Chapter 1

Income Statement

Example Company
Statement of Income
for the year ended December 31, 20x3

Sales		$3,040,000
Cost of goods sold		1,680,000
Gross margin		1,360,000
Expenses		
Depreciation	$128,000	
Insurance	9,600	
Rent	24,000	
Salaries	256,000	417,600
Operating Income		942,400
Interest expense		120,000
Interest income		16,000
Net income before taxes		838,400
Income tax expense		366,400
Net income		$472,000

Note that the above approach is not required. Alternative presentation approaches are also acceptable.

Statement of Changes in Shareholders' Equity

XYZ Company
Statement of Changes in Shareholders' Equity
For the year ended December 31, 20x6

	Common Stock	*Retained Earnings*	*Total*
Balance, Jan 1, 20x6	$100,000	$250,000	$350,000
Net income		450,000	450,000
Issue of capital stock to shareholders	200,000		200,000
Purchase of capital stock from shareholders	(50,000)		(50,000)
Dividends		(120,000)	(120,000)
Balance, Dec 31, 20x6	$250,000	$580,000	$830,000

Riddler's Inc.
Statement of Changes in Shareholders' Equity
for the year ended December 31, 20x8

	Preferred Shares	*Common Shares*	*Retained Earnings*
Balance, Jan 1, 20x8	$8,000	$5,000	$750,375
Issue of common stock		5,000	
Net income			85,325
Dividends			(2,000)
Balance, December 31, 20x8	$8,000	$10,000	$833,700

The Statement of Changes in Shareholders' Equity is a mandatory statement for a public company in Canada. Private companies are only required to present a statement of changes in Retained Earnings, although the changes in all other Shareholder Equity accounts have to be disclosed in the notes to the financial statements. A statement of changes in retained earnings would essentially be the same as the one shown above except that it would only be comprised of the Retained Earnings column.

Statement of Owner's Equity (sole proprietorship)

Joe's Fish and Chips
Statement of Owner's Equity
December 31, 2011

Joseph Campbell, Capital January 1, 2011	$ 23,500
Net Income	48,000
Drawings	(20,000)
Joseph Campbell, Capital December 31, 2011	$ 51,500

Sole Proprietorship - A sole proprietorship is a business that is owned by one person. The owner, as such, would receive all profit from the business. However, the owner would also be solely liable for any debts incurred by the business. The owner may operate the business as well as own it, or the owner may employ others.

Statement of Partner's Equity

Jolly Molly's Crafts
Statement of Partner's Equity
December 31, 2011

	Molly Abersmith Capital	Jennifer Golden Capital	Total Capital
Partner Capital, January 1, 2011	$20,000	$ 7,000	$27,000
Net Income *	30,000	10,000	40,000
Partner drawings	25,000	10,000	35,000
Partner Capital, December 31, 2011	$25,000	$ 7,000	$32,000

* Note: As per the partnership agreement, Molly received 75% of the profits and Jennifer received 25%.

Partnership: A partnership is a business that is owned by two or more people. The percent owned by any partner can be anything, so long as the total of all partners adds up to 100%. For example, you could have two partners, one that owns 1% of the company and one that owns 99%; or you could have four partners with 25% ownership each. There are no rules in determining the split of the ownership, so long as all partners agree. As well, it should be noted that the partnership agreement that is agreed to will state the income split between partners. This would not necessarily be equal to the percentage ownership of each partner.

Statement of Retained Earnings

Tron Inc.
Statement of Retained Earnings
For the year ended December 20x9

Retained Earnings, Beg. 20x9	$1,860
Net Income for the year 20x9	4,270
Less Dividends	-
Retained Earnings, End 20x9	$6,130

Balance Sheet

Grow Company
Balance Sheet
As at December 31, 2007

ASSETS	
Current Assets	
Cash	$ 3,200
Accounts receivable	3,650
Inventory	6,000
	12,850
Land	13,000
Buildings	29,700
Equipment	16,490
	59,190
	$72,040
LIABILITIES AND SHAREHOLDERS' EQUITY	
Current Liabilities	
Accounts payable	$ 2,480
Wages payable	750
Income taxes payable	2,500
	5,730
Bonds payable	8,000
	13,730
Shareholders' Equity	
Common shares	25,000
Retained earnings	33,310
	58,310
	$72,040

Riddler's Inc.
Statement of Financial Position
as at December 31, 20x8

ASSETS		
Current Assets		
Cash		$ 23,000
Short-term investments		12,000
Accounts receivable		4,100
Inventory		10,200
Prepaid insurance		2,000
		51,300
Noncurrent Assets		
Land		800,000
Building	$575,000	
Less accumulated depreciation	25,125	549,875
Equipment	16,500	
Less accumulated depreciation	6,200	10,300
		1,360,175
		$1,411,475
SHAREHOLDERS' EQUITY AND LIABILITIES		
Current liabilities		
Accounts payable		$ 3,000
Income taxes payable		30,000
Interest payable		675
Salaries payable		10,100
Unearned revenue		1,000
Current portion of mortgage payable		15,000
		59,775
Long-Term Liabilities		
Mortgage payable		500,000
		559,775
Shareholders' Equity		
Preferred Shares		$ 8,000
Common Shares		10,000
Retained earnings		833,700
		851,700
		$1,411,475

