ACCT 1101 Introduction to Financial Accounting

Chapter 1: Accounting in Business

- **Assets (자산) = Liabilities (부채) + Equity (자기 자본)**
  - **Assets (자산):**
    - Cash, Notes Receivable, Land, Buildings, Equipment, Store Supplies. Vehicles, Accounts Receivable, etc.
  - **Liabilities (부채):**
    - Accounts payable, Notes Payable, Wages Payable, Taxes Payable, etc.
  - **Equity (자기 자본):**
    - Owner's capital (+)
    - Owner's withdrawals (-)
    - Revenues - Net Profit (+)
    - Expenses (-)
- **Income Statement**
  - Describes a company's revenues & expenses along with the resulting net profit/loss over a period of time
  - Revenue - Expenses = Net Profit
- **Statement of Changes in Equity**
  - Reports information about how equity changes over the reporting period
  - Owner's Original Capital + Investment* + Net Profit/Loss - Owner's Withdrawals* = Owner's current Capital
- **Statement of Financial Position**
  - Assets = Liabilities + Equity (must be balanced)
    - Equity: derived from Statement of Changes in Equity
- **Statement of Cash Flows**
  - Describes a company's cash flows for operating, investing and financing activities
  - End outcome = Cash balance (for further periods)
- **Return on Assets (RoA)**
  - Return on Assets = Net profit / Average total assets
    - Average total assets = (beginning total asset + ending total asset) / 2
  - Measures your ability to generate profit out of your assets

Chapter 2: Analyzing and Recording Transactions

- General Ledger: Record containing all accounts used by the company
- T-account: Represents a ledger account & is a tool used to understand the effects of one or more transactions
- **Debits & Credits**
  - **Debit**
    - **Increase of Asset (자산의 증가)**
    - **Decrease of Liabilities (부채의 감소)**
    - **Decrease of Equity (자본의 감소)**
    - **Increase of Expense (비용의 증가)**

        - Ex. Stock, Lands, Cash, Accounts Receivable, Investment, Supplies, Prepaids, Buildings, Owner's Withdrawals, Expenses (Depreciation, Salaries, Rent…)
    - **Credit**
        - **Decrease of Asset (자산의 감소)**
        - **Increase of Liabilities (부채의 증가)**
        - **Increase of Equity (자본의 증가)**
        - **Increase in Profit (수익의 증가)**
        - Ex. Cash used, Accumulated Depreciation, Unearned Revenue, Earned Revenue, Accounts Payable, Salaries Payable, Owner's Capital, Cash Payable
- **Balance Column Sheet**

Date	**Description**	**PR**	**Debit**	**Credit**	**Balance**
Dec. 1	Initial Investment	G1	30,000		30,000
2	Purchased Supplies	G1		2,500	27,500
3	Purchased Equipment	G1		26,000	1,500
10	Collection from Customer	G1	4,200		5,700

1. Identify the debit account in the Ledger (Ex. Cash)
2. Enter the date (Ex. Dec. 1)
3. Enter the amount & Description (Ex. Initial Investment, 30,000)
4. Enter the Journal Reference (Ex. G1)
5. Compute the balance (Debit - Credit = Balance, Debit + Debit = balance)
6. Enter the Ledger reference (Ex. Account No. 101)

- **Double Entry**
    - **Example:**
        - **Cash** **30,000**
          Owner's Capital **30,000**

    = Posting:

Cash			**Owner's Capital**	
30,000				**30,000**

- **Trial Balance**
    1. List each account title & its amount (from ledger)
    2. Compute the total of debit balances & the total of credit balances
    3. Verify if debit balance = credit balance
- **T-account → Journal Entry → Ledger → Trial Balance**

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Chapter 3: Adjusting Accounts and Preparing Financial Statements

- **Accrual Basis vs. Cash Basis**
    - **Accrual Basis (발생주의)**
        - Revenues are recognized when earned
        - Expenses are recognized when incurred
    - **Cash Basis (현금주의)**
        - Revenues are recognized when cash is received
        - Expenses are recorded when cash is paid
        - NON-GAAP (Generally Accepted Cash Principles) = NOT IN USE
    - **Example: Prepaid Insurance of $2,400 for 12 months**
        - **If Cash Basis:** the entire $2,400 recognized as an expense in the month paid
        - **If Accrued Basis:** $2,400 is divided by 12 months (2400/12 = 200) and $200 is recognized each month until it reaches the last month
- **Revenue Recognition Principle**
    - Revenue is recognized when earned.
    - 매출은 배달이 일어나야 함; 모든 일들이 다 끝났을 시에 매출로 인식된다.
        - 그 전에 받았을 시: 미수수익으로 처리 (unearned revenue; liability)
- **Matching Principle <대응의 법칙>**
    - 해당 매출을 올리기 위해 발생된 비용은 동시에 인식해야 한다는 원칙
    - 매출을 올리기 위한 비용이 해당 매출과 직접 대응하지 않는다면, 해당 비용은 미래의 대응이 될 것.
- **Adjusting Accounts**
    - Recorded to bring an asset or liability account balance to its proper account
    - Made at the end of the period to allocate revenue & expenses between current and future period
    - Paid/received cash **before** expense/revenue recognized (의무를 다하기 전)
        - Prepaid expenses (선급 비용)
            - = Asset
            - 'For the future benefits'
        - Unearned revenues (선수수익)
            - = Liabilities (before fulfilling the obligation)
    - Paid/received cash **after** expense/revenue recognized (의무를 다한 후)
        - Accrued expenses (발생된 비용)
        - Accrued revenues (발생된 수익)
- **Depreciation**
    - Process of allocating the cost of a plant asset over its useful life
    - Straight Line Depreciation Expense = asset cost - residual value (the lowest value the asset can get) / useful life
    - Accumulated Depreciation expense → Decrease in asset → Credit
    - Despite depreciation, the targeted asset (ex. equipment) will always be recorded with its original cost)
        - Allows a clearer understanding of the condition of the product

- **Net Profit Margin**
  - Measures the company's net profit to its net sales
  - Profit Margin = Net Profit / Net Sales
  - The higher the NPM, the better the company is making its 'pure' profit out of its sales revenue.

Chapter 4: Completing the Accounting Cycle

- **Accounting Cycle**
  1. **Analyze transactions -** Analyze transactions to prepare for journalizing.
  2. **Journalize -** Record accounts, including debits and credits, in a journal.
  3. **Post -** Transfer debits and credits from the journal to the ledger.
  4. **Prepare unadjusted trial balance -** Summarize unadjusted ledger accounts and amounts.
  5. **Adjust -** Record adjustments to bring account balances up to date; journalize and post adjustments.
  6. **Prepare adjusted trial balance -** Summarize adjusted ledger accounts and amounts.
  7. **Prepare statements -** Use adjusted trial balance to prepare financial statements.
  8. **Close -** Journalize and post entries to close temporary accounts.
  9. **Prepare post-closing trial balance -** Test clerical accuracy of the closing procedures.
  10. **Reverse (optional step) -** Reverse certain adjustments in the next period
- **Work Sheet**
  - Benefits:
    - Aids the preparation of financial statements.
    - Reduces the possibility of errors.
    - Links accounts and adjustments to their impacts in financial statements.
    - Assists in planning and organizing an audit of financial statements.
    - Helps in preparing interim financial statements.
    - Shows the effects of proposed transactions.
  - Example:

			Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Statement of Financial Position and Statement of Changes in Equity	
4	No.	Account	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
5	101	Cash	4,350				4,350				4,350	
6	106	Accounts receivable			(f) 1,800		1,800				1,800	
7	126	Supplies	9,720			(b) 1,050	8,670				8,670	
8	128	Prepaid insurance	2,400			(a) 100	2,300				2,300	
9	167	Equipment	26,000				26,000				26,000	
10	209	Accumulated depreciation - Equip.				(c) 375		375				375
11	201	Accounts payable		6,200				6,200				6,200
12	209	Salaries payable				(e) 210		210				210
13	236	Unearned consulting revenue		3,000	(d) 250			2,750				2,750
14	301	C. Taylor, Capital		30,000				30,000				30,000
15	302	C. Taylor, Withdrawals	200				200				200	
16	403	Consulting revenue		5,800		(d) 250						
17						(f) 1,800		7,850		7,850		
18	406	Rental revenue		300				300		300		
19	612	Depreciation expense - Equip.			(c) 375		375		375			
20	622	Salaries expense	1,400		(e) 210		1,610		1,610			
21	637	Insurance expense			(a) 100		100		100			
22	640	Rent expense	1,000				1,000		1,000			
23	652	Supplies expense			(b) 1,050		1,050		1,050			
24	690	Utilities expense	230				230		230			
25		Totals	45,300	45,300	3,785	3,785	47,685	47,685	4,365	8,150	43,320	39,535
26		**Net profit**							3,785			3,785
27									8,150	8,150	43,320	43,320

- **Recording Closing Entries**
    - Resets revenue, expense, and withdrawal account balances to zero at the end of the period.
    - Helps to summarize a period's revenues and expenses in the Income Summary account.
    - **Four steps:**
        - Close Credit Balances in Revenue Accounts to Income Summary
            - Add revenues (Debit) = Income Summary (Credit)
        - Close Debit Balances in Expense Accounts to Income Summary
            - Add expenses (Credit) = Expense Accounts (Debit)
            - Income Summary (Credit) - Expenses Account (Debit) = Net Profit (Credit)
        - Close Income Summary account to Owner's Capital
            - Owner's Previous Capital (Credit) + Net Profit (Credit) = Owner's revised Capital (Credit)
        - Close Withdrawals to Owner's Capital
            - Owner's revised Capital (Credit) - Owner's Withdrawals (Debit) = Capital Balance
    - **Post-Closing Trial Balance**
        - Should only show permanent accounts (assets, liabilities, and the capital account)
        - All the revenues, expenses, and withdrawals have been reduced to zero balances
        - Debit and Credit must be balanced
- **Temporary and Permanent Accounts**
    - **Temporary Accounts** (closed at the end of the period)
        - Expenses, Revenues, Withdrawals, Income Summary
        - The closing process applies only to temporary accounts
    - **Permanent Accounts** (carried forward from one accounting period to the next)
        - Owner's capital, Assets, Liabilities
- **Statement of Financial Position**
    - **Assets**
        - Current assets (expected to be converted to cash within one year)
            - Ex. Cash, short-term investments, Accounts Receivable, Inventory, Prepaid Expenses
        - Noncurrent assets (more than one year)
            - Long-term financial assets
            - Property, plant, and equipment
            - Intangible assets
                - Ex. patents, copyrights, trademarks, and goodwill
    - **Liabilities**
        - Current liabilities

            - Ex. Accounts payable, Wages payable, Notes payable, Current portion of long-term liabilities
        - Noncurrent liabilities
            - Ex. long-term notes payable (net of current amounts due), mortgages payable, bonds payable
    - **Equity**
        - Owner's Capital
- **Current Ratio**
    - Current Ratio = Current Assets / Current Liabilities
    - Helps assess the company's ability to pay its debts in the near future (when they fall due)

Chapter 5: Merchandising Operations

- **Merchandiser**
    - Difference from service organization → They sell inventory
        - Sell products to earn revenue
        - Net sales - Cost of goods sold - Expenses = Net Profit
    - Can sell inventory in the wholesale market or to consumers in retail market
    - **Wholesaler**: an intermediary that buys products from manufacturers or other wholesalers and sell them to retailers or other wholesalers
        - Example: Costco
    - **Retailer**: an intermediary that buys products from manufacturers of wholesalers and sells them to consumers
        - Example: Park n Shop
    - **Operating Cycle for a Merchandiser**
        1. Purchase of inventory from manufacturer by cash
        2. Merchandise inventory by credit sales (Accounts receivable)
        3. Cash collection from customers by the designed period of time
    - **Inventory System**
        - **Flow of Costs**
            - Beginning inventory + Net purchases = Merchandise available for sale (total inventory that you can sell to the customer during the period)
            - Merchandise available sale → Ending inventory (remainder) + Cost of goods sold (inventory sold)
        - **Perpetual Systems**
            - system that continually updates accounting records for every merchandising transaction
        - **Periodic Systems**
            - System that updates the accounting records for merchandise transactions only at the end of the accounting period
- **Merchandise Purchases**

- **When inventory is purchased**: **debit the asset Merchandise Inventory** (for the cost of the inventory purchased) + **credit Cash**
- **Trade Discounts**
  - Used by manufacturers and wholesalers to offer better prices for greater quantities purchased.
  - Offered based on quantities purchased (Ex. trade discount of 30% when a customer orders 1,000 units or more)
  - not recorded in the accounting records
- **Purchase Discounts**
  - A deduction from the invoice price granted to induce early payment of the amount due.
  - provided to customers as an incentive for them to pay early (for faster operating cycle)
  - **Credit period**: normal period of time the company allows for customers to extend their account receivable (typically 30 or 60 days)
  - **Discount period**: much shorter period of time (typically 10 or 15 days)
    - If payment is received during the discount period → discount
    - If payment is received after discount period → full payment
    - **Written term: 2/10, n/30**
      - **2: discount percent**
      - **10: Number of days discount is available**
      - **N: Net (all)**
      - **30: Credit Period (due period)**
    - **Example:**
      - **On November 12, Z-Mart paid the amount due on the purchase of November 2.**
        - Discount recorded as a reduction in the cost of the Merchandise Inventory
        - In payment entry: the current balance merchandise inventory becomes $1,176 (after deduction of discount)

Nov. 12	Accounts Payable	1,200	
	Merchandise Inventory		24
	Cash		1,176
	Paid for the $1,200 purchase of Nov. 2 less the discount of $24 (2% × $1,200).		

- **Purchase Returns and Allowances**
  - **Purchase Return**
    - Merchandise returned by the purchaser to the supplier.
  - **Purchase Allowance**
    - A reduction in the cost of defective or unacceptable merchandise received by a purchaser from a supplier.
      - May be slight defect in merchandise or late shipment
      - Customer keeps the merchandise & receive price reduction

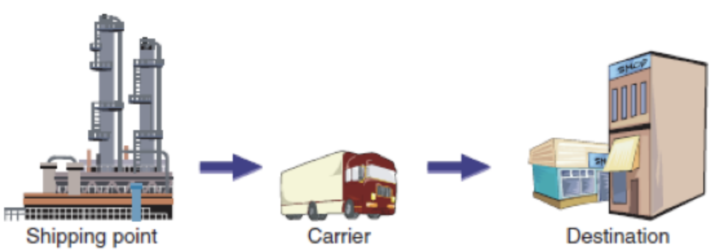
- **Example:** On November 15, Z-Mart (buyer) issues a $300 debit memorandum for an allowance from Trex for defective merchandise.

