide additional examples for each method:

FIFO: https://www.youtube.com/watch?v=Wa83L8TvoaM&feature=youtu.be

LIFO: https://www.youtube.com/watch?v=zLAvpS6o25E&feature=youtu.be

AVG Cost: https://www.youtube.com/watch?v=qAWVVw-dC5A&feature=youtu.be

Works Cited:

Edspira.com

Financial Accounting by Harrison, Horngren, and Thomas, 12th Edition, Prentice Hall via Pearson Education 2015