Chapter 4 - Formulas / Calculations

Ratio Analysis

Liquidity Analysis		
Current Ratio	Current Assets ÷ Current Liabilities	tells us how much current assets there are relative to current liabilities.
Quick Ratio (Acid-Test Ratio)	(Cash + Accounts Receivable + Temporary Investments) ÷ Current Liabilities	how much liquid current assets there are relative to current liabilities
Solvency Analysis		
Debt-to-Equity Ratio	Long-term Debt ÷ Shareholders' Equity	
Times Interest Earned	Income before Interest and Taxes ÷ Interest expense	is a good judge of a firm's solvency. A firm with a times interest earned ratio of 2.0 is generating operating income that is only twice as high as interest charges. Such a firm's exposure to fluctuations in interest rates is high. How many times the operating income can cover interest expense
Profitability Analysis		
Gross Profit %	Gross Profit ÷ Sales	
Return on Sales	Net income ÷ Sales	
Return on **Assets**	Net income ÷ Average total	Average = (current yr +

	assets x 100	previous yr) ÷ 2
Return on Equity	Net Income ÷ Average shareholders' equity	
Asset Management Ratios (activity ratios)		
Inventory turnover	Cost of goods sold ÷ Average Inventory	measures the number of times the inventory rolls over within a year
Days Sales in **Accounts Receivable**	Average Accounts Receivable ÷ (Net Credit Sales ÷ 365)	tells us what the average number of days our accounts receivable have been outstanding
Asset turnover	Sales ÷ Average total assets	tells us how many sales dollars are generated by each dollar of asset invested

Net Sales	Sales - sales allowance - sales discounts - sales returns
Cost of Goods Sold	Beg inventory ADD purchases LESS ending inventory **COGS = BI + P - EI**
Ending Inventory	Beg inventory ADD purchases LESS COGS **EI = BI + P - COGS**
Straight Line Depreciation	**(purchase cost / useful life in years) x m/12**
Double Declining	NBV / useful life x 2 **Year 1** | | **Calculation** | | | | **Calculation** Cost | $578,107.00 | | Depreciation | Year 1 | $128,468.22 | (578,107/9)*2 Useful life | 9.00 **Year 2** Net Book Value | $449,638.78 | 578,107-128,468.2 = 449638.8 | Depreciation | Year 2 | $ 99,919.73 | (449,638.78/9)*2 Useful Life | 9.00
Insurance expense	**(cost of insurance policy / duration of insurance**

	policy in months) x m/12
Interest Expense/ Revenue	**principal x interest rate x m/12** • rate is always per annum so it's always divided by 12
Retained Earnings	**End bal = beg bal + net income (or - net income loss) - dividends declared** OR Asset - liabilities - common stocks (and other equity accounts) **Beg bal = End bal - net income + dividends declared** OR Asset - liabilities - common stocks (and other equity accounts) from previous year balance sheet

Cash Balance per **books** (bank statement)	**Cash balance per bank (end of month)** **ADD** deposits in transit **LESS** outstanding cheques **ADD/LESS** bank errors
Cash balance per **bank** (beg bank statement balance/ pre adj)	**Adjusted/revised cash balance** **ADD** outstanding cheques **LESS** deposits in transits **ADD/LESS** bank errors *opposite of cash balance per book calculations
Adjusted/revised Cash balance per books	**Cash balance per books** (pre-adjusted cash balance in the book) • if not given: beg bal = previous month end bal (from bank statement) + cash receipts - cash payment receipts **LESS** bank fees, interest (expense) **ADD/LESS** errors (made by accountant), NSF ***NSF**: • if customer's AR payment NSF (deducted from chequing already in bank statement) DEDUCT it

	in cash balance • if your AP payment NSF (payment returned to bank) ADD it back to cash balance
Fair Values (original cost)	**# of shares x value per share for the year**
FV Gain/Loss	**Gain**: # of shares x (current value per share - previous value per share) **Loss**: # of shares x (previous value per share - current value per share)
Accumulated OCI (other comprehensive income)	**# of shares x value per share for the year - original cost**

Chapter 5

Cash and Cash equivalents

- Bills and coins
  - Float
    - e.g. cash in cash register
  - Petty cash
- Cheques that have been written but not yet deposited
- Amounts in bank accounts
- Investments that are very much lik cash
  - very liquid (can be converted to cash quickly)
  - Known value (low risk)
  - e.g./ term deposits

Bank reconciliation, why?

- It is unusual for records in cash t-account to match bank statement.
  - Deposits in transit: Cheques received get recorded as a debit (increase) to cash, but it takes time to bring them to the bank and for the bank to process them.
  - Outstanding cheques: Cheques written get recorded as a credit (decrease) to cash, but it takes time for suppliers to take the cheques to the bank and for the money to be transferred out of the account.
  - Not-sufficient funds (NSF): Sometimes cheques "bounce" (because customer doesn't have enough money, so cash account was debited, but cash was never actually paid.
  - Service fees: fees aren't recorded as a credit (decrease) to cash until the exact amount of the fees are known when the bank statement is received.
  - Bank errors (rare in real life).