Nov. 15	Accounts Payable	300	
	Merchandise Inventory		300
	Allowance for defective merchandise.		

- **Example:** Z-Mart purchases $1,000 of merchandise on June 1 with terms 2/10, n/60. Two days later, Z-Mart returns $100 of goods before paying the invoice. When Z-Mart later pays on June 11, it takes the 2% discount only on the $900 remaining balance.

June 1	Merchandise Inventory	1,000	
	Accounts Payable		1,000
	Purchased merchandise, invoice dated June 1, terms 2/10, n/60.		
June 3	Accounts Payable	100	
	Merchandise Inventory		100
	Returned merchandise to seller.		
June 11	Accounts Payable	900	
	Merchandise Inventory		18
	Cash		882
	Paid for $900 merchandise ($1,000 − $100) less $18 discount (2% × $900).		

- **Transportation Costs and Ownership Transfer**



	Ownership Transfers when Goods Passed to	Transportation Costs Paid by
FOB shipping point	Carrier	Buyer
FOB destination	Buyer	Seller

  - FOB: "Free On Board"
  - **When shipping terms are FOB shipping point:**
    - ownership transfers from the seller to the buyer when the seller provides the goods to the carrier
    - the buyer will pay the transportation cost
      - This transportation cost will be added to the merchandise inventory account
  - **When shipping terms are FOB destination:**
    - ownership transfers from the seller to the buyer when the buyer receives the goods
    - the seller will pay the transportation cost

- **Example**: Z-Mart purchased merchandise in terms of FOB shipping point. The transportation charge is $75.

Nov. 24	Merchandise Inventory	75	
	Cash		75
	Paid freight costs on purchased merchandise.		

- any necessary transportation costs of a buyer (often called transportation-in or freight-in) be included as part of the cost of purchased merchandise

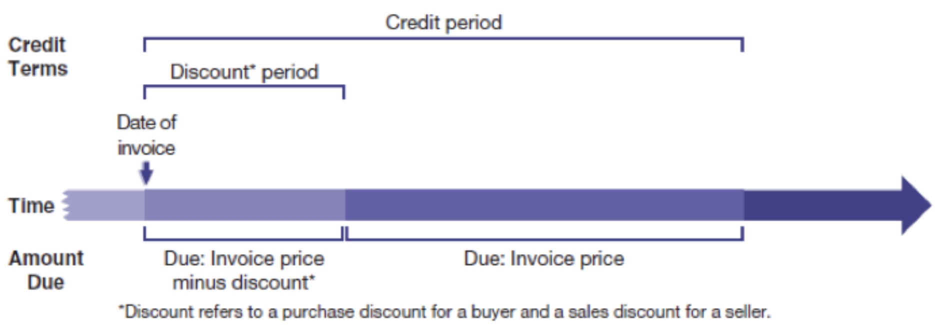
Z-MART Itemized Costs of Merchandise Purchases For Year Ended December 31, 2015	
Invoice cost of merchandise purchases	$235,800
Less: Purchase discounts received	(4,200)
Purchase returns and allowances	(1,500)
Add: Costs of transportation-in	2,300
Total cost of merchandise purchases	$232,400

- **Sales of Merchandise**
  - Each sales transaction for a seller of merchandise involves two parts:
    - Revenue received in the form of an asset from a customer; and
    - Recognition of the cost of merchandise sold to a customer.
  - **Example**: On November 3, Z-Mart sold $2,400 of merchandise on credit. The merchandise has a cost basis to Z-Mart of $1,600.

Nov. 3	Accounts Receivable	2,400	
	Sales		2,400
	Sold merchandise on credit.		

Nov. 3	Cost of Goods Sold	1,600	
	Merchandise Inventory		1,600
	To record the cost of Nov. 3 sale.		

- **Sales Discounts**
  - can benefit a seller by decreasing the delay in receiving cash and reducing future collection efforts.
  - At the time of a credit sale, a seller does not know whether a customer will pay within the discount period and take advantage of a discount.
    - This means the seller usually does not record a sales discount until a customer actually pays within the discount period.



- **Example:** Z-Mart completes a $1,000 credit sale with terms of 2/10, n/60.

Nov. 12	Accounts Receivable.	1,000	
	Sales.		1,000
	Sold merchandise under terms of 2/10, n/60.		

  - **Case 1**: paid in full within the 60-day period

Jan. 11	Cash	1,000	
	Accounts Receivable		1,000
	Received payment for Nov. 12 sale.		

  - **Case 2**: paid in full within the 10-day discount period

Nov. 22	Cash	980	
	Sales Discounts	20	
	Accounts Receivable		1,000
	Received payment for Nov. 12 sale less discount.		

- **Sales Returns and Allowances**
  - Sales returns and allowances usually involve dissatisfied customers and the possibility of lost future sales.
  - **Sales return**: refer to merchandise that customers return to the seller after a sale
  - **Sales allowances**: refer to reductions in the selling price of merchandise sold to customers
    - This can occur with damaged or defective merchandise that a customer is willing to purchase with a decrease in the selling price
  - **Example**: Recall Z-Mart's sale for $2,400 that had a cost of $1,600. Assume the customer returns part of the merchandise. The returned items sell for $800 and cost $600.

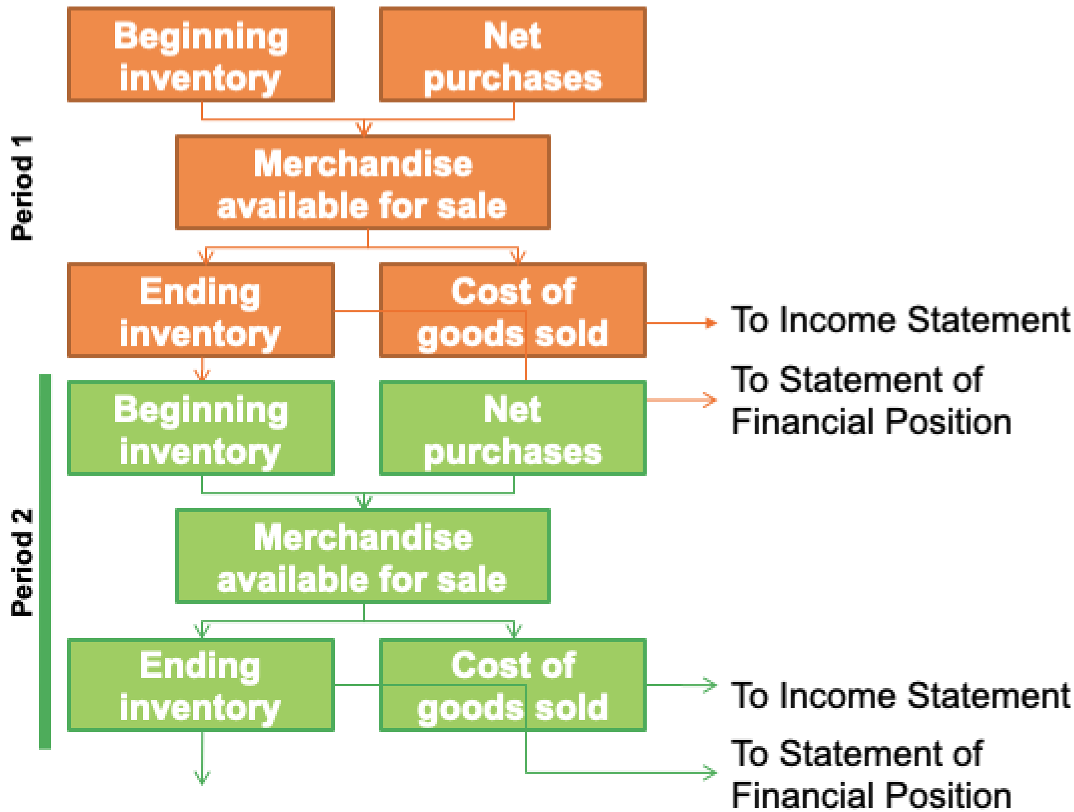
Nov. 6	Sales Returns and Allowances	800	
	Accounts Receivable		800
	Customer returns merchandise of Nov. 3 sale.		

Nov. 6	Merchandise Inventory	600	
	Cost of Goods Sold		600
	Returned goods added to inventory.		

  - **Example**: Assume that $800 of the merchandise Z-Mart sold on November 3 is defective but the buyer decides to keep it because Z-Mart offers a $100 price reduction.

Nov. 6	Sales Returns and Allowances	100	
	Accounts Receivable		100
	To record sales allowance on Nov. 3 sale.		

- **Merchandising Cost Flow in the Accounting Cycle**



- **Adjusting Entries for Merchandisers**
    - a merchandiser using a perpetual inventory system is usually required to make another adjustment to update the Merchandise Inventory account to reflect any loss of merchandise, including theft and deterioration
    - Shrinkage: the term used to refer to the loss of inventory and it is computed by comparing a physical count of inventory with recorded amounts
    - **Example**: Z-Mart's Merchandise Inventory account at the end of year 2015 has a balance of $21,250, but a physical count reveals that only $21,000 of inventory exists.

Dec. 31	Cost of Goods Sold	250	
	Merchandise Inventory.		250
	To adjust for $250 shrinkage revealed by a physical count of inventory.		

        - Shrinkage → Debit to Costs of Goods Sold & Credit to Merchandise Inventory

- **Closing Entries for Merchandisers**

Step 1: Close Credit Balances in Temporary Accounts to Income Summary.

Dec. 31	Sales	321,000	
	Income Summary		321,000
	To close credit balances in temporary accounts.		

Step 2: Close Debit Balances in Temporary Accounts to Income Summary.

Dec. 31	Income Summary	308,100	
	Sales Discounts		4,300
	Sales Returns and Allowances		2,000
	Cost of Goods Sold		230,400
	Depreciation Expense		3,700
	Salaries Expense		43,800
	Insurance Expense		600
	Rent Expense		9,000
	Supplies Expense		3,000
	Advertising Expense		11,300
	To close debit balances in temporary accounts.		

Step 3: Close Income Summary to Owner's Capital.

The third closing entry is identical for a merchandising company and a service company. The $12,900 amount is net profit reported on the income statement.

Dec. 31	Income Summary	12,900	
	K. Marty, Capital		12,900
	To close the Income Summary account.		

Step 4: Close Withdrawals Account to Owner's Capital.

The fourth closing entry is identical for a merchandising company and a service company. It closes the Withdrawals account and adjusts the Owner's Capital account to the amount shown on the statement of financial position.

Dec. 31	K. Marty, Capital	4,000	
	K. Marty, Withdrawals		4,000
	To close the Withdrawals account.		

  - Addition of Sales Discounts, Sales Returns and Allowances and Cost of Goods Sold when closing Debit Balances in Temporary accounts to Income Summary

- **Income Statement**

Z-MART
Income Statement
For Year Ended December 31, 2015

Sales		$321,000
Sales discounts	($ 4,300)	
Sales returns and allowances	(2,000)	(6,300)
Net sales		314,700
Cost of goods sold		(230,400)
Gross profit		**84,300**
Expenses		
Depreciation expense	(3,700)	
Salaries expense	(43,800)	
Insurance expense	(600)	
Rent expense	(9,000)	
Supplies expense	(3,000)	
Advertising expense	(11,300)	(71,400)
Profit before tax		**$ 12,900**

  - Sales - Sales discount = Net Sales
  - Net Sales - Cost of good sold = Gross Profit
  - Gross Profit - Expenses = Profit before tax

- **Statement of Financial Position**
    - Addition of Merchandise inventory in Current Assets

Z-MART Statements of Financial Position (Partial) December 31, 2015	
Current assets	
Cash	$ 8,200
Accounts receivable	11,200
Merchandise inventory	**21,000**
Office supplies	550
Store supplies	250
Prepaid expenses	300
Total current assets	$ 41,500

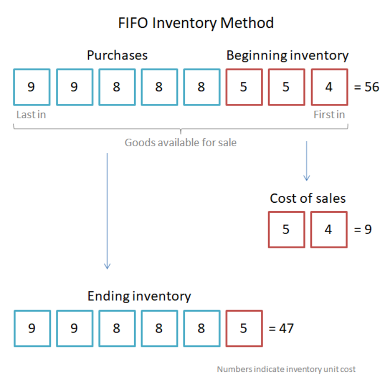
- **Acid-Test Ratio**
    - a common ratio that is used to determine the liquidity of a company
    - The ratio determines if the company has enough liquid assets to pay current liabilities
    - **Acid Test Ratio = Quick Assets / Current Liabilities**
        - **Quick Assets = Cash + Short-Term Investments + Current Receivables**
    - A common rule of thumb is the acid-test ratio **should have a value of at least 1.0** to conclude a company is unlikely to face liquidity problems in the near future.
- **Gross Profit Margin Ratio**
    - The ratio that calculates the percentage of dollar sales available to cover expenses and provide a profit
    - **Gross Profit Margin = Gross Profit / Net Sales**
        - **Gross Profit = Net Sales - Cost of Goods Sold**
    - The higher the ratio is, the better.

