Chapter 8 Managing Payroll and Inventory

Spreadsheet Application

Determining Cost of Inventory and Analyzing Inventory Turnover

Objective: Determine inventory costs under FIFO and LIFO and calculate inventory turnover.

Practice Situation

The Kite Attic opened for business on January 1. The store purchased the following items for resale during the first six months.

| Inventory Purchases | | | | | | |
|---------------------|---------------------------------|-------|---------|-------|--|--|
| Date | Description | Units | Cost | Total | | |
| 1/1 | Single-Line Box kite | 12 | \$12.00 | | | |
| 1/1 | Quad-Line Revolution kite | 12 | \$61.00 | | | |
| 1/1 | Single-Line Mini kite | 36 | \$2.00 | | | |
| 3/1 | Thunderfoil Power kite | 12 | \$52.00 | | | |
| 3/1 | Single-Line Chinese Dragon kite | 6 | \$33.00 | | | |
| 3/11 | Single-Line Box kite | 24 | \$12.00 | | | |
| 3/1 | Quad-Line Revolution kite | 12 | \$62.00 | | | |
| | Total | | | | | |

At the end of six months, The Kite Attic inventory contains 13 Quad-Line Revolution kites, 7 Single-Line Box kites, 5 Thunderfoil Power kites, and 3 Single-Line Chinese Dragon kites. Calculate the following inventory measurements:

- Total cost of The Kite Attic's inventory purchases
- Total cost of the ending inventory under the first-in, first-out method at 6/30
- Total cost of the ending inventory under the last-in, first-out method at 6/30
- Cost of goods sold for 1/1 through 6/30 using the first-in, first-out method
- Inventory Turnover (use an average inventory of \$1,300 for the period) using the first-in, first-out method

Name ______ Class _____

| Cost of Ending Inventory using FIFO (6/30) | | | |
|--|-------|------|-------|
| Item | Units | Cost | Total |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Total | | | |
| Cost of Ending Inventory using LIFO (6/30) | | | |
| Item | Units | Cost | Total |
| | | | |
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| | | | L |
| | | | |
| Total | | | |

Chapter 8

| Summary Information | | | | |
|---------------------|---|--|--|--|
| | Total Cost of Inventory Purchases | | | |
| | Less Total Cost of Ending Inventory Using FIFO | | | |
| | Cost of Goods Sold | | | |
| | Inventory Turnover | | | |

Spreadsheet Directions

- 1. Start your spreadsheet software program and open problem SA21.xls.
- **2.** Insert the formulas to compute the total cost of inventory purchases. *Note: Format all dollar amounts to Currency, decimal places* 2.
- **3.** Compute the cost of inventory using FIFO by inputting the names, costs, and quantities of the items remaining in inventory at 6/30. Insert formulas to compute the total cost for each product and the total cost of inventory.

| Name | Date | Class |
|------|------|-------|
|------|------|-------|

- **4.** Compute the cost of inventory using LIFO by inputting the names, costs, and quantities of the items remaining in inventory at 6/30. Insert formulas to compute the total cost for each product and the total cost of inventory.
- **5.** Complete the summary information by subtracting the cost of ending inventory using the FIFO method from the total cost of inventory purchases to compute the cost of goods sold.
- 6. Insert the formula to compute the inventory turnover rate. *Note: Format the amount to Number, Decimal places,* 2.
- 7. Save your work to a new file labeled **SA21*****.xls. (Replace *** with your initials.)
- **8.** Print out a copy of your work if your teacher has instructed you to do so.

Interpreting Results

- 1. What is the total cost of ending inventory using the FIFO costing method?
- 2. What is the total cost of ending inventory using the LIFO costing method?
- **3.** What is the total cost of goods sold for the period 1/1 through 6/30 using the FIFO costing method?

Drawing Conclusions

- **1.** What is The Kite Attic's inventory turnover rate? Explain the significance of this numeric measurement.
- 2. The Kite Attic uses a periodic inventory system. What processes would the store need to implement to convert to a perpetual inventory system? Explain.