Bank Balance

  - Cash balance per **bank** (end of month)
    - Add deposits in transit
    - Less outstanding cheques
    - = Cash Balance per books
- Bank book ending balance should be the same as cash ending balance

- If bank is overstated
    - subtract from bank balance as bank error

Book Balance

- Cash balance per **books** (Pre-reconciliation cash balance)
    - **Opening balance =**
        - **Previous month ending balance** (from bank statement) **+** cash **receipts -** cash **payment receipts**
    - **Less** bank fees, interest, NSF, errors
    - **Add/Less** errors (made by accountant or incorrectly recorded in book)
    - = **Revised/adjusted** cash balance per books
- Adjusting entries
    - only record adjusting entries for changes in cash aside from sales
        - Ex. bank fees, errors, NSF etc
        - UNLESS question indicates it has appeared on bank statement (but not books)
    - DO NOT record cash received/payments
        - Cash received during December 77,000
        - Cash payments made during December 77,548
    - NSF related bank fees is to be included in AR (charged to customer)
    - Returned cheques from deducted from account on bank statement means it was paid to you before
        - AR -> NSF -> deduct from your account + NSF fees
        - NSF amount + NSF fees should be added to AR when doing adjusting entries

Date	Description	Amounts Deducted from Account (Debits)	Amounts Added to Account (Credits)	Balance
Sept. 30	Beginning balance			$12,587
Oct. 1	Deposit		$1,759	14,346
1	Cheque #599	$4,120		10,226
3	Cheque #603	1,114		9,112
4	Cheque #604	555		8,557
6	Deposit		2,187	10,744
8	Cheque #605	775		9,969
9	EFT Salaries	2,799		7,170
11	Cheque #606	145		7,025
15	Deposit		5,781	12,806
15	Cheque #607	875		11,931
18	EFT collection on account		1,620	13,551
21	Cheque #608	489		13,062
23	EFT Salaries	2,799		10,263
25	Returned cheque (NSF)	748		9,515
25	NSF processing fee	35		
29	Deposit			
30	Cheque #610	475		
31	Service charge	26		

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Taken out of account means it was deposited before. This means it was deducted from AR so now it needs to be added back in AR along with NSF fees)

- revised cash balance should be the same as ending bank balance

The next step will be to calculate the revised cash balance:

Cash balance, before adjustments	$43,579
Less bank service charges	(156)
Less NSF Cheque	(788)
Add error on cheque # 345	9
Cash balance after adjustments	$42,644

Finally, we prepare the bank reconciliation:

Cash per bank, August 31, 20x7	$45,673
Add outstanding deposits	3,545
Less outstanding cheques	(6,574)
Cash per books, August 31, 20x7	$42,644

Identifying Cash Balance Items

- What is to be included (added) in cash balance calculation
  - Cash on hand in cash registers
  - Visa and mastercard slips
  - balance in chequing account
  - US bank account
- What is NOT included in cash balance calculation
  - float
  - treasury bill/ money market funds
  - prepaid deposits
  - Sale without cash received

Investments in Equity Securities
Recording FVTPL

- Purchase, dividends, loss/gain, sale

Mar 15, 20x4	FVPTL Investments	$130,000	
	Cash		$130,000
Sep 30, 20x4	Cash	3,400	
	Dividend income		3,400
Dec 31, 20x4	FVPTL Investments	16,000	
	Gain on FVTPL Investments		16,000
	To record the increase in the fair value of the investment to 10,000 shares x $14.60 = $146,000.		
Apr 25, 20x5	Cash	138,000	
	Loss on sale of FVPTL Investments	8,000	
	FVTPL Investments		146,000

Recording FVTOCI

- Purchase, dividends, loss/game, sale

Mar 15, 20x4	FVTOCI Investments	$130,000	
	Cash		$130,000
Sep 30, 20x4	Cash	3,400	
	Dividend income		3,400
Dec 31, 20x4	FVTOCI Investments	16,000	
	Other Comprehensive Income – FVTOCI Investments		16,000
	To record the increase in the fair value of the investment to 10,000 shares x $14.60 = $146,000.		

Preparing Partial Statement of Comprehensive Income

Partial Statement oc Comprehensive Income	***20x1***	***20x2***	***20x3***
Income before gains/losses on FVTPL Investments	$ 200,000	$ 200,000	$ 200,000
Gain (loss) on FVTPL Investments	$ (2,040)	$ 9,120	$ 3,120
Profit for the year	$ 197,960	$ 209,120	$ 203,120
Other Comprehensive Income			
Gain (loss) on FVOCI Investments	$ 4,180	$ (13,200)	$ 2,750
Comprehensive income for the year	$ 202,140	$ 195,920	$ 205,870

- Income before gains/losses was given in the question
- gains/loss on FVTPL is taken from the corresponding journal entry
- gains/loss on FVOCI is also taken from the corresponding JE
- Comprehensive income for the year
    - Profit for the year + gain/loss on FVOCI

Preparing Partial Balance sheet in the accumulated other comprehensive income account

Partial Balance Sheet	***20x1***	***20x2***	***20x3***
Shareholders' Equity			
Accumulated Other Comprehensive Income			
Unrealized gains (losses) on FVTOCI			
Investments	$ 4,180	$ (9,020)	$ (6,270)