Chapter 6: Inventories and Cost of Sales

- **Determining Inventory Items**
    - Merchandise inventory includes all good that a company owns and hold for sale, regardless of where the goods are located when inventory is counted
        - **Items requiring special attention include:**
            - Goods in Transit
                - FOB Shipping Point
                    - Buyer has the ownership & responsible for transportation fees
                    - Buyer's inventory should include the goods in transit
                - FOB Destination Point
                    - Seller has the ownership & responsible for transportation fees

                - Seller's inventory should include the goods in transit
        - Goods on Consignment
            - Merchandise is included in the inventory of the consignor, the owner of the inventory (위탁자)
            - Consignees (수탁인) to sell goods on behalf of consignor
                - Even though the goods are located in the stock of consignee, the consignor still has the ownership of the goods (& to further record it in inventory)
                    - the consignee doesn't take ownership on the goods
        - Goods Damaged or Obsolete
            - Not counted in inventory if they cannot be sold
            - Cost should be reduced to net <u>realizable value</u> if they can be sold
                - Net realizable value: the estimated selling price in the ordinary course of business less the estimated costs of completion & the estimated costs necessary to make the sale
                    - Difference between how much you can make out of the inventory and the cost you need to incur towards making the sales
                    - Can include the cost involving in the production process (completion), transportation (necessary to make sale)
- **Determining Inventory Costs**
    - Include all expenditures necessary to bring an item to a salable condition and location
    - Minus Discounts and allowances
    - Plus Import Duties, Freight, Storage, Insurance
- **Internal Controls and Taking a Physical Count**
    - Most companies take a physical count of inventory at least once each year
    - When the physical count does not match the Merchandise Inventory account an adjustment must be made
    - When the physical count is lower than the Merchandise inventory:
        - Debit cost of goods sold & credit merchandise inventory
            - Leads to decrease in asset
        - To have the good control of the value of inventory, the merchandiser needs a good internal controls
            - Internal controls: set of system which is used to achieve the accuracy of financial recording and operational efficiency
            - Good internal controls over count include:
                - Pre-numbered inventory tickets
                - Counters should have no inventory responsibility

            - Counts confirm existence, amount and quality of inventory item, not just about the numbers
            - Second count is taken
            - Manager confirms all items counted (to avoid potential collusion problem between counter and manager)
- Inventory Costing under a Perpetual System
    - Inventory affects Statement of Financial Position and Income Statement
        - Statement of Financial Position → the ending value is an important component in a current assets
        - Income Statement → Sold inventory will be recorded as cost of goods sold
- Inventory Cost Flow Assumptions
    - Management decisions in accounting for inventory involve the following:
        - Items included in inventory and their costs
        - Costing method (specific identification, FIFO, or weighted average cost)
            - **Specific Identification**: when each item can be identified with a specific purchase
                - Used for high-priced items (airplane, jewelry)
            - **FIFO (First-In, First-Out)**: sell the merchandise inventory that was bought at earlier times first (costs flow in the order incurred)



            - **Weight Average Cost**: Assumes costs flow at an average of the costs available
        - Inventory system (perpetual or periodic)
        - Use of market values or other estimate

- **Inventory Costing Illustration**
  - Here is information about the mountain bike inventory of Trekking for the month of August:

Date	Activity	Units Acquired at Cost	Units Sold at Retail	Unit Inventory
Aug. 1	Beginning inventory	10 units @ $ 91 = $ 910		10 units
Aug. 3	Purchases	15 units @ $106 = $ 1,590		25 units
Aug. 14	Sales		20 units @ $130	5 units
Aug. 17	Purchases	20 units @ $115 = $ 2,300		25 units
Aug. 28	Purchases	10 units @ $119 = $ 1,190		35 units
Aug. 31	Sales		23 units @ $150	12 units
	Totals	55 units $5,990	43 units	

  - **Specific Identification**

Date	"goods in" Goods Purchased	"goods out" Cost of Goods Sold	"what's left" Inventory Balance
Aug. 1	Beginning balance		10 @ $ 91 = $ 910
Aug. 3	15 @ $106 = $1,590		10 @ $ 91 15 @ $106 } = $2,500
Aug. 14		8 @ $ 91 = $ 728 12 @ $106 = $1,272 } = $2,000*	2 @ $ 91 3 @ $106 } = $ 500
Aug. 17	20 @ $115 = $2,300		2 @ $ 91 3 @ $106 20 @ $115 } = $2,800
Aug. 28	10 @ $119 = $1,190		2 @ $ 91 3 @ $106 20 @ $115 10 @ $119 } = $3,990
Aug. 31		2 @ $ 91 = $ 182 3 @ $106 = $ 318 15 @ $115 = $1,725 3 @ $119 = $ 357 } = $2,582* $4,582	5 @ $115 7 @ $119 } = $1,408

    - Here are the entries to record the purchases and sales. The numbers in red are determined by the cost flow assumption used.
    - All purchases and sales are made on credit. The selling price of inventory was as follows:
      - 8/14: $130, 8/31: $150

Purchases				Sales			
Aug. 3	Merchandise Inventory	1,590		Aug. 14	Accounts Receivable	2,600	
	Accounts Payable		1,590		Sales		2,600
17	Merchandise Inventory	2,300		14	Cost of Goods Sold.	2,000	
	Accounts Payable		2,300		Merchandise Inventory. . . .		2,000
28	Merchandise Inventory	1,190		31	Accounts Receivable	3,450	
	Accounts Payable		1,190		Sales		3,450
				31	Cost of Goods Sold.	2,582	
					Merchandise Inventory. . . .		2,582

- **First-In, First-Out (FIFO)**
  - Assumption that company first sells goods the company has purchased at beginning
  - Oldest Costs → Cost of Goods Sold (Sold inventory)

- Recent Costs → Ending Inventory

Date	Goods Purchased	Cost of Goods Sold	Inventory Balance
Aug. 1	Beginning balance		10 @ $ 91 = $ 910
Aug. 3	15 @ $106 = $1,590		10 @ $ 91 15 @ $106 } = $2,500
Aug. 14		10 @ $ 91 = $ 910 10 @ $106 = $1,060 } = $1,970	5 @ $106 = $ 530
Aug. 17	20 @ $115 = $2,300		5 @ $106 20 @ $115 } = $2,830
Aug. 28	10 @ $119 = $1,190		5 @ $106 20 @ $115 10 @ $119 } = $4,020
Aug. 31		5 @ $106 = $ 530 18 @ $115 = $2,070 } = $2,600 $4,570	2 @ $115 10 @ $119 } = $1,420

  - Here are the entries to record the purchases and sales. The numbers in red are determined by the cost flow assumption used.
  - All purchases and sales are made on credit. The selling price of inventory was as follows:
    - 8/14: $130, 8/31: $150

Purchases				Sales			
Aug. 3	Merchandise Inventory	1,590		Aug. 14	Accounts Receivable.........	2,600	
	Accounts Payable		1,590		Sales		2,600
17	Merchandise Inventory	2,300		14	Cost of Goods Sold.........	1,970	
	Accounts Payable		2,300		Merchandise Inventory....		1,970
28	Merchandise Inventory	1,190		31	Accounts Receivable.........	3,450	
	Accounts Payable		1,190		Sales		3,450
				31	Cost of Goods Sold.........	2,600	
					Merchandise Inventory....		2,600

- **Weighted Average Cost**
  - When a unit is sold, the average cost of each unit in inventory is assigned to the cost of goods sold.
  - Cost of Goods available for Sale / Units on hand on the date of sale = Average Cost

Date	Goods Purchased	Cost of Goods Sold	Inventory Balance
Aug. 1	Beginning balance		10 @ $ 91 = $ 910
Aug. 3	15 @ $106 = $1,590		10 @ $ 91 15 @ $106 } = $2,500 (or $100 per unit)[a]
Aug. 14		20 @ $100 = $2,000	5 @ $100 = $ 500 (or $100 per unit)[b]
Aug. 17	20 @ $115 = $2,300		5 @ $100 20 @ $115 } = $2,800 (or $112 per unit)[c]
Aug. 28	10 @ $119 = $1,190		5 @ $100 20 @ $115 10 @ $119 } = $3,990 (or $114 per unit)[d]
Aug. 31		23 @ $114 = $2,622 $4,622	12 @ $114 = $1,368 (or $114 per unit)[e]

- Here are the entries to record the purchases and sales. The numbers in red are determined by the cost flow assumption used.
- All purchases and sales are made on credit. The selling price of inventory was as follows:
  - 8/14: $130, 8/31: $150

Purchases				Sales			
Aug. 3	Merchandise Inventory	1,590		Aug. 14	Accounts Receivable.	2,600	
	Accounts Payable		1,590		Sales		2,600
17	Merchandise Inventory	2,300		14	Cost of Goods Sold	2,000	
	Accounts Payable		2,300		Merchandise Inventory		2,000
28	Merchandise Inventory	1,190		31	Accounts Receivable.	3,450	
	Accounts Payable		1,190		Sales		3,450
				31	Cost of Goods Sold	2,622	
					Merchandise Inventory		2,622

- **Last-In, First-Out (LIFO) - Prohibited in IFIS**
  - First sell the inventories that you have bought recently
  - Recent Costs ➝ Cost of Goods Sold
  - Oldest Costs ➝ Ending Inventory

Date	Goods Purchased	Cost of Goods Sold	Inventory Balance
Aug. 1	Beginning balance		10 @ $ 91 = $ 910
Aug. 3	15 @ $106 = $1,590		10 @ $ 91 15 @ $106 } = $ 2,500
Aug. 14		15 @ $106 = $1,590 5 @ $ 91 = $ 455 } = $2,045	5 @ $ 91 = $ 455
Aug. 17	20 @ $115 = $2,300		5 @ $ 91 20 @ $115 } = $ 2,755
Aug. 28	10 @ $119 = $1,190		5 @ $ 91 20 @ $115 10 @ $119 } = $ 3,945
Aug. 31		10 @ $119 = $1,190 13 @ $115 = $1,495 } = $2,685 $4,730	5 @ $ 91 7 @ $115 } = $1,260

- Here are the entries to record the purchases and sales. The numbers in red are determined by the cost flow assumption used.
- All purchases and sales are made on credit. The selling price of inventory was as follows:
  - 8/14: $130, 8/31: $150

Purchases				Sales			
Aug. 3	Merchandise Inventory	1,590		Aug. 14	Accounts Receivable.	2,600	
	Accounts Payable		1,590		Sales		2,600
17	Merchandise Inventory	2,300		14	Cost of Goods Sold	2,045	
	Accounts Payable		2,300		Merchandise Inventory		2,045
28	Merchandise Inventory	1,190		31	Accounts Receivable.	3,450	
	Accounts Payable		1,190		Sales		3,450
				31	Cost of Goods Sold	2,685	
					Merchandise Inventory		2,685

- **Financial Statement Effects of Costing Methods**
    - Because prices change, inventory methods nearly always assign different cost amounts.

TREKKING COMPANY For Month Ended August 31	Specific Identification	FIFO	Weighted Average Cost
Income Statement			
Sales	$ 6,050	$ 6,050	$ 6,050
Cost of goods sold	**4,582**	**4,570**	**4,622**
Gross profit	1,468	1,480	1,428
Expenses	450	450	450
Income before taxes	1,018	1,030	978
Income tax expense (30%)	305	309	293
Net income	**$ 713**	**$ 721**	**$ 685**
Statement of financial position			
Inventory	**$1,408**	**$1,420**	**$1,368**

    - Cost of goods Sold, Net Income, and Inventory are evaluated for comparison
    - Specific identification gives the most precise estimation above all the methods
    - LIFO is prohibited in IFIS (does not give an accurate value to the ending inventory)
    - FIFO & LIFO are extremes & Weighted Average Cost is at between (smoothes out the price changes)
    - FIFO is likely to give the lowest Cost of goods Sold & highest Net Income and therefore, highest Inventory.
    - Managers would prefer FIFO for higher net income
    - Some Managers would adapt LIFO for reporting lower net income to pay lesser tax
- **Consistency in Using Costing Methods**
    - The IASB's Conceptual Framework states that comparability is an enhancing qualitative characteristic of financial information.
    - Related to comparability is consistency which refers to the use of the same methods for the same items, either from period to period within a reporting entity or in a single period across entities.
    - When a change from one method to another will improve its financial reporting, the entity can do so, but the notes to the financial statements must report the type of change, its justification and its effect on profit

- **Lower of Cost and Net Realizable Value (NRV)**
    - Inventory must be reported at NRV when NRV is lower than the cost
    - NRV is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.
        - How much you can sell minus the cost you need to incur towards the point when a sell was made
    - Can be applied two ways:
        - Separately apply to each individual item
        - Apply to major categories of assets

- **Ex. A motor sports retailer has the following items in inventory:**

Inventory Items	Units on Hand	Per Unit Cost	Per Unit NRV	Total Cost	Total NRV
Cycles:					
Roadster	20	$ 8,000	$ 7,000	$ 160,000	$ 140,000
Sprint	10	5,000	6,000	50,000	60,000
Off-Road					
Trax-4	8	5,000	6,500	40,000	52,000
Blazer	5	9,000	7,000	45,000	35,000
Totals				$ 295,000	

Here is how to compute lower of cost and NRV:

Inventory Items	Units on Hand	Total Cost	Total NRV	Lower of Cost and NRV Applied to Items
Cycles:				
Roadster	20	$ 160,000	$ 140,000	$ 140,000
Sprint	10	50,000	60,000	50,000
Off-Road				
Trax-4	8	$ 40,000	$ 52,000	40,000
Blazer	5	45,000	35,000	35,000
Totals		$ 295,000		$ 265,000

  - Highlight total NRV when total NRV is lower than the total cost
  - Highlight total cost when total cost is lower than the total NRV
  - Total amount is lower than the total cost of ending balance
- **Recording the Lower of Cost and NRV**

Inventory Items	Units on Hand	Total Cost	Total NRV	Lower of Cost and NRV Applied to Items
Totals		$ 295,000		$ 265,000

  - **Total Cost - Lower of Cost and NRV = Cost of Goods Sold**
    - **Debit Cost of Goods Sold**
    - **Credit Merchandise Inventory**

Cost of Goods Sold	30,000	
Merchandise Inventory		30,000
To adjust inventory cost to NRV.		

- **Financial Statement Effects of Inventory Errors - Income Statement**

Inventory Error	Cost of Goods Sold	Net Income
Understate ending inventory	Overstated	Understated
Understate beginning inventory	Understated	Overstated
Overstate ending inventory	Understated	Overstated
Overstate beginning inventory	Overstated	Understated

- **Financial Statement Effects of Inventory Errors - Statement of Financial Position**

Inventory Error	Cost of Goods Sold	Net Income
Understate ending inventory	Understated	Understated
Overstate ending inventory	Overstated	Overstated

- **Inventory Turnover**
  - Shows how many times a company turns over its inventory during a period (can sell inventory for this number of time in the period)
  - Indicator of how well management is controlling the amount of inventory available
  - **Inventory Turnover = Cost of goods sold / Average inventory**
    - **Average inventory = (beginning inv. + ending inv.) / 2**
- **Days' Sales in Inventory**
  - Reveals how much inventory is available in terms of the number of days' sales (how much time it takes to sell the ending inventory)
  - **Days' Sales in Inventory = Ending Inventory / Cost of goods sold x 365**
  - The lower the number, the better.

Chapter 9: Receivables

Accounts Receivable

- A receivable is an amount due from another party
- A company must also maintain a separate account for each customer that tracks how much that customer purchases, has already paid, and still owes.

Sales on Credit

- **Ex. On July 1, TechCom had a credit sale of $950 to CompStore and a collection of #720 from RDA Electronics from a prior credit sale.**

July 1	Accounts Receivable—CompStore	950	
	Sales		950
	*To record credit sales**		
July 1	Cash	720	
	Accounts Receivable—RDA Electronics		720
	To record collection of credit sales.		

- **Debit Accounts Receivable** to record an increase in Accounts Receivable
- **Credit Sales** to indicate an increase in Revenue
- **Debit Cash** to record collection of credit sales
- **Credit Account Receivable** to record a decrease in Account Receivable (by the amount paid in cash)

General Ledger

Accounts Receivable

Date	PR	Debit	Credit	Balance
June 30		3,000		3,000
July 1		950		3,950
July 1			720	3,230

Accounts Receivable Ledger

RDA Electronics

Date	PR	Debit	Credit	Balance
June 30		1,000		1,000
July 1			720	280

CompStore

Date	PR	Debit	Credit	Balance
June 30		2,000		2,000
July 1		950		2,950

TechCom
Schedule of Accounts Receivable

RDA Electronics	$ 280
CompStore	2,950
Total	$3,230

Credit Card Sales

- Advantages of allowing customers to use credit cards:
  - Customers' credit is evaluated by the credit card issuer.
  - Sales increase by providing purchase options to the customer.
  - The risks of extending credit are transferred to the credit card issuer
    - No risk on return of credit for sellers
  - Cash collections are quicker
- **Ex. On July 15th, TechCom has $100 of credit card sales with a 4% fee, and its $96 cash was received immediately on deposit.**

July 15	Cash	96	
	Credit Card Expense	4	
	Sales		100
	*To record credit card sales less a 4% credit card expense.**		

  - Debit cash (received immediately on deposit)
  - Debit Credit Card Expense (sales with a 4% fee)
  - Credit sales ($100 of credit card sales)

- **If instead TechCom must remit electronically the credit card sales receipts to the credit card company and wait for the $96 cash payment, we will make the first entry on July 15, and the second entry on July 20, when the cash is received.**

July 15	Accounts Receivable—Credit Card Co.	96	
	Credit Card Expense	4	
	Sales		100
	*To record credit card sales less 4% credit card expense.**		

July 20	Cash	96	
	Accounts Receivable—Credit Card Co.		96
	To record cash receipt.		

- July 15
  - Debit Accounts Receivable (to credit card company)
  - Debit Credit Card Expenses (4% fee)
  - Credit Sales
- July 20
  - Debit cash (when the cash is received by the seller)
  - Credit Accounts Receivable (to deduct the accounts receivable for July 15 sales → sales fully received as cash.)

Installment Accounts Receivable (할부외상매출금)

- Amounts owed by customers from credit sales for which payment is required in periodic amounts over an extended time period. The customer is usually charged interest.

Valuing Accounts Receivable

- Must deal with the case that some customers may not pay their account. These uncollectible amounts are referred to as bad debts.
- There are two methods of accounting for bad debts:
  - Direct Write-Off Method
  - Allowance Method

Direct Write-Off Method

- **Ex. TechCom determines on January 23 that it cannot collect $520 owed to it by its customer J. Kent.**

Jan. 23	Bad Debts Expense	520	
	Accounts Receivable—J. Kent		520
	To write off an uncollectible account.		

- Debit Bad Debts Expense (the uncollectable account)
- Credit Accounts Receivable
- Notice that the specific customer is noted in the transaction so we can make the proper entry in the customer's Accounts Receivable subsidiary ledger.
  - To have information for each of the customers

- **Ex. Recovering a bad debt; On March 11, J.Kent was able to make full payment to TechCom for the amount previously written-off.**

Mar. 11	Accounts Receivable—J. Kent	520	
	Bad Debts Expense		520
	To reinstate account previously written off.		
Mar. 11	Cash	520	
	Accounts Receivable—J. Kent		520
	To record full payment of account.		

  - Debit Accounts Receivable
  - Credit Bad Debts Expense (to reinstate account previously written off)
  - Debit Cash
  - Credit Accounts Receivable (to record full payment of account)
  - Restored reputation for customer

Allowance Method

- At the end of each period, estimate total bad debts expected to be realized from that period's sales.
- Two advantages to the allowance method:
  - It records estimated bad debts expense in the period when the related sales are recorded.
  - It reports accounts receivable on the statement of financial position at the estimated amount of cash to be collected.
- **Ex. TechCom had credit sales of $300,000 during its first year of operations. At the end of the first year, $20,000 of credit sales remained uncollected. Based on the experience of similar businesses, TechCom estimated that $1,500 of its accounts receivable would be uncollectible.**

Dec. 31	Bad Debts Expense	1,500	
	Allowance for Doubtful Accounts		1,500
	To record estimated bad debts.		

Accounts Receivable			
Dec. 31	20,000		

Allowance for Doubtful Accounts			
		Dec. 31	1,500

  - Debit Bad Debts Expense (estimated)
  - Credit **Allowance for Doubtful Accounts** (preparation for future bad debts)
  - Recognize Accounts Receivable
- **Statement of Financial Position Presentation**

Current assets		
Accounts receivable	$20,000	
Less allowance for doubtful accounts	1,500	$18,500

- In current assets: add Accounts receivable ($20,000) & less allowance for doubtful accounts ($1,500)

Writing Off a Bad Debt

- **Ex. TechCom decides that J. Kent's $520 account is uncollectible.**

Jan. 23	Allowance for Doubtful Accounts	520	
	Accounts Receivable—J. Kent		520
	To write off an uncollectible account.		

Accounts Receivable				Allowance for Doubtful Accounts			
Dec. 31	20,000					Dec. 31	1,500
		Jan. 23	520	Jan. 23	520		

  - Debit Allowance for Doubtful Accounts (reduction of $520)
  - Credit Accounts Receivable (reduction of $520)
- The write-off does not affect the estimated realizable value of accounts receivable.

	Before Write-Off	After Write-Off
Accounts receivable	$ 20,000	$ 19,480
Less allowance for doubtful accounts	1,500	980
Estimated realizable accounts receivable	$18,500	$18,500

  - Before Write-Off: $20,000 - $1,500 = $18,500
  - After Write Off: $19,480 - $980 = $18,500

Recovering a Bad Debt

- To help restore credit standing, a customer sometimes volunteers to pay all or part of the amount owed on an account even after it has been written off.
- **Ex. On March 11, Kent pays in full his $520 account previously written off.**

Mar. 11	Accounts Receivable—J. Kent	520	
	Allowance for Doubtful Accounts		520
	To reinstate account previously written off.		
Mar. 11	Cash	520	
	Accounts Receivable—J. Kent		520
	To record full payment of account.		

  - Debit Accounts Receivable
  - Credit Allowance for Doubtful Accounts
  - Debit Cash
  - Credit Accounts Receivable

Estimating Bad Debts Expense

- Receivables Methods:
  - Percent of Receivables

- Aging of Receivables

Percent of Receivables Method

- Compute the estimate of the Allowance for Doubtful Accounts
  - Estimate of the Allowance for Doubtful Accounts = Year-end Accounts Receivable x Bad Debt percentage
- Bad Debts Expense is computed as:
  - Total Estimated Bad Debts Expense - Previous Balance in Allowance Account = Current Bad Debts Expense
- **Ex. Musicland has $50,000 in accounts receivable and a $200 credit balance in Allowance for Doubtful Accounts on December 31, 2015. Past experience suggests that 5% of receivables are uncollectible.**

Dec. 31	Bad Debts Expense	2,300	
	Allowance for Doubtful Accounts		2,300
	To record estimated bad debts.		

  - Desired balance in Allowance for Doubtful Accounts = 50,000 x 0.05 = $2,500
  - Unadjusted Balance = $200
  - Current Bad Debts Expense = $2,500 - $200 = $2,300
  - Adjustment:
    - Debit Bad Debts Expense ($2,300)
    - Credit Allowance for Doubtful Accounts ($2,300)

Aging of Receivables Method

- Classify each receivable by how long it is past due.
- Each age group is multiplied by its estimated bad debts percentage.
- Estimated bad debts for each group are totaled.

MUSICLAND
Schedule of Accounts Receivable by Age
December 31, 2015

Customer	Totals	Not Yet Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	Over 90 Days Past Due
Carlie Abbott	$ 450	$ 450				
Jamie Allen	710			$ 710		
Chavez Andres	500	300	$ 200			
Balicia Company	740				$ 100	$ 640
Zamora Services	1,000	810	190			
Total receivables*	$50,000	$37,000	$6,500	$3,700	$1,900	$ 900
Percent uncollectible		× 2%	× 5%	× 10%	× 25%	× 40%
Estimated uncollectible	$ 2,270	$ 740	$ 325	$ 370	$ 475	$ 360

- **Ex. Musicland's unadjusted credit balance in the allowance account is $200. We estimated the proper balance to be $2,270.**
- Desired proper balance - Current balance = Bad Debts Expense
    - Bad Debts Expense = $2,270 - $200 = $2,070
    - Debit Bad Debts Expense
    - Credit Allowance for Doubtful Accounts
- **Ex. At the beginning of the period, GlobeCom has a credit balance of $1,700 in its allowance for doubtful accounts. At the end of the period, GlobeCom has gross accounts receivable of $71,200. There was objective evidence that 10% of the $6,000 debt owed by a debtor, IslandCom, would most probably be uncollectible. The result of the accounts receivables were reviewed collectively and the results indicated that an estimated 2% of these accounts would not be collectible.**
    - The required ending balance in the allowance for doubtful accounts is calculated as 10% x ($6,000) + 2% x ($71,200 - $6,000) = $1,904
    - Proper balance - Beginning balance = adjusted credit
    - 1,904 - 1,700 = $204
        - Debit Bad Debts Expense
        - Credit Allowance for Doubtful Accounts

Notes Receivable

- A promissory note is a written promise to pay a specified amount of money, usually with interest, either on demand or at a definite future date.
- This typically happens when the credit term is relatively long (works as a strong legal protection from future bad debts)

Computing Maturity

- The maturity date of a note is the day the note (principal and interest) must be repaid.
- **Ex. On July 10, 2015, TechCom received a $1,000, 90-day, 12% promissory note as a result of a sale to Julia Browne.**

Days in July	31		
Minus the date of the note	10		
Days remaining in July		21	← July 11–31
Add days in August		31	← Aug. 1–31
Add days in September		30	← Sept. 1–30
Days to equal 90 days, or **maturity date of October 8**		8	← Oct. 1–8
Period of the note in days		90	

- **The note is due and payable on October 8, 2015.**

Computing Interest

- **Principal of the note x Annual interest rate x Time expressed in fraction of year = Interest**
    - Annual interest rate: Even for maturities less than one year, the rate is annualized.

- Time expressed in fraction of year: If the note is expressed in days, base a year on 360 days.

- **Ex. A company received a $9,000, 8%, 60-day note. The maturity value of the note is:**
  - Principal amount = $9,000
  - Interest = 9,000 x 0.08 x 60/360 = 120
  - Maturity value = Principal amount + Interest = $9,120

Recognizing Notes Receivable

- Notes receivable are usually recorded in a single Notes Receivable account to simplify recordkeeping. The original notes are kept on file, including information on the maker, rate of interest, and due date.
- **Ex. To illustrate the recording for the receipt of a note, we use the $1,000, 90-day, 12% promissory note from Julia Browne to TechCom. TechCom received this note at the time of a product sale to Julina Browne.**

July 10*	Notes Receivable	1,000	
	Sales		1,000
	Sold goods in exchange for a 90-day, 12% note.		

  - Debit Notes Receivable
  - Credit Sales
  - We omit the entry to Dr. Cost of Sales and Cr. Merchandise Inventory to focus on sales and receivables.

Recording an Honored Note

- The principal and interest of a note are due on its maturity date
- **Ex. J. Cook has a $600, 15%, 60-day note receivable due to TechCom on December 4 (Honored Note = paid at the maturity date).**

Dec. 4	Cash	615	
	Notes Receivable		600
	Interest Revenue		15
	Collect note with interest of $600 × 15% × 60/360.		

  - Debit Cash
  - Credit Notes Receivable and Interest Revenue

Recording a Dishonored Note

- The act of dishonoring a note does not relieve the maker of the obligation to repay the principal and interest due.
  - Even though the customer is not able to pay back at the due date, the customer still has obligation to pay in the future
- When the customer fails to pay the note = the note is DISHONORED

- **Ex. TechCom holds an $800, 12%, 60-day note of Greg Hart. At maturity, October 14, Hart dishonors the note.**

Oct. 14	Accounts Receivable—G. Hart	816	
	Interest Revenue		16
	Notes Receivable		800
	To charge account of G. Hart for a dishonored note and interest of $800 × 12% × 60/360.		

  - Debit Accounts Receivable
  - Credit Interest Revenue and Notes Receivable

Recording End-of-Period Interest Adjustments

- **Ex. On December 16, TechCom accepts a $3,000, 60-day, 12% note from a customer in granting an extension on a past-due account. When TechCom's accounting period ends on December 31, $15 of interest has accrued on the note.**
  - $3,000 x 12% x 15/360 = $15

Dec. 31	Interest Receivable	15	
	Interest Revenue		15
	To record accrued interest earned.		

  - Debit Interest Receivable
  - Credit Interest Revenue

Recording End-of-Period Interest Adjustments

Feb. 14	Cash	3,060	
	Interest Revenue		45
	Interest Receivable		15
	Notes Receivable		3,000
	Received payment of note and its interest.		