- Calculations for acc. OCI
    - 20x1
        - taken from partial statement of comprehensive income since there's no years prior
    - 20x2
        - Original cost - (# of shares x value per share for the year)
            - - $20,680 + (2200 x 5.3) = 9020 (loss)
            - If it's a loss, it should be negative (add negative in front of original and plus the loss)

Chapter 6 - Revenue and Accounts Receivable

Key Concepts

- **Credit sales:**
  - A sales is made on credit
- **Collections:**
  - Cash is collected on an account receivable
- **Write off:**
  - It is determined that a customer is likely to never pay
- **Recovery:**
  - by-golly they paid! A customer account previously written off actually pays
- **Bad debt expense:**
  - an estimated amount of all the credit sales made in this period, how many are likely to never pay.
  - made at the end of the period
- **Allowance for doubtful accounts ("A4DA"):**
  - An estimated amount of all the credit sales that are still outstanding (which is all the accounts receivable) how must is estimated to never be collected.

Revenue Recognition

- **5-step revenue recognition process.**
  1. Identify the **contract** with the customer.
     - when the customer pays for the goods/services
  2. Identify the separate **performance obligations** in the contract.
     - obligation to provide _____ product + obligation to provide _____ services over the course of _____ weeks/ months/ years
  3. Determine the **transaction price**.
     - total transaction price
  4. **Allocate the transaction price to** the separate **performance obligations** in the contract.
     - calculate discounted selling price for each item/services
  5. **Recognize revenue when** (or as) the **entity satisfies each performance obligation**.
     - Journal entry on the day the contract is signed

Cash	$300	
Deferred Revenue – Course		163
Revenue		137

     -
     - If service/product not yet delivered, credit entire cost in revenue
     - JE when service has been earned

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- Maintenance
  - Can be realized using % of completion method
    OR
  - Even distribution (divide the maintenance cost over the period)

- **Bundled services**
  - Allocate transaction price
    1. Calculate % selling price of each item at original cost relative to the total original cost of all items requested
       - original selling price / total original cost
    2. Calculate the discounted selling price of each item
       - total discounted price x % selling price of item
- **Long contracts**
  - Two methods
    - Revenue **recognized at the end of contract** when all services have been performed
    - **The Percentage of Completion method**
      - recognizes services over time
      - **Steps**:
        1. **Calculate % completed**
           - cost incurred to date / (cost incurred to date + expected cost for the year)
           - the last year % completion is 100%
        2. **Calculate revenue realized**
           - % completed x contract amount (price)
             - following years revenue rec:
               - (current yr % completion - previous yr % completion) x contract price
               - Or for the last year:
                 - contract amount - previous revenue realized
        3. **Calculate profit realized**
           - revenue realized for the year - cost incurred for the year
  - Formula

FORMULA

	Year 1	*Year 2*	*Year 3*	*Year 4*
ACTUAL Costs incurred during year	A	C	E	G
Expected costs to complete contract	B	D	F	-0-

Year 1 % completion	:= A / A+B
Year 1 Revenues	: = Yr 1 % completion X contract amount
Year 1 profits	: = Yr 1 revenues MINUS A
Year 2 % completion	:= (A+C) / (A+C +D)
Year 2 Revenues	: = (Yr 2 % completion - Yr 1 % completion) X contract amount
Year 2 profits	: = Yr 2 revenues MINUS C
Year 3 % completion	:= (A+C + E) / (A+C +E + F)
Year 3 Revenues	: = (Yr 3 % completion - Yr 2 % completion) X contract amount
Year 3 profits	: = Yr 3 revenues MINUS E
Year 4 % completion	:=100% (project is done!
Year 4 Revenues	: = (100 - Yr 3 % completion) X contract amount
Year 4 profits	: = Yr 4 revenues MINUS G

Accounts Receivable

- **Income statement method**
  - Estimates bad debt expenses based on % of credit sales
  - **% Credit Sales ->** BDE (solve for A4DA)
    - **Bad debt expense = credit sale x % given**
      - Ex. Credit sale $940,000, % given: 5%
        - bad debt = 940,000 x 0.05 = 47,000
    - **AFDA ending balance = beg bal - write offs (DR) + bad debts (CR) + recoveries (CR)**
      - Ex. beg bal: 22,000, write off: 45,000, bad debts: 47,000, recoveries: 5000
      - AFDA end bal = 22,000 - 45,000 + 47,000 + 5000
- **Balance sheet method**
  - Estimates ending balance of allowance for doubtful account for the year based on aging schedule or **% of AR**
  - **Aging schedule** -> ending balance of A4DA (then solve for BDE)
    - The aging method considers the fact that some invoices are older than others and thus they should factor in on a heavier basis in the calculation of the allowance for doubtful accounts
    - **AFDA = sum of % given x AR balance for each category**
    - Ex. assume the total receivables add up to $1,200,000 and that the aging of accounts receivable is as follows:

0 – 30 days	$750,000
31 – 60 days	280,000
61 – 90 days	120,000
90 + days	50,000
	$1,200,000

Based on past experience, the company estimates that **1% of current accounts** will eventually become uncollectible, **3%** of

accounts between 31-60 days, **8%** of accounts between 61-90 days and **40%** of accounts over 90 days. **The allowance for doubtful accounts at the end of the year will be**

0 – 30 days	$750,000 x 1%	$ 7,500
31 – 60 days	280,000 x 3%	8,400
61 – 90 days	120,000 x 8%	9,600
90 + days	50,000 x 40%	20,000
		$45,500

- **% of AR** -> ending balance of A4DA (then solve for BDE)
  - Ending balance of AR x % given
    - The allowance method
    - Ex. ending accounts receivable balance is $1,200,000 and the company estimates that 5% of these accounts will eventually become uncollectible
      - the AFDA at the end of the year will be $1,200,000 x 5% = $60,000
- **Solving for Bad Debt with AFDA balance**
  - Bad debt = End bal - beg bal - recoveries + write offs
    - AKA End bal **LESS all credit** transactions **PLUS debit** transactions
  - AFDA T-Account

	AFDA		
		63,000	Beg. Bal
		3,000	REC
W/O	55,000		
		86,350	BDE
		97,350	End. Bal

Beg Bal	Credit
Recovers	Credit
Write offs	Debit
Bad debt	Credit

- **Journal Entries**

1	Accounts receivable	940,000	
	Sales		940,000
	Records the credit sales		
2	Cash	700,000	
	Accounts receivable		700,000
	Record the collection of cash on outstanding accounts		
3	Allowance for doubtful accounts	45,000	
	Accounts receivable		45,000
	Records the write off		
4	Accounts receivable	5,000	
	Allowance for doubtful accounts		5,000
	Records the recovery. Part 1: undo write off		
5	Cash	5,000	
	Accounts receivable		5,000
	Records the recovery. Part 2: record collection		
6	Bad debt expense	47,000	
	Allowance for Doubtful accounts		47,000
	Records bad debt expense (end of period adjusting entry)		

- **Converting receivables into notes**
  - When customer cannot pay an outstanding receivable
  - Outstanding AR balance is converted into note receivable

Note receivable	30,000	
Accounts Receivable		30,000

  - To record receipt of interest payment

Cash	200	
Interest Revenue (30,000 x 8% x 1/12)		200

  - To record accrue interest

Interest Receivable	200	
Interest Revenue (30,000 x 8% x 1/12)		200

Interest Receivables and Dividend Revenues

- **Interest Receivable**
  - For now to year end
    - DR Interest receivable (principal x rate x m/12)
      - CR Interest Revenue
    - Ex. $100,000 loan at 6% rate, July 1 to December 31

Interest receivable ($100,000 x 6% x 6/12)	$3,000	
Interest revenue		$3,000

  - For end of loan
    - DR Cash (full amount of interest)

        - CR Interest receivable (to pay off previous year end adjusting entry made)
        - CR Interest revenue (to record remaining interest earned)
    - Ex.

On July, 1, 20x5, you will record the receipt of the $6,000 as follows:

Cash	$6,000	
Interest receivable		3,000
Interest revenue		3,000

- **Dividend Revenue**
    - *Dividend revenue* is recorded when the board of directors of a company in which we own shares has declared a dividend
    - To record dividends declared (for shares we own)
        - DR Dividends receivable (# shares x value per share)
            - CR Dividend revenue
        - Ex.

Dividends receivable (2,000 shares x $1)	$2,000	
Dividend revenue		$2,000

    - To record dividends paid (to us)
        - DR Cash
            - CR Dividend Receivable
        -

Cash	2,000	
Dividends receivable		2,000

Interest Charges on Outstanding AR

-

Interest Receivable	XXXX	
Interest Income		XXXX

- Ex. Southwestern Families Inc. extends credit to its customers with a net 30 day policy. Interest is charged at a rate of 12% per annum (1% monthly) after that. Upon doing a quarterly review of its receivables, Southwestern's accountant notices that Customer 1245 has an outstanding balance of $1,000 that has been outstanding for 120 days (4 months). What should the journal entry be to record the interest owing?
    -

Interest Receivable	$30	
Interest Income		$30
($1,000 x 3 months x 1%)		

    - 3 months because initial 30 day does not incur interest
- Outstanding AR interest added to account
    -

d.	Accounts Receivable	18,700	
	Interest Income		18,700

Dishonour of Notes Receivable

- If it is expected
    - continue to accumulate interest receivable

- If unexpected
  - DR AFDA principal amount
    - CR Notes receivable principal amount

Allowance for doubtful accounts	50,000	
Notes receivable		50,000

Chapter 7 - Inventory

-

Inventory Control Systems

- **Perpetual**
  - as inventory is purchased, as sales are made, inventory is updated (accounting system keeps track)
  - Most common
- **Periodic**
  - not updated
  - Inventory is counted by hand, instead of relying on accounting system
  - Inventory purchases are recorded in a purchases account
  - Cost of sales is determined indirectly
  - Less common

Journal Entries

- **Perpetual**

  When inventory is purchased

  Dr Inventory

  Cr Cash (or AP)

  When inventory is sold

  Dr Cash (or AR)

  Cr Revenue

  Dr COGS (based on costing formula)

  Cr Inventory

  End of period

  No adjusting entry needed

  Inventory might be physically counted during an annual audit
  -
- **Periodic**

When merchandise is purchased

Dr Purchases

Cr Cash (or AP)

When inventory is sold (no entry regarding COGS.)