  - $3,000 x 12% x 15/360 = $15

Disposal of Receivables

- Companies can convert receivables to cash before they are due.
- Selling Receivables (Factoring)
- Pledging Receivables

Accounts Receivable Turnover

- Accounts Receivable Turnover = Net Sales / Average accounts receivable, net (average of the beginning & ending value)
- Provides useful information for evaluating how efficient management has been in granting credit to produce revenue

ACCT 1101 Introduction to Financial Accounting

Chapter 10: Long Term Assets

- **Property, Plant and Equipment (Fixed Assets)**
    - Tangible in Nature
    - Actively Used in Operations
    - Expected to Benefit Future Periods
        - Ex. Machineries
    - How to prepare journal entry:
        1. Compute cost (associated with the acquisition)
        2. Allocate cost to periods benefited (in years span)
        3. Account for subsequent expenditures (fixing, adding new features)
        4. Record disposal (decision to sell the equipment)
- **Intangible Assets**

Cost Determination

- For journal entry:
    - Debit Property, Plant and Equipment
    - Credit Cash
    - Q: How much to recognize
- Acquisition Cost = Purchase price + All expenditures needed to prepare the asset for its intended use (ex. Assembling fee, freight fee)
    - Excludes financing charges (ex. interests) and cash discounts
        - For interests in future periods:
            - Debit interest expenses
            - Credit Cash

Land

- Initial acquisition cost may include...
    - Purchase price
    - Real estate commissions
    - Title search and transfer fees
    - Insurance premiums
    - Delinquent taxes
    - Surveying fees
- Land is not Depreciable (no useful life; indefinate use)

Land Improvements

- Additional features to make land useful
- Ex. Parking lots, driveways, fences, walks, shrubs, and lighting systems
- Depreciate over useful life of improvements

Buildings

- Initial acquisition cost may include…

- Cost of purchase or construction
- Brokerage fees
- Taxes
- Title fees
- Attorney fees

Machinery and Equipment

- Initial acquisition cost may include…
  - Purchase price
  - Taxes
  - Installing, assembling, and testing fees
  - Transportation charges
  - Insurance while in transit
  - **All the normal costs associated with machine until the point when the machine is ready for use (further subsequent costs are not recognized as the initial costs)**

Lump-Sum Asset Purchase

- Often times, the deal is done in a package form
- The total cost of a combined purchase of land and building is separated on the basis of their relative fair market values
- **Ex. CarMax paid $90,000 cash to acquire a group of items consisting of land appraised at $30,000, land improvements appraised at $10,000, and a building appraised at $60,000. The $90,000 cost will be allocated on the basis of appraised values as shown:**

	Appraised Value	Percent of Total	Apportioned Cost
Land	$ 30,000	30% ($30,000/$100,000)	$27,000 ($90,000 × 30%)
Land improvements	10,000	10 ($10,000/$100,000)	9,000 ($90,000 × 10%)
Building	60,000	60 ($60,000/$100,000)	54,000 ($90,000 × 60%)
Totals	$100,000	100%	$ 90,000

  - Allocate the total purchase price to three components, as each of these assets have different useful life
  - Because of different implications on depreciation, we have to recognize the initial cost for each of the components separately.
  - To determine the cost for each of the three, we need to invite someone to do the appraisal → find percentage for each appraisals → find apportioned cost by (appraised value x percentage)

Depreciation

- Depreciation is the process of allocating the cost of an item of property, plant and equipment to expense in the accounting periods benefiting from its use.
- To comply with the expense matching principle (you need to match expense from revenue)

- **Acquisition Cost (unused) → Cost Allocation → Expense (Used)**
- **Factors in Computing Depreciation**
  1. Cost (initial acquisition cost)
  2. Residual Value (The lowest value it can get after its useful life)
  3. Useful Life
- **Depreciation Methods**
  1. **Straight-Line**
     a. Subtract residual value from the total cost to find Depreciable amount
     b. The depreciable amount is evenly allocated in a span of useful life
     c. Widely used & easiest to compute
     d. Equation:
        i. (Cost - Residual value) / Useful life = Depreciation per year
     e. In Adjusting Entry…
        i. Debit Depreciation Expense
        ii. Credit Accumulated Depreciation - Machinery
     f. In Statement of Financial Position…
        i. Gross Value of PPE - Accumulated depreciation = Net Value of PPE
           1. The Gross Value of PPE stays the same every year

	Depreciation for the Period			End of Period	
Annual Period	Depreciable Cost*	Depreciation Rate	Depreciation Expense	Accumulated Depreciation	Carrying Amount†
2010	—	—	—	—	$10,000
2011	$9,000	20%	$1,800	$1,800	8,200
2012	9,000	20	1,800	3,600	6,400
2013	9,000	20	1,800	5,400	4,600
2014	9,000	20	1,800	7,200	2,800
2015	9,000	20	1,800	9,000	**1,000**

  2. **Units-of-Production**
     a. Matches expense to revenue best among the methods
     b. The more we produce, the more it depreciates
     c. Equation:
        i. **Depreciation Per Unit** = (Cost - Residual Value) / Total Units of Production
        ii. Depreciation Expense = **Depreciation Per Unit** x Number of Units produced in the Period

	Depreciation for the Period			End of Period	
Annual Period	Number of Units	Depreciation per Unit	Depreciation Expense	Accumulated Depreciation	Carrying Amount
2010	—	—	—	—	$10,000
2011	7,000	$0.25	$1,750	$1,750	8,250
2012	8,000	0.25	2,000	3,750	6,250
2013	9,000	0.25	2,250	6,000	4,000
2014	7,000	0.25	1,750	7,750	2,250
2015	5,000	0.25	1,250	9,000	1,000

  3. **Double-Declining-Balance**
     a. Depreciate more in early years of the asset

b. Depreciate less in late years of the asset
c. Makes sense economically
d. Favorable to companies that want to delay tax payments
e. Equation:
   i. Straight-line rate = 100% / useful life
   ii. Double-declining-balance rate = 2 x Straight-line rate
   iii. Depreciation expense = Double-declining-balance rate x Beginning-period carrying amount

	Depreciation for the Period			End of Period	
Annual Period	Beginning of Period Carrying Amount	Depreciation Rate	Depreciation Expense	Accumulated Depreciation	Carrying Amount
2010	—	—	—	—	$10,000
2011	$10,000	40%	**$4,000**	$4,000	6,000
2012	6,000	40	**2,400**	6,400	3,600
2013	3,600	40	**1,440**	7,840	2,160
2014	2,160	40	**864**	8,704	1,296
2015	1,296	40	**296***	9,000	**1,000**

   iv. The residual value must be kept; ex. Even though the depreciation expense in 2015 is $717.6, only $296 is recognized as expense in order to keep the residual value.

- **Partial-Year Depreciation**
  - When an item of property, plant and equipment is acquired during the year, depreciation is calculated for the fraction of the year the asset is owned.
  - **Ex. Assume our machinery was purchased on October 8, 2010. Let's calculate depreciation expense for 2010, assuming we use straight-line depreciation.**
    - **Partial-Year Depreciation cost = (Cost - Residual Value) / useful years x 3 / 12 (3 months)**
- **Change in Estimates for Depreciation**
  - Over the life of an asset, new information may come to light that indicates the original estimates were inaccurate.
  - **Ex. Let's look at our machinery from the previous examples and assume that at the beginning of the asset's third year, its carrying amount is $6,400 ($10,000 cost less $3,600 accumulated depreciation using straight-line depreciation). At that time, it is determined that the machinery will have a remaining useful life of 4 years, and the estimated residual value will be revised downward from $1,000 to $400.**

$$\frac{\textbf{Carrying amount} - \textbf{Revised residual value}}{\textbf{Revised remaining useful life}} = \frac{\$6{,}400 - \$400}{4 \text{ years}} = \$1{,}500 \text{ per year}$$

- **Reporting Depreciation**
  - **Ex. Nestle 2013**

Land and building	15,988
Less accumulated depreciation and impairment	5,300
Carrying amount	10,688
Machinery and equipment	28,433
Less accumulated depreciation and impairment	15,098
Carrying amount	13,335
Tools, furniture and other equipment	7,817
Less accumulated depreciation and impairment	5,323
Carrying amount	2,494
Vehicles	880
Less accumulated depreciation and impairment	502
Carrying amount	378

Additional Expenditures

Treatment	Financial Statement Effect			
	Statement	**Expense**	**Current Profit**	**Current Taxes**
Capital Expenditure (debit asset)	**Statement of Financial Position account debited**	**Deferred**	**Higher**	**Higher**
Revenue Expenditure (debit expense)	**Income Statement account debited**	**Currently recognized**	**Lower**	**Lower**

- **Capital Expenditure:** Long term expenses and the effect continues beyond the current accounting year
  - Major overhauls or partial replacements (enhances productivity)
  - Extends life beyond original estimate
  - Depreciated over time
  - Debit asset, credit cash
- **Revenue Expenditure:** Short term expenses incurred to maintain day to day functioning of an organization
  - Maintains normal operating condition
  - Does not increase productivity
  - Does not extend life beyond original estimate
  - Debit expense, credit cash
- If the amounts involved are not material, most companies expense the item

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Disposals of Property, Plant and Equipment

- Update depreciation to the date of disposal
- Journalize disposal by:
  - Recording Cash received (debit) or paid (credit)
  - Removing accumulated depreciation (debit)
  - Removing the asset cost (credit)
  - Recording a gain (credit) or loss (debit)

Discarding Property, Plant and Equipment

- If Cash > Carrying Amount (asset cost - accumulated depreciation), record a gain (credit, like revenue)
- If Cash < Carrying Amount, record a loss (debit, like expense)
- If Cash = Carrying Amount, no gain or loss
- **Ex. A machine costing $9,000, with accumulated depreciation of $9,000 on December 31st of the previous year was discarded on <u>June 5th</u> of the current year. The company is depreciating the equipment using the straight-line method over eight years with zero residual value.**

June 5	Accumulated Depreciation—Machinery	9,000	
	Machinery.		9,000
	To discard fully depreciated machinery.		

- **Ex. Equipment costing $8,000, with accumulated depreciation of $6,000 on December 31st of the previous year was discarded on July 1st of the current year. The company is depreciating the equipment using the straight-line method over eight years with zero residual value.**
  1. **Bring the depreciation up-to-date.**

July 1	Depreciation Expense.	500	
	Accumulated Depreciation—Equipment		500
	To record 6 months' depreciation ($1,000 × 6/12).		

    - Annual depreciation cost = (8,000 - 0) / 8 = $1,000
    - 6 months of Depreciation = 1000 x 6/12 = $500
    - Debit Depreciation Expense
    - Credit Accumulated Depreciation

  2. **Record discarding of asset**

July 1	Accumulated Depreciation—Equipment.	6,500	
	Loss on Disposal of Equipment	1,500	
	Equipment		8,000
	To discard equipment with a $1,500 book value.		

    - Discarding of asset → Cash received = 0
    - Accumulated Depreciation = 6,000 + 500 = $6,500
    - Loss of Disposal of Equipment = 8,000 (initial cost) - 6,500 (Accumulated depreciation) = $1,500

        - Since Cash ($0) < Book Value ($1,500) ➝ Loss
    - Debit Accumulated Depreciation & Loss on Disposal of Equipment
    - Credit Equipment (initial cost)

Selling Property, Plant and Equipment

- **Ex. On March 31st, BTO sells equipment that originally cost $16,000 and has accumulated depreciation of $12,000 at December 31st of the prior calendar year-end. Annual depreciation on this equipment is $4,000 using straight-line depreciation. The equipment is sold for $3,000 cash.**

1. **Update Depreciation to March 31.**

March 31	Depreciation Expense.	1,000	
	Accumulated Depreciation—Equipment		1,000
	To record 3 months' depreciation ($4,000 × 3/12).		

- Annual depreciation cost = $4,000
- 6 months of Depreciation = 4000 x 3/12 = $1,000
- Debit Depreciation Expense
- Credit Accumulated Depreciation

2. **Record sale of asset at carrying amount ($16,000 - $13,000 = $3,000).**

March 31	Cash	3,000	
	Accumulated Depreciation—Equipment.	13,000	
	Equipment		16,000
	To record sale of equipment for no gain or loss.		

- Debit Cash received
- Debit Accumulated Depreciation ($12,000 +$1,000 for current year = $13,000)
- Credit Equipment (initial cost)
- Book Value = 16,000 -13,000 = $3,000
    - BV = Cash ➝ No gain or loss

- **Ex. On March 31st, BTO sells equipment that originally cost $16,000 and has accumulated depreciation of $12,000 at December 31st of the prior calendar year-end. Annual depreciation on this equipment is $4,000 using straight-line depreciation. The equipment is sold for <u>$2,500</u> cash.**

- **Record sale of asset at carrying amount ($16,000 - $13,000 = $3,000).**

March 31	Cash	3,000	
	Accumulated Depreciation—Equipment.	13,000	
	Equipment		16,000
	To record sale of equipment for no gain or loss.		

- Debit Cash received
- Debit Accumulated Depreciation ($12,000 +$1,000 for current year = $13,000)
- Credit Equipment (initial cost)
- Book Value = 16,000 -13,000 = $3,000
    - BV (3,000) > Cash (2,500) ➝ loss of $500
        - Debit Loss on Disposal of Equipment

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Intangible Assets

- Noncurrent assets without physical substance
- Useful life is often difficult to determine
- Often provide exclusive rights or privileges
- Usually acquired for operational use
    - Research & Development (R&D)
        - The expenditures associated with research activities can only be expensed
        - Debit R&D Expenses, Credit Cash
- **Cost Determination and Amortization**
    - Patents
    - Copyrights
    - Franchises and Licenses
    - Goodwill (comes from acquisition)
        - Payment for acquisition - Fair value = Goodwill
            - Q: Why is payment > FV?
            - A: Intrinsic values (good management and so on)
    - Trademarks and Trade Names
    - Other Intangibles
    - **If there is a useful life → Amortization**
    - **Initial Acquisition cost includes purchase price, legal fees, and filing fees**

Total Asset Turnover

- **Total Asset Turnover = Net sales / Average Total Assets (Beginning value + ending value of total assets divided by 2)**
- Provides information about a company's efficiency in using its assets.

Chapters 11 & 14: Liabilities

- Must be due to a past event (past)
- Company has a present obligation (present)
- Paid in the future days (future)
- **Current Liabilities**
    - Expected to be paid within one year or the company's operating cycle, whichever is longer
    - Current liabilities contributes the high percentage of total liabilites
- **Long-Term Liabilities**
    - Not expected to be paid within one year or the company's operating cycle, whichever is longer
- **Uncertainty in Liabilities**
    - Uncertainty in Whom to Pay
        - Still the liability must be recognized in the account
    - Uncertainty in When to Pay

        - Ex. Legal companies which provide legal counseling services to the customers
            - Customers have paid, but we are not sure whether the company would need our service / not sure when the service must be provided
        - Still the liability must be recognized in the account
    - Uncertainty in How Much to Pay
        - Ex. Company's use of electricity
            - Not sure how much electricity has been used (not sure with the exact amount)
            - Therefore, estimation must be made + the liability must be recognized in the account
- **Known Liabilities**
    - **Accounts Payable**
        - When the supplier deliver the good but it is not paid yet (will be paid in the future)
    - **Sales Tax Payable**
        - Also called goods and services taxes in some countries
        - **Ex. On August 31, Harvery Norman sold materials for $6,000 that are subject to a 10% goods and services tax (GST).**

Aug. 31	Cash	6,600	
	Sales		6,000
	GST Payable ($6,000 × 0.10)		600
	To record cash sales and 10% GST.		

            - Debit Cash
            - Credit Sales and GST Payable (paid by the buyer)
                - Sellers required to collect GST on behalf of government
            - Later when tax is paid:
                - Debit GST Payable
                - Credit Cash
    - **Unearned Revenues**
        - **Ex. On June 30, Beyonce sells $5,000,000 in tickets for eight concerts.**

June 30	Cash	5,000,000	
	Unearned Ticket Revenue		5,000,000
	To record sale of concert tickets.		

        - **On Oct. 31, Beyonce performs a concert.**

Oct. 31	Unearned Ticket Revenue	625,000	
	Ticket Revenue		625,000
	To record concert ticket revenues earned.		

            - $5,000,000 / 8 = $625,000
    - **Short-Term Notes Payable**
        - A written promise to pay a specified amount on a definite future date within one year or the company's operating cycle, whichever is longer.

            - The owner of the note to have stronger legal protection
        - **Ex. On August 23, Brady Company asks McGraw to accept $100 cash and a 60-day, 12% $500 note to replace its existing $600 Account Payable.**

Aug. 23	Accounts Payable—McGraw	600	
	Cash		100
	Notes Payable—McGraw		500
	Gave $100 cash and a 60-day, 12% note for payment on account.		