Dr Cash (or AR)

Cr Revenue

End of period (after inventory is physically counted)

Dr COGS (based on costing formula)

Cr Purchases

Cr Inventory

Formula: COGS = Beg Inv + purchases – End Inv.

- **Adjusting inventory amount**
  - Inventory = **end inventory - beg inventory**
    - If ending inv **>** beg inv, then debit inventory
    - If ending inv **<** beg inv, then credit inventory

- **COGS Equation**
  - Beginning Inventory
    + Purchases
    = Cost of Goods Available for Sale
    - Ending Inventory
    = Cost of Goods Sold

- Accounting:
  - **Beginning inventory + purchases = ending inventory + COGS**
- English:
  - At the end of the period, all the inventory the company has purchased, ever, must be either still in inventory ("ending inventory") or sold ("COGS")**

- The inventory purchased includes batches that have different actual costs.

- Inventory costing estimates a reasonable allocation between ending inventory and cost of goods sold.

Three Cost Approaches (Inventory Valuation Methods)

- **Specific identification**
  - No estimation
  - Actual COGS assigned to each individual unit of inventory
  - Applies to custom works of art and items with serial numbers
  - Financial statements can be manipulated by selling items with higher or lower COGS
- **Cost Flow Assumption**
  - **for undistinguishable inventory**
  - **First in First Out (FIFO)**
    - When an item is sold, we estimate COGS by **assuming items are sold in the order they entered inventory**. There is no actual requirement that items be sold in that order.
      - Ex. gumball dispenser is filled with 100 gumballs
        - the first 50 cost the company $0.03
        - the next 50 cost the company $0.05.
    - **COGS = opening inventory + earlier purchases**
    - COGS and the ending inventory cost will be the same no matter if using perpetual or periodic system
    -
  - **Average cost**
    - The cost of a product sold is estimated using a **weighted average of all items** in inventory.
    - **Use 4 decimal points when calculating**
      - Ex When the first gumball is sold, we assume the COGS was $0.04. Assumes NRV > $0.04
- LIFO is no longer used

Calculations

- **Periodic method**
  - **FIFO**
    - **Step 1**
      - **Calculate # of units in ending inventory with respective cost** attached (from most recent purchases)
        - Look at the most recent purchases to find # of units leftover at they're respective batch price
          - **# units purchased ex**

Chapter 8 - Recognition of Property, plant and Equipment

Recognition of Property, plant and Equipment

- Tangible assets (can be seen and touched)
- 2 criteria
    - asset is held for use in the production or supply of goods, services, for rental to others or administrative purposes and
    - is expected to be used during more than one period

Allocating Cost of Group Purchase of Assets

- Individual fair market value per appraisal is used for allocation %
- Steps
    1. Add total of group purchase at FMV
    2. divide individual FMV of each asset by the total FMV to get the %
    3. total cost of purchase x % for each asset
- Example

	Individual Fair Market Value per Appraisal	*%*	*Allocation of Purchase Price*
Land	$150,000	25%	$125,000
Building	450,000	75%	375,000
	$600,000		$500,000

- Journal entry

Land	$125,000	
Building	375,000	
Cash		$500,000

Determining Capitalizing expenditures or Maintenance cost

- **capitalizing expenditures means to include the cost as part of the asset value**
- maintenance cost means to expense the cost (ie. as repairs)
- To determine, it depends on whether the company is follow IFRS or ASPE
    - **Capitalizing criteria**
        - IFRS
            - it is probable that the future economic benefits associated with the asset will flow to the entity and
            - the cost of the asset can be measured reliably
        - ASPE
            - the useful life of the asset is extended

        - the rate of output of the asset is increased
        - the operating costs of the asset are decreased, or
        - the expenditure enhanced the quality of the asset in a substantive way
    - Example
        - costs to maintain a truck, such as oil changes or brake replacements, would generally be considered to be repairs and would be expensed
        - replace the truck's engine would likely increase the useful life of the truck, thus capitalize the cost of the new engine to the asset account
- **Journal entries**
    - **Capitalized expenditures**
        - Debit Asset
            - Credit Cash/AP
    - **Capitalized expenditures that changes residual value or useful life**
        - (NBV - new residual value) / (new useful life - # of years depreciated already)
        - same as above but need to recalculate depreciation
        - **Calculation**
            - Straight line
                - **old depreciation + (capitalization value / # of months left x # of months left in the year)**
- **Impact of capitalization on income statement**
    - depreciation expense = capitalizing cost / remaining useful life x m/12

Depreciation Methods

Straight Line	(Cost - Residual value) / useful life **Depreciation expense with acc dep and remaining useful life** (cost - acc dep - residual) / remaining useful life **Changes in Estimates** (NBV - new residual value) / (new useful life - # of years depreciated already) **Capitalization that changes useful life** (NBV + capitalization value - residual value) / # of remaining months x # of remaining months in the year + depreciation for the months (during the year) prior to capitalization • NVB = original cost + previous capitalization - acc dep* ○ *including the months prior to the current capitalization • Example

	Net book value of asset at Sep 30, 20x7 - Original cost of asset $60,000 Capitalization made on April 1, 20x5 2,000 Less Depreciation expense 20x3 (10,000) 20x4 (10,000) 20x5 (10,500) 20x6 (10,750) 20x7 to Sep 30: $10,750 x 9/12 (8,062) $12,688 Depreciation expense – Sep 30 to Dec 31, 20x7 ($12,688 + 20,000 – 10,000) / 39 months = $582 per month x 3 months = $1,746 Total depreciation expense for 20x7 = $8,062 + 1,746 = $9,808
Declining balance / Diminishing Balance	**NBV x depreciation rate (%)** or **NBV x (2/useful life)** *multiply by m/12 if asset was bought mid year in excel: **NBV = original cost x power(1-diminishing rate, # of years passed)** *diminishing rate in decimals **Diminishing rate = 1 / useful life x 2 Ex. NBV = cost - accumulated depreciation *Don't depreciation more than residual value. **Residual value is used when DDB is lower than residual value
Units of production	(cost - residual value) / useful life in units of production x units of production expended during the period **Changes in Estimates** (NBV - new residual value) / (new total units- # of units depreciated already)

Component Accounting

- IFRS requires that assets consisting of different components with different useful life be recorded separately
- Ex. a building that costs a total of $5 million with different components

	Cost	*Useful Life*
Structure	$3,000,000	50 years
Elevators	800,000	15 years
HVAC System	400,000	10 years
Windows	800,000	20 years

The building would be recorded as follows:

Building Structure	$3,000,000	
Elevators	800,000	
HVAC System	400,000	
Building Windows	800,000	
Cash		$5,000,000

- **Derecognition of assets**
  - Assets that are replaced before the end of useful life are derecognized first then new elevators are recorded
  - **Journal entry**

Accumulated Depreciation ($800,000 x 12/15)	640,000	
Loss on derecognition of elevators	160,000	
Elevators		800,000

The new elevators would then be recorded:

Elevators	1,100,000	
Cash		1,100,000

  - Recording components separate is NOT required by ASPE
    - Journal entry under ASPE

Building	$5,000,000	
Cash		$5,000,000

Leasehold Improvements

- when companies improve leased out properties
- Must first determine if the expenditure is to be capitalized (as improvement) or expensed (maintenance)
  - Management makes the decision
- If capitalized, it is amortized over the lesser of the useful life of the improvement or the lease term

Derecognition of Property, Plant and Equipment

- Recording disposals
- The **difference between proceeds from sale** of asset and NBV of asset is the gain or loss on disposal
  - if **proceeds > NBV**
    - credit gain on disposal
  - if **NBV > than proceeds**

        - debit loss on disposal
    - if accumulated depreciation is less than residual value
        - calculate gain/loss on disposal with proceeds - residual value then cost - cash - gain
- Journal Entries
    - Gain on disposal

Cash	$100,000	
Accumulated depreciation	161,000	
Asset		250,000
Gain in disposal		11,000

Changes in estimates

- when useful life or residual value of an asset changes
- changes are applied from the date of change estimated
- New annual depreciation
    - **(NBV - new residual value) / (new useful life - # of years depreciated already)**

Natural Resources and Depletion

- value of that **asset** would be **equal to the amount paid to acquire the rights** to the natural resource and
- would be "used up" as the natural resources are harvested from the site
- **Depletion expense is calculated using units of production method**
- **Depletion rate**

$$\text{Depletion Rate} = \frac{\text{Capitalized Cost of Natural Resource Asset}}{\text{Estimated Number of Extractable Units}}$$

- Ex

$$\text{Depletion Rate} = \frac{\$2{,}000{,}000}{1{,}000{,}000 \text{ barrels}} = \$2.00/\text{barrel}$$

Intangible Assets

- examples of intangible assets
    - **trademarks** – a name or symbol that identifies a company or a product,
    - **patents** – a legal right ensuring the company's exclusive right to a product or process,
    - **copyrights** – the protection of writings, musical compositions and works of art,
    - **franchises** – the exclusive rights to sell products or perform services, typical within a certain geographical area
- Amortization of intangible assets depends on whether these assets have a limited or an unlimited life.

- Intangible assets whose lives are limited should be amortized on a **straight-line** basis over their estimated useful lives. This need not coincide with the asset's legal life
- Intangible assets whose lives are unlimited (i.e. some franchises, goodwill) are not amortized but instead subject to an annual impairment test

Exchanges of Assets

- Two companies exchange assets
- Two scenarios
    - If new asset is worth the same as old NBV
        - No gain no loss

Asset – new	$25,000	
Accumulated Depreciation – Old	50,000	
Asset – old		$75,000

    - If new asset is worth more/less than old NBV
        - Gain or loss
        - new asset is recorded at fair value

Asset – new	$30,000	
Accumulated Depreciation – Old	50,000	
Gain on asset exchange		$5,000
Asset – old		75,000

Legal Obligations

- The present value of the cost to recycle the machine would be added to the cost of the machine and depreciated over its useful life.
    - This amount would also be recorded as a long term liability and would accrue interest over it's useful life

Chapter 9 - Liabilities

Current Liabilities

- A current liability is one that will be settled within one year or the business cycle of the firm, whichever is longer.