            - **Debit Accounts Payable**
            - **Credit Cash and Notes Payable**
        - **On October 22, Brady pays the note plus interest to McGraw.**

Oct. 22	Notes Payable—McGraw	500	
	Interest Expense	10	
	Cash		510
	Paid note with interest ($500 × 12% × 60/360).		

            - **Debit Notes Payable and Interest Expense**
                - **$500 x 12% x (60 / 360) =$10**
            - **Credit Cash**
    - **Note Given to Borrow From Bank**
        - **Ex. On Sept. 30, a company borrows $2,000 from a bank at 12% for 60 days.**

Sept. 30	Cash	2,000	
	Notes Payable		2,000
	Borrowed $2,000 cash with a 60-day, 12%, $2,000 note.		

            - **Debit Cash**
            - **Credit Notes Payable**
        - **On Nov. 29, the company repays the principal of the note plus interest.**

Nov. 29	Notes Payable	2,000	
	Interest Expense	40	
	Cash		2,040
	Paid note with interest ($2,000 × 12% × 60/360).		

            - **Debit Notes Payable and Interest Expense**
                - **$2,000 x 12% x (60 / 360) = $40**
            - **Credit Cash**

End-of-period Adjustment to Nots

- When the accounting period end date falls between Note Date and Maturity Date, an adjusting entry is required to **record Interest Expense incurred to date**
    - To apply the matching principle
    - To correct the amount of assets and liabilities to its appropriate level
- **Ex. On Dec. 16, 2011, a company borrows $2,000 from a bank at 12% interest for 60 days. An adjusting entry is needed on December 31.**

2011			
Dec. 31	Interest Expense	10	
	Interest Payable		10
	To record accrued interest on note ($2,000 × 12% × 15/360).		

- **Debit Interest Expense ($2,000 x 12% x 15 / 360 = $10)**
- **Credit Interest Payable**

- **On Feb. 14, 2012, the company repays this principal and interest on the note.**

2012			
Feb. 14	Interest Expense*	30	
	Interest Payable	10	
	Notes Payable	2,000	
	Cash		2,040
	*Paid note with interest. *($2,000 × 12% × 45/360)*		

- **Debit Interest Expense (From Jan 1. to Feb. 14)**
  - **($2,000 x 12% x 45 / 360 = $30)**
- **Debit Interest Payable (from Dec. 16 to Dec. 31) and Notes Payable**
- **Credit Cash (paying Notes payable by cash)**

Estimated Liabilities

- Known obligation of an uncertain amount, but <u>one that can be reliably estimated.</u>
- **Warranty Liabilities**
  - Seller's obligation to replace or correct a product (or service) that fails to perform as expected within a specified period.
  - To comply with the full disclosure and matching principles, the seller reports expected warranty expense in the period when revenue from the sale is reported.
  - **Ex. On Dec. 1, 2011, a dealer sells a car for $16,000 with a maximum one-year of 12,000 mile warranty covering parts. Past Experience indicates warranty expenses average 4% of a car's selling price**

2011			
Dec. 1	Warranty Expense	640	
	Estimated Warranty Liability		640
	To record estimated warranty expense.		

    - **Debit Warranty Expense (16,000 x 0.04 = 640)**
    - **Credit Estimated Warranty Liability**
  - **On Jan. 9, 2012, the customer returns the car for repairs. The dealer replaces parts costing $200.**

2012			
Jan. 9	Estimated Warranty Liability	200	
	Auto Parts Inventory		200
	To record costs of warranty repairs.		

    - **Debit Estimated Liability (deduction of Liability)**
    - **Credit Auto Parts Inventory (deduction of Inventory)**

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Accounting For Contingent Liabilities

- Depends on the probability of future event
- If Future event is Probable (>50%) and Amount owed is Estimable = **Record Liability (Recognize in account)**
  - Ex. Debit Loss from Lawsuit
  - Ex. Credit Loss from Lawsuit Payable
- If Future event is Probable and Amount owed is Inestimable = **Disclosure in Notes (Recognize in Statement of Financial Position)**
- If Future event is Possible (5%<X<50%)= **Disclosure in Notes (Recognize in Statement of Financial Position)**
- If Future event is remote (<5%) = **No disclosure**

Possible Contingent Liabilities

- **Potential Legal Claims**
  - A Potential claim is recorded if the amount can be reliably estimated and payment for damages is probable.
- **Debt Guarantees**
  - The guarantor usually discloses the guarantee in its financial statement notes. If it is probable that the debtor will default, the guarantor should record and report the guarantee as a liability.

Times Interest Earned

- **Times Interest Earned = Profit before interest expenses and income taxes / Interest Expense**
- If profit before interest and taxes varies greatly from year to year, fixed interest charges can increase the risk that an owner will not earn a positive return and be unable to pay interest charges
- Can conclude whether the company has a strong / weak ability to fulfil its debt obligation
- If lower than 1 = poor credit condition; may be unable to pay the interest charges.

Long-Term Notes Payable

- Single Payment of Principal plus Interest (when the note matures on a due date)
- Regular Payments of Principal plus interest (paid over the range of note date & note maturity date, can either be equal principal payments plus interest or **equal payments**)
  - **Ex. On January 1, 2011, Foghog borrows $60,000 from a bank to purchase equipment. It signs an 8% installment note requiring 6 annual payments of principal plus interest.**

Jan. 1	Cash	60,000	
	Notes Payable.		60,000
	Borrowed $60,000 by signing an 8%, six-year installment note.		

  - **Compute the periodic payment by dividing the face amount of the note by the present value factor.**

Computation	Table	Table Value	Present Value	Payment
Principal divided by PV factor	Annuity of $1 (B.3)	4.6229	60,000	12,979

$$P = PMT \times \frac{1 - \left(\frac{1}{(1+r)^n}\right)}{r}$$

where:

P = Present value of an annuity stream

PMT = Dollar amount of each annuity payment

r = Interest rate (also known as discount rate)

n = Number of periods in which payments will be made

			Payments				
Period Ending Date	(A) Beginning Balance	(B) *Debit* Interest Expense 8% × (A)	+	(C) *Debit* Notes Payable (D) − (B)	=	(D) *Credit* Cash (computed)	(E) Ending Balance (A) − (C)
(1) 12/31/2011	$60,000	$ 4,800		$ 8,179		$12,979	$51,821
(2) 12/31/2012	51,821	4,146		8,833		12,979	42,988
(3) 12/31/2013	42,988	3,439		9,540		12,979	33,448
(4) 12/31/2014	33,448	2,676		10,303		12,979	23,145
(5) 12/31/2015	23,145	1,852		11,127		12,979	12,018
(6) 12/31/2016	12,018	961		12,018		12,979	0
		$17,874		$60,000		$77,874	

- **Interest Expense (Debit) = 60,000 x 0.08 = $4,800**
- **Notes Payable (Debit) = $12,979 - $4,800 = $8,179**
- **Cash (Credit) = 60000/4.6229 (Table Value) = $12,979**
- **Ending Balance = $60,000 - $8,179 = $51,821**

1. **Record the first payment made on December 31, 2011 by Foghog to the bank.**

Dec. 31	Interest Expense	4,800	
	Notes Payable	8,179	
	Cash		12,979
	To record first installment payment.		

2. **Refer back to the amortization schedule to make the December 31, 2012 payment on the note**

Dec. 31	Interest Expense	4,146	
	Notes Payable	8,833	
	Cash		12,979
	To record second installment payment.		

- **Interest expense decreases as beginning balance decreases over time.**
- **Cash paid stays the same, at $12,979.**

Mortgage Notes and Bonds

- A legal agreement that helps to protect the lender if the borrower fails to make the required payments.
- Gives the lender the right to be paid out of the cash proceeds from the sale of the borrower's assets specifically identified in the mortgage contract.

Debt-to-Equity Ratio

- **Debt-to-Equity Ratio = Total Liabilities / Total Equity**
- Helps investors determine the risk of investing in a company by dividing its total liabilities by total equity.
- Measuring the credit risk of the company

Chapter 13: Accounting for Corporations

Corporations

- An entity created by law; you have to register with the government to comply with the company law
- Existence of corporation is separate from owner; shareholders are the owners
- Has rights and privileges; can sign a contract with its supplier, customer or bank, just like normal individuals
- Can be privately held and publicly held
- **Advantages**
    - Separate legal entity
    - Limited liability of shareholders
    - Transferable ownership rights; selling shares through stock exchange
    - Continuous life; does not matter whether the owner is doing right or not
    - Lack of mutual agency for shareholders; shareholders are not allowed to sign any contract on behalf of corporations
    - Ease of capital accumulation (ensuring the advantages above)
- **Disadvantages**
    - Governmental regulation (ex. Corporations are required to file their financial statements to their shareholders)
    - Corporate taxation (corporate income tax + dividends + dividends tax…)
- **Organization form**
    - Shareholders
        - Retail Shareholders
        - Institutional Shareholders
        - **Rights of shareholders**
            - Voting rights (control rights); vote at shareholders' meetings
                - Controlling the managers
            - Cash Flow rights
                - Sell Shares (to liquidate their shares)
                - Purchase additional shares

        - Receive dividends
        - Share equally in any assets remaining after creditors are paid in a liquidation
    - Board of Directors
        - Monitor the behaviours of corporations (ex. Checking how the shareholders' investments are used by the managers)
        - Give an advice to managers
        - Usually has a number of committees (ex. Compensation committee to incentivize the managers to work hard)
    - President, Vice-President, and Other Officers
        - People who control the daily operations of companies
    - Employees of the Corporation
        - Ex. sales department, finance department

Basics of Share Capital

- Authorized shares: total number of shares that a corporation is authorized to sell or issue (specified in company's chart)
- Issued shares: total number of shares that has been sold or issued to shareholders
- Par Value: an arbitrary amount assigned to each share when it is authorized
    - Designed to protect the interest of shareholders who buy shares in Initial Public Offering (IPO)
- Market price: the amount that each share will sell for in the market
- Classes of Shares
    - **Par Value**
        - **Ex. On June 5, Dillion Snowboards issued 30,000 shares of $10 par value for $300,000**

June 5	Cash	300,000	
	Share Capital—Ordinary, $10 Par Value		300,000
	To record 30,000 $10 par value ordinary shares issued at par.		

            - **Debit Cash**
            - **Credit Share Capital - Ordinary, $10 Par Value**

Shareholders' Equity	
Share Capital—Ordinary, $10 par value; 50,000 shares authorized; 30,000 shares issued and outstanding	$300,000
Retained earnings	65,000
Total shareholders' equity	$365,000

            - **In Statement of Financial position, the Share Capital is added to form total Shareholder's Equity**
                - **Shareholders' Equity = Retained Earnings + Share Capital**
        - **Issuing Par Value Shares at a Premium**
            - **Ex. On June 5, Dillion Snowboards issued 30,000 shares of $10 par value at $12 per share.**

June 5	Cash	360,000	
	Share Capital—Ordinary, $10 Par Value		300,000
	Share Premium—Ordinary		60,000
	To record 30,000 $10 par value ordinary shares issued at $12 per share.		

- ○ **Debit Cash**
- ○ **Credit Share Capital (par value x shares)**
- ○ **Credit Premium ([issued price - par value] x shares)**

Shareholders' Equity	
Share Capital—Ordinary, $10 par value; 50,000 shares authorized; 30,000 shares issued and outstanding	$300,000
Share Premium—Ordinary	60,000
Retained earnings	65,000
Total shareholders' equity	$425,000

- ○ **Share Premium is added in Shareholders' Equity**

- ○ **No-Par Value**
  - ■ **Issuing the price which the market believes**
  - ■ **Ex. On October 20, a corporation issued 1,000 shares of no-par value for $40 per share.**

Oct. 20	Cash	40,000	
	Share Capital—Ordinary, No-Par Value		40,000
	To record 1,000 no-par value ordinary shares issued at $40 per share.		

- ○ **Stated Value**
  - ■ **Ex. On October 20, a corporation issued 1,000 no-par value shares having a stated value of $40 per share for $50 per share.**
    - ● **$50 per share = issued price (Share capital + Share Premium)**

Oct. 20	Cash	50,000	
	Share Capital—Ordinary, $40 Stated Value		40,000
	Share Premium—Ordinary		10,000
	To record 1,000 $40 stated value share issued at $50 per share.		

- ● **Debit Cash (issued price x shares)**
- ● **Credit Share Capital (Stated value x shares)**
- ● **Credit Premium ([issued price - stated value] x shares)**

- ○ **Issuing Shares for Non Cash Assets**
  - ■ **Ex. On June 10, a corporation issued 4,000 shares of $20 par value for land valued at $105,000.**

June 10	Land	105,000	
	Share Capital—Ordinary, $20 Par Value		80,000
	Share Premium—Ordinary		25,000
	To record 4,000 $20 par value ordinary shares issued for land valued at $105,000.		

- ● **Debit Land**
- ● **Credit Share Capital (par value x shares)**

- **Credit Premium (asset value - share capital value)**

Cash Dividends

- Regular cash dividends provide a return to investors and almost always affect the share's market value.
- Provision of dividend can signify that the company has a good prospect
- Corporation → dividends → Shareholders
- To pay a cash dividend, the corporation must have:
  - A sufficient balance in retained earnings
  - The cash necessary to pay the dividend

Accounting for Cash Dividends

- **Three important dates**
  - **Date of Declaration**
    - Record liability for dividend (account), based on the previous financials results
  - **Date of Record**
    - No entry required
  - **Date of Payment**
    - Record payment of cash to shareholders
- **Ex. On January 19, a $1 per share cash dividend is declared on Dana Inc. 's 10,000 ordinary shares outstanding. The dividend will be paid on March 19 to shareholders of record on February 19.**
  - **January 19 = Date of Declaration**

		Dr	Cr
Jan. 19	**Retained Earnings**	**10,000**	
	Ordinary Dividend Payable		**10,000**
	To record the declaration of $1 per ordinary share cash dividend.		

    - **Debit Retained Earnings**
    - **Credit Ordinary Dividend Payable**
  - **February 19 = Date of Record**
  - **March 19 = Date of Payment**

		Dr	Cr
Mar. 19	**Ordinary Dividend Payable**	**10,000**	
	Cash		**10,000**
	To record the payment of $1 per ordinary share cash dividend.		

    - **Debit Ordinary Dividend Payable**
    - **Credit Cash**

Share Splits

- A distribution of additional shares to shareholders according to their percent ownership
- Par value to be divided by two, with a doubled number of selling shares
- Typically happens when stock price of the share is too high

Preference Shares

- A separate class of shares, typically having priority over ordinary shares in:
    - Dividend distributions
    - Distribution of assets in case of liquidation
- Usually has a stated dividend rate
- Normally has no voting rights
- **Cumulative vs. Noncumulative**
    - **Cumulative** - Dividends in arrears must be paid before dividends may be paid on ordinary shares. (Normal case)
    - **Noncumulative** - Undeclared dividends from current and prior years do not have to be paid in future years.
    - **Ex. Consider the following Shareholders' Equity section of the Statement of Financial Position. The Board of Directors did not declare or pay dividends in 2014. In 2015, the Board declared and paid cash dividends of $42,000.**

Share Capital-Ordinary, $5 par value; 40,000 shares authorized, issued and outstanding	**$**	**200,000**
Share Capital-Preference, 9%, $100 par value; 1,000 shares authorized, issued and outstanding		**100,000**
Total Share Capital	**$**	**300,000**

If Preference Shares Are Noncumulative:	**Preference**	**Ordinary**
Year 2014: No dividends paid.	$ -	$ -
Year 2015:		
1. Pay 2015 preference dividend.	$ 9,000	
2. Remainder goes to ordinary.		$ 33,000

If Preference Share Are Cumulative:	**Preference**	**Ordinary**
Year 2014: No dividends paid.	$ -	$ -
Year 2015:		
1. Pay 2014 preference dividend in arrears.	$ 9,000	
2. Pay 2015 preference dividend.	9,000	
3. Remainder goes to ordinary.		$ 24,000
Totals	$ 18,000	$ 24,000

- Noncumulative
    - 1. 100,000 x 9% = $9,000
    - 2. $42,000 - $9,000 = $33,000
- Cumulative
    - 1. 100,000 x 9% = $9,000 (for unpaid dividend in 2014)
    - 2. 100,000 x 9% = $9,000
    - 3. $42,000 - $18,000 = $24,000

- **Participating vs. Nonparticipating**

- **Participating**: Dividends may exceed a stated amount once ordinary shareholders receive a dividend equal to the preference stated rate.
- **Nonparticipating**: Dividends are limited to a maximum amount each year. The maximum is usually the stated dividend rate. (Normal case)

- **Reasons for issuing Preference shares**
  - To raise capital without sacrificing control
  - To boost the return earned by ordinary shareholders through financial leverage
  - To appeal to investors who may believe the ordinary shares are too risky or that the expected return on ordinary shares is too low

Treasury Shares

- A company's own shares that have been acquired
- Corporations might acquire its own shares to:
  - Use their shares to buy other companies
  - Avoid a hostile takeover
  - Reissue to employees as compensation
  - Support the market price
- **Purchasing Treasury Shares**
  - **Ex. On May 8, Whitt, Inc. purchased 2,000 of its own shares in the open market for $4 per share.**

		Dr	Cr
May 8	**Treasury Shares-Ordinary**	**8,000**	
	Cash		**8,000**
	To record the purchase of 2,000 treasury shares at $4 per share.		

  - **Debit Treasury Shares - Ordinary**
  - **Credit Cash**
  - **Treasury shares are shown as a reduction in total shareholder's equity on the statement of financial position (contra-equity)**
- **Selling Treasury Shares at Cost**
  - **Ex. On June 30, Whitt sold 100 shares of its treasury shares for $4 per share.**

		Dr	Cr
June 30	**Cash**	**400**	
	Treasury Shares-Ordinary		**400**
	To record the receipt of $4 per share for 100 treasury shares for $4 per share.		

  - **Debit Cash**
  - **Credit Treasury Shares - Ordinary**
- **Selling Treasury Shares Above Cost**
  - **Ex. On July 19, Whitt, Inc. sold an additional 500 treasury shares for $8 per share.**

		Dr	Cr
July 19	Cash	4,000	
	Treasury Shares-Ordinary		2,000
	Share Premium-Treasury Shares		2,000
	To record the receipt of $8 per share for 500 treasury shares costing $4 per share.		

- **Debit Cash ($8 x 500 = $4,000)**
- **Credit Treasury Shares - Ordinary ($4 x 500 = $2,000)**
- **Credit Share Premium ($4,000 - $2,000 = $2,000)**

- **Selling Treasury Shares Below Cost**
  - **Ex. On August 27, Whitt sold an additional 400 treasury shares for $1.50 per share.**

		Dr	Cr
Aug. 27	Cash	600	
	Share Premium-Treasury Shares	1,000	
	Treasury Shares-Ordinary		1,600
	To record the receipt of $1.50 per share for 400 treasury shares costing $4 per share.		

- **Debit Cash ($1.5 x 400 = $600)**
- **Debit Share Premium ($1,600 - $600 = $1,000)**
- **Credit Treasury Shares - Ordinary ($4 x 400 = $1,600)**

  - **If Debited Share Premium > Balance of Share Premium (Credit):**
    - **Debit Share Premium by the left amount of Balance**
    - **Debit remaining Share Premium by Retained Earnings**

Statement of Profit or Loss and Other Comprehensive Income

- All non-owner changes in equity + other comprehensive income
- Can be 2 statements: Statement of Profit or Loss + Statement of Comprehensive Income

IFRS Corp
Statement of Profit or Loss and Other Comprehensive Income
For Year Ended December 31, 2015

Revenue		$ 198,000
Cost of goods sold		(100,000)
Gross profit		98,000
Other income		10,000
Selling expenses		(30,000)
Administrative expenses		(25,000)
Other expenses		(14,500)
Interest expense		(12,500)
Profit before tax		26,000
Income tax expense		(6,000)
Net profit		20,000
Other comprehensive income		
Revaluation surplus on property, plant and equipment	$40,000	
Foreign currency translation differences	8,000	
Other comprehensive income for year, net of tax		48,000
Total comprehensive income for the year		$ 68,000

Statement of Changes in Equity

- This statement includes the total amount of comprehensive income, but its main purpose is to show the amounts of transactions with shareholders (e.g., share issues and dividends) and to provide a reconciliation of the opening and closing balance of each class of equity and each reserve.
- Also shows the effects of any changes in accounting policies and correction of prior period errors.

IFRS Corp
Statement of Changes in Equity
For Year Ended December 31, 2015

	Share Capital	Retained Earnings	Reserves	Total Equity
Balance as at December 31, 2014	$1,000,000	$570,000	–	$1,570,000
Changes in accounting policy or correction of prior period error	–	1,000	–	1,000
Restated balance	1,000,000	571,000	–	1,571,000
Net profit	–	20,000	–	20,000
Other comprehensive income	–	–	48,000	48,000
Issuance of shares	200,000	–	–	200,000
Purchase of treasury shares	–	–	(150,000)	(150,000)
Dividends	–	(10,000)	–	(10,000)
Balance as at December 31, 2015	$1,200,000	$581,000	$(102,000)	$1,679,000

Reserves

- Most reserves result from accounting standards to reflect certain measurement changes in equity rather than the income statement, e.g. asset revaluation reserve, foreign currency translation reserve and other statutory reserves.
- Retained earnings are also called revenue reserves.
- **Ending Retained Earnings = Beginning Retained Earnings + Net Profit - Dividends**

Earnings Per Share (EPS)

- serves as an indicator of a company's profitability; he higher a company's EPS, the more profitable it is considered.
- EPS indicates how much money a company makes for each share of its stock and is a widely used metric for corporate profits.
- A higher EPS indicates more value because investors will pay more for a company with higher profits.

$$\textbf{Basic earnings per share} = \frac{\textbf{Net profit - Preference dividends}}{\textbf{Weighted-average ordinary shares outstanding}}$$

Price-Earnings Ratio (P/E Ratio)

- reveals information about the stock market's expectations for a company's future growth in earnings, dividends, and opportunities.
- gives investors a better sense of the value of the company
- The higher the PER, the greater expectation of future growth.

$$\text{Price–Earnings Ratio} = \frac{\text{Market value (price) per share}}{\text{Earnings per share}}$$

Dividend Yield

- Tells us the annual amount of cash dividends distributed to ordinary shareholders relative to the share's market price.

$$\text{Dividend Yield} = \frac{\text{Annual cash dividends per share}}{\text{Market value per share}}$$

Book Value Per Share - Ordinary

- Reflects the amount of shareholders' equity applicable to ordinary shares on a per share basis.

$$\text{Book value per ordinary share} = \frac{\text{Shareholders' equity applicable to ordinary shares}}{\text{Number of ordinary shares outstanding}}$$

Chapter 16: Statement of Cash Flows

Purpose of the Statement of Cash Flows

- How does a company obtain its cash?
    - Operation? Financing Activities?
- What explains the change in the cash balance?
- Where does a company spend its cash?

Importance of Cash Flows

- How did the business fund its operations?
    - Issuing debt?
    - Issuing equity (shares)?
- Does the business have sufficient cash to pay its debts as they mature?
- Did the business make any dividend payments?
- Did the business borrow any funds or repay any loans?

Measurement of Cash Flows

- Currency
- Cash Equivalents
    - Short-term, highly liquid investments

- Readily convertible into cash
- Sufficiently close to maturity so that market value is unaffected by interest rate changes

Classification of Cash Flows

- The Statement of Cash Flows includes the following three sections:
  - Operating Activities
  - Investing Activities
  - Financing Activities

Operating Activities

- The principal revenue-producing activities of the entity and other activities that are not investing or financing activities
- Generally include those transactions and events that determine net profit.
- Examples of inflows are:
  - Cash receipts from the sale of goods and the rendering of services
  - Cash receipts from royalties, fees, commissions, and other revenue
- Examples of outflows are:
  - Cash payments to suppliers for goods and services (purchases)
  - Cash payments to and on behalf of employees (paying wages)

Investing Activities

- The acquisition and disposal of long-term assets and other investments not included in cash equivalents.
- Examples of inflows are:
  - Cash receipts from sales of PPE, intangibles and other long-term assets
  - Cash receipts from sales of equity or debt instruments of other entities
  - Cash receipts from the repayment of advances and loans made to other parties
- Examples of outflows are:
  - Cash payments to acquire PPE, intangibles and other long-term assets
  - Cash payments to acquire equity or debt instruments of other entities
  - Cash advances and loans made to other parties

Financing Activities

- Activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.
- Examples of inflows are:
  - Cash proceeds from issuing shares or other equity instruments
  - Cash proceeds from issuing debentures, loans, bonds, mortgages, and other short-term or long-term borrowings (debt instruments)
- Examples of outflows are:
  - Cash payments to owners to acquire or redeem the entity's shares (ex. Dividends, purchase of treasury stocks)

- Cash payments of amounts borrowed (debt)

Classification of Cash Flow Items

	Operating	Investing	Financing
Interest received	Yes	Yes	
Dividends received	Yes	Yes	
Interest paid	Yes		Yes
Dividends paid	Yes		Yes

Noncash Investing and Financing

- Items requiring separate disclosure include:
    - Retirement of debt by issuing equity securities
    - Conversion of preference shares to ordinary shares

Format of the Statement of Cash Flows

- Must make sure that sum of cash flows of all activities is equal to the net increase or decrease in cash

COMPANY NAME
Statement of Cash Flows
For *period* Ended *date*

Cash flows from operating activities	
[List of individual inflows and outflows]	
Net cash provided (used) by operating activities	$ #
Cash flows from investing activities	
[List of individual inflows and outflows]	
Net cash provided (used) by investing activities	#
Cash flows from financing activities	
[List of individual inflows and outflows]	
Net cash provided (used) by financing activities	#
Net increase (decrease) in cash	$ #
Cash (and equivalents) balance at prior period-end	#
Cash (and equivalents) balance at current period-end	$ #

Separate schedule or note disclosure of any "noncash investing and financing transactions" is required.

Preparing the Statement of Cash Flows

1. Compute net increase or decrease in cash (using an information from Balance Sheet)
2. Compute net cash from operating activities
3. Compute net cash from investing activities
4. Compute net cash from financing activities
5. Prove and report beginning and ending cash balances

Analyzing the Cash Account

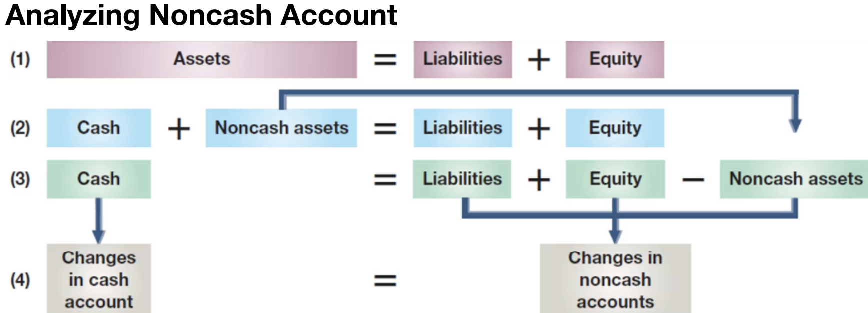
- The Cash account is a natural place to look for information about cash flows from operating, investing, and financing activities
- Debit: Beginning and ending balance, receipts (from customers, asset sales, share issuance, dividends, etc.)

- Credit: Payments (for merchandise, wages, interest, taxes, dividends, assets, etc.)

Cash			
Balance, Dec. 31, 2014	12,000	Payments for merchandise	319,000
Receipts from customers	570,000	Payments for wages and operating expenses	218,000
Receipts from asset sales	12,000	Payments for interest	8,000
Receipts from share issuance	15,000	Payments for taxes	5,000
Receipts from dividends	16,000	Payments for assets	10,000
		Payments for notes retirement	34,000
		Payments for dividends	14,000
Balance, Dec. 31, 2015	33,000		

GENESIS Statement of Cash Flows For Year Ended December 31, 2015			
Cash flows from operating activities			
Cash received from customers	$570,000		
Cash paid for merchandise	(319,000)		
Cash paid for wages and other operating expenses	(218,000)		
Cash paid for taxes	(5,000)		
Cash received from dividends*	16,000		
Cash paid for interest**	(8,000)		
Net cash from operating activities		$36,000	Cash from Operating
Cash flows from investing activities			
Cash received from sale of property, plant and equipment	12,000		
Cash paid for purchase of property, plant and equipment	(10,000)		
Net cash from investing activities		2,000	Cash from Investing
Cash flows from financing activities			
Cash received from issuing shares	15,000		
Cash paid to retire notes	(34,000)		
Cash paid for dividends***	(14,000)		
Net cash used in financing activities		(33,000)	Cash from Financing
Net increase in cash		$5,000	
Cash balance at prior year-end		12,000	
Cash balance at current year-end		$17,000	

Analyzing Noncash Account



Information to Prepare the Statement of Examples of inflows

- Information to prepare the statement of cash flows usually comes from three sources:
  - Comparative Statements of Financial Position
  - Current Income Statement
  - Additional Information

Application of the Indirect Method of Reporting

GENESIS
Income Statement
For Year Ended December 31, 2015

Sales		$590,000
Cost of goods sold		(300,000)
Gross profit		290,000
Wages and other operating expenses	(216,000)	
Depreciation expense	(24,000)	
Loss on sale of property, plant and equipment	(6,000)	(246,000)
Operating profit		44,000
Dividend income on financial assets		16,000
Interest expense		(7,000)
Profit before tax		53,000
Income tax expense		(15,000)
Net profit		$ 38,000

GENESIS
Statements of Financial Position
December 31, 2015 and 2014

	2015	2014
Assets		
Current assets		
Cash	$ 17,000	$ 12,000
Accounts receivable	60,000	40,000
Merchandise inventory	84,000	70,000
Prepaid expenses	6,000	4,000
Total current assets	167,000	126,000
Noncurrent assets		
Property, plant and equipment	250,000	210,000
Accumulated depreciation	(60,000)	(48,000)
Total assets	$357,000	$288,000
Liabilities		
Current liabilities		
Accounts payable	$ 35,000	$ 40,000
Interest payable	3,000	4,000
Income tax payable	22,000	12,000
Total current liabilities	60,000	56,000
Long-term notes payable	90,000	64,000
Total liabilities	150,000	120,000
Equity		
Share capital—Ordinary, no-par value	95,000	80,000
Retained earnings	112,000	88,000
Total equity	207,000	168,000
Total liabilities and equity	$357,000	$288,000

Ex. Additional information on Genesis Inc.'s 2015 transactions:

a) **The accounts payable balances result from merchandise inventory purchases.**
b) **Purchased $70,000 in PPE by paying $10,000 cash and issuing $60,000 of notes payable.**
c) **Sold PPE with an original cost of $30,000 and accumulated depreciation of $12,000 for $12,000 cash, yielding a $6,000 loss.**
d) **Received $15,000 cash from issuing 3,000 shares of no-par ordinary shares.**
e) **Paid $34,000 cash to retire notes with a $34,000 carrying amount.**
f) **Declared and paid cash dividends of $14,000.**
g) **Received all its dividend income on financial assets in cash of $16,000.**

Why start with Profit before Tax?

- International Financial Reporting Standards (IFRS)
    - Cash flows arising from taxes on profit should be separately disclosed and should be classified as cash flows from operating activities.

GENESIS
Statement of Cash Flows
For Year Ended December 31, 2015

	Cash flows from operating activities		
	Net profit	38,000	
	Income tax expense	15,000	
	Profit before tax	53,000	
	Adjustments to reconcile profit to net cash from operating activities		
1	Depreciation expense	24,000	
2	Loss on sale of property, plant and equipment	6,000	
3	Increase in accounts receivable	(20,000)	
3	Increase in merchandise inventory	(14,000)	
3	Increase in prepaid expenses	(2,000)	
3	Decrease in accounts payable	(5,000)	
4	Dividend income	(16,000)	
4	Interest expense	7,000	
	Cash generated from operating activities	33,000	
	Income tax paid	(5,000)	
	Dividend received*	16,000	
	Interest paid**	(8,000)	
	Net cash from operating activities		36,000

1. Adjustments for Operating Items not Providing or Using Cash

- Net Profit + Income tax expense = Profit Before Tax
- Addition of Depreciation expense

2. Adjustments for Non-operating Items

- Loss on sale of property, plant and equipment = Investing Activities (does not result in decrease in operating cash flow) = addition
- Addition of Loss on sale of property, plant and equipment

3. Adjustments for Changes in Noncash Current Assets and Current Liabilities

- Reduction from Increase in accounts receivable
- Reduction from Increase in merchandise inventory
- Reduction from Increase in prepaid expenses
- Reduction from Decrease in accounts payable

	Change in Account Balance During Year	
	Increase	**Decrease**
Noncash Current Assets	Subtract from profit	Add to profit
Current Liabilities	Add to profit	Subtract from profit

Interest Revenues, Dividend Revenues, Interest Expenses and Income Taxes

- Under IFRS, interest and dividends received, interest paid and income taxes must be separately shown.
- Since interest and dividend revenues are added to derive profit, adjustments involve deducting these amounts from profit.
- Interest expenses are added to profit to cancel the earlier deduction

Profit before tax

+Depreciation, depletion, amortization, and impairment — (1) Adjustments for operating items not providing or using cash

+Losses from disposal of long-term assets
−Gains from disposal of long-term assets
— (2) Adjustments for nonoperating items

+Decrease in noncash current asset
−Increase in noncash current asset
+Increase in current liability*
−Decrease in current liability*
— (3) Adjustments for changes in noncash current assets and current liabilities

+Interest expense
−Interest income
−Dividend income
— (4) Adjustments for separate disclosure of dividend received, interest received, or interest paid

Net cash from (used in) operating activities

* Excludes current portion of long-term debt and any (non-sales-related) short-term notes payable—both are financing activities.

Examples:

1. **a company used the indirect method to determine its cash flows from operating activities. Use the following information to determine its net cash from or used in operating activities. The company does not pay taxes.**

Net profit	$15,200
Depreciation expense	10,000
Cash payment on notes payable	8,000
Gain on sale of land	3,000
Increase in inventory	1,500
Increase in accounts payable	2,850

Net profit	$15,200
Depreciation expense	10,000
Gain on sale of land	(3,000)
Increase in inventory	(1,500)
Increase in accounts payable	2,850
Net cash from operating activities	$23,550

2. **The following information is available regarding a company's annual salaries and wages. What amount of cash is paid for salaries and wages?**

Salaries and wages expense	$255,000
Salaries and wages payable, prior year-end	8,200
Salaries and wages payable, current year-end	10,900

Cash paid for salaries and wages = $255,000 + $8,200 - $10,900 = $252,300

3. **The following information is available for a company. What amount of cash is paid for merchandise for the current year?**

Cost of goods sold	$545,000
Merchandise inventory, prior year-end	105,000
Merchandise inventory, current year-end	112,000
Accounts payable, prior year-end	98,500
Accounts payable, current year-end	101,300

Increase in inventory = $112,000 - $105,000 = $7,000
Increase in Accounts Payable = $101,300 - $98,500 = $2,800
Cash paid for merchandise = $545,000 + $7,000 (debit) - $2,800 (credit) = $549,200

Accounts Payable			Merchandise Inventory	
	98,500		105,000	
	101,300		112,000	

Analyzing Cash Sources and Uses

- Most managers stress the importance of understanding and predicting cash flows for business decisions.

($ thousands)	BMX	ATV	Trex
Cash provided (used) by operating activities	$90,000	$40,000	$(24,000)
Cash provided (used) by investing activities			
Proceeds from sale of plant assets			26,000
Purchase of plant assets	(48,000)	(25,000)	
Cash provided (used) by financing activities			
Proceeds from issuance of debt			13,000
Repayment of debt	(27,000)		
Net increase (decrease) in cash	$15,000	$15,000	$ 15,000

Cash Flow on Total Assets

$$\text{Cash flow on total assets} = \frac{\text{Net cash flow from operating activities}}{\text{Average total assets}}$$

ACCT 1101 Introduction to Financial Accounting

Chapter 17: Financial Statement Analysis

Basics of Analysis

- Financial Statement analysis helps users make better decisions
  - Reduces uncertainty
  - Application of analytical tools
  - Involves transforming data
  - Internal users: Managers, Officers (Planning & Controlling), Internal Auditors
  - External users: Shareholders (measure to determine the risk of the investment), Lenders (evaluation on whether the business has good liquidity to pay off debt), Customers (evaluate company's stability)
- **Building Blocks of Analysis**
  - Liquidity and efficiency
  - Solvency
  - Profitability
  - Market prospects`
- **Information for Analysis**
  - Statement of Profit or Loss & Other Comprehensive Income (Income statement)
  - Statement of Financial Position
  - Statement of Changes in Equity
  - Statement of Cash Flows
  - Notes to the Financial Statements
- **Standards for Comparison**
  - When we interpret our analysis, it is essential to compare the results we obyained to other standards or benchmarks:
  - Potential benchmarks:
    - Intracompany (Ex. Comparing the company at Year 2019 to Year 2018)
    - Competitors (Ex. Comparing a company that is in a same industry; also known as cross-sectional analysis)
    - Industry (Ex. Company versus the industry as a whole)
    - Guidelines
- **Tools of Analysis**
  - **Horizontal Analysis**
    - Comparing company's financial condition and performance across time
    - Intracompany analysis

ADIDAS
Comparative Statements of Financial Position
December 31, 2013 and December 31, 2012

(in EUR millions)	2013	2012	Euro Change	Percent Change
Cash and cash equivalents	1,587	1,670	(83)	(5.0)
Short-term financial assets	41	265	(224)	(84.5)
Accounts receivable	1,809	1,688	121	7.2
Other current financial assets	183	192	(9)	(4.7)
Inventories	2,634	2,486	148	6.0
Income tax receivables	86	76	10	13.2
Other current assets	506	489	17	3.5
Assets classified as held for sale	11	11	0	0.0
Total current assets	6,857	6,877	(20)	(0.3)
Property, plant and equipment	1,238	1,095	143	13.1
Goodwill	1,204	1,281	(77)	(6.0)
Trademarks	1,419	1,484	(65)	(4.4)
Other intangible assets	164	167	(3)	(1.8)
Long-term financial assets	120	112	8	7.1
Other noncurrent financial assets	30	21	9	42.9
Deferred tax assets	486	528	(42)	(8.0)
Other noncurrent assets	81	86	(5)	(5.8)
Total noncurrent assets	4,742	4,774	(32)	(0.7)
Total assets	11,599	11,651	(52)	(0.4)

- Change in Dollar Amount
  - Dollar Change = Analysis Period Amount - Base Period Amount
  - Analysis Period Amount = usually the current year
  - Base Period Amount = usually the prior year
- Change as a Percent
  - Percentage Change = Dollar Change / Base Period Amount x 100
  - Better interpretation than the actual dollar difference
- Trend Analysis
  - Used to reveal patterns in data covering successive periods
  - Trend Percent = Analysis Period Amount / Base Period Amount x 100
  - We can use the trend percentages to construct a graph so we can see the trend over time.

- **Vertical Analysis**
  - Comparing company's financial condition and performance to a base amount
  - Ex. Comparing the company's expense to a revenue (base amount)
  - Common-Size Statements
    - Common-size Percent = Analysis Amount / Base Amount x 100
    - Base Amount - Total Assets (Statement of Financial Position), Revenues (Income Statement)
- **Ratio Analysis**
  - Measurement of key relations between financial statement items
  - Liquidity, Efficiency, Solvency
    - **Liquidity = measures whether the firm has sufficient resources (esp. cash) to pay its short-term liabilities**
      - **Current Ratio**

                - Current Ratio = Current Assets / Current Liabilities
                    - Current Assets = Cash, Short-term investments + account receivables + inventories + prepaid inventories
                - Measuress the short-term debt-paying ability of the company. A higher current ratio suggests a strong liquidity position.
            - **Acid-test Ratio**
                - Acid-test Ratio = Cash + Short-term investments + Current receivables / Current Liabilities
                    - Quick Assets = Cash + Short-term investments + Current receivables
                - Like current ratio but excludes inventories & prepaid expenses that may be difficult to quickly convert into cash
- **Efficiency = measures whether the firm is efficient in terms of managing its assets**
    - **Days' Sales in Inventory**
        - Days' Sales in Inventory = Ending inventory / Cost of goods sold x 365
        - Useful measure in evaluating inventory liquidity
        - If a product is demanded by customers, this formula estimates how long it takes to sell the inventory
        - The higher the ratio, the worse the firm is controlling its inventory
    - **Total Asset Turnover**
        - Total Asset Turnover = Net sales / Average total assets
            - Average total assets = ((Beginning + Ending) / 2)
        - Reflects a company's ability to use its assets to generate sales.
        - It is an important indication of operating efficiency.
    - **Inventory Turnover**
        - Inventory Turnover = Cost of goods sold / Average Inventory
            - Average Inventory = ((Beginning + Ending) / 2)
        - Measures the number of times merchandise is sold and replaced during the year
    - **Accounts Receivable Turnover**
        - Accounts Receivable Turnover = Net sales / Average accounts receivable

        - Average Accounts Receivable = ((Beginning + Ending) / 2)
      - Measures how many times a company converts its receivables into cash each year
- **Solvency**
  - **Debt Ratio**
    - Debt Ratio = Total Liabilities / Total Liabilities and equity
    - Expresses total liabilities as a percent of total assets
    - The higher the debt ratio, the more the firm's asset is composed of liabilities
  - **Debt-to-Equity Ratio**
    - Debt-to-Equity Ratio = Total Liabilities / Total Equity
    - Measures what portion of a company's assets are contributed by creditors
    - A larger ratio implies less opportunity to expand through use of debt financing
  - **Times Interest Earned**
    - Times interest earned = Income before interest expense and income taxes / interest expense
      - Income before interest and taxes = Net profit + interest expense + income taxes
    - This is the most common measure of the ability of a company's operations to provide protection to long-term creditors
    - The higher the ratio, the higher the ability for the firm to pay its interests in the future
- **Profitability**
  - **Profit Margin Ratio**
    - Profit Margin = Net Profit / Net Sales
    - Describes a company's ability to earn net profit from each sales dollar
    - The higher the ratio, the better the firm can process its net profit from its net sales
    - Ex. You have a ratio of 0.8. If you sell $5 ice cream, you are making $4 profit per unit.
  - **Return on Total Assets**
    - Return on Total Assets = Net Profit / Average total Assets
      - Average Return on Total Assets = ((Beginning + Ending) / 2)
    - Return on Total Assets = Profit Margin x Asset Turnover

            - (Net profit / Sales) x (Sales / Average total assets)
        - Measures how well assets have been employed by the company's management
        - How to improve the ratio: increase the profit margin, improve the operational efficiency
    - **Return on Equity**
        - Return on Equity = Net profit / Shareholders' Equity
            - shareholders' equity = total assets - total liabilities
        - measure of how effectively management is using a company's assets to create profits.
        - How to improve the ratio: increase the debt ratio
- **Market Prospects**
    - **Profit-earnings ratio**
        - Profit-earnings ratio = Market price per ordinary share / Earnings per share (EPS)
            - EPS = Net profit / number of ordinary shares
        - Often used by investors as a general guideline in gauging share values
        - The higher the price-earnings ratio, the more opportunity a company has for growth
    - **Dividend Yield**
        - Dividend Yield = Annual cash dividends per share / Market price per share
        - Identifies the return, in terms of cash dividends, on the current market price per share of the company's oridnary shares
        - If Dividend Yield = 0.1 (1/10), the investor will be paid back in 10 years (0.1 x 10 = 1)
- **Working Capital**
    - Current Assets - Current Liabilities = Working Capital
    - Represents current assets financed from long-term capital sources that do not require near-term repayment
    - More working capital suggests a strong liquidity position and ability to meet current obligations