Journal Entries

- Taking out loan
  -

Cash	10,000	
Long-term debt		10,000

- Interest paid year end
  -

Long-term debt	2,000	
Interest Expense	600	
Cash		2,600

Loan on Balance Sheet

- **Current Portion of Long-term Debt**
  - This is a current liability that is incurred when a company has long-term debt that requires a certain amount to be repaid within the next year.
  - **This year's loan balance - next year's loan balance = current portion of long-term debt**
    - For example, a company takes out a loan on January 1st for $10,000 with the terms set at 6% interest due annually. The principal must be repaid equally over 5 years. Interest and Principal payments are due December 31st of each year.
    - Ex. current portion of LT debt on 20x7 balance sheet would be 20x7 loan balance less 20x8 loan balance
- **Long-term Portion of Debt**
  - **Next year's loan balance**
  - Ex. long term portion of 20x7 year end balance sheet would be 20x8's loan balance on the amortization table
  -

Current Liabilities	
Current portion of bank loan payable	$ 384,024
Long-term liabilities	
Bank loan payable	1,246,722

Loan Amortization and Interests

- Amortization table

		Rate	4%	
Date	Total PMT	Interest	Principal	Balance AF
20x2				2,000,000
20x3	449,254	80,000	369,254	1,630,746
20x4	449,254	65,230	384,024	1,246,722
20x5	449,254	49,869	399,385	847,337
20x6	449,254	33,893	415,361	431,976
20x7	449,255	17,279	431,976	-

- **Three types of loan payment**
  - **Balanced / equal payment / changing installments**
    - **Total payment is fixed** (ie. every year pay 499,252)
      - Total payment = fixed
      - Interest = Previous balance x interest rate
      - Principal = total payment - interest
      - Balance = previous balance - total payment
    - **Journal Entries**

Dec 31, 20x3	Interest expense	80,000	
	Bank Loan Payable	369,254	
	Cash		449,254

  - **Installments**
    - principal paid on installment (ie. **fixed payment of principal**)
      - Interest = Previous balance x interest rate
      - Principal = fixed
      - Total payment = principal + interest
    - **Journal entries**
      - **Loan taken**

Date		Debits	Credits
Aug 31 2013	Cash	100,000	
	Note payable		100,000

      - **Accrue interest**

        Interest = previous balance x interest rate x m/12

Dec 31 2013	Interest expense	2,000	
	Interest payable		2,000

      - **Payment day**

        Interest expense = interest incurred since last interest journal entry

        Interest payable = interest payable on last journal entry

        Note payable = principal installment

Aug 31 2014	Interest expense	4,000	
	Interest payable	2,000	
	Note payable	25,000	
	Cash		31,000

  - **Lump sum**
    - **Full loan payment at the maturity date + accrued interest**
      - Interest = original loan x interest rate
      - Principal = original loan

        - Total payment = interest + original loan
    - **Journal entries**
        - **accrue interest**

Dec 31 2013	Interest expense	2,000	
	Interest payable		2,000

        - **Interest payment**

Aug 31 2014	Interet expense	4,000	
	Interest payable	2,000	
	Cash		6,000

        - **Loan payment at maturity**

Aug 31 2016	Interest expense	4,000	
	Interest payable	2,000	
	Note payable	100,000	
	Cash		106,000

Employee Withholdings

- Employers match employee CPP
- Employers pays 1.4 times the employee's EI deductions

- **Journal entries**
    - **Payroll for the period**

Salaries expense	$	10,500	
Salaries payable			$ 10,500

    - **Payroll withholdings**

Salaries expense	$	87,000	
Income tax withholding payable			$ 34,500
EI payable			$ 5,400
CPP payable			$ 3,900
Cash			$ 43,200

        - OR

Wages Expense	100,000	
Employee Withholdings Payable ($27,000 + 7,500 + 8,000)		42,500
Cash		57,500

        Income tax: 27k, CPP 7500, EI 8000

    - **Employer's required remittance**

Benefits expense	$	11,460	
CPP payable			$ 3,900
EI payable			$ 7,560

        - OR

CPP Expense ($7,500 x 100%)	7,500	
EI Expense ($8,000 x 1.40)	11,200	
Employee Withholdings Payable		18,700

    - **Remittance**

Income tax withholding payable	$	34,500		
EI payable	$	12,960		
CPP payable	$	7,800		
Cash			$	55,260

- OR

Employee Withholdings Payable ($42,500 + 18,700)	61,200	
Cash		61,200

HST payable/ receivable

- HST charged to customers on sale goes to HST payable account
- HST paid on purchases goes to HST receivable

- **Journal Entries**
  - **HST on sale**

Cash	$	4,520		
HST payable			$	520
Sale			$	4,000

OR

Cash ($5,000 x 1.13)	5,650	
Sales		5,000
HST Payable		650
Cost of Goods Sold	3,700	
Inventory		3,700

  - **HST on purchase**

Inventory	$	3,400		
HST receivable	$	442		
Accounts payable			$	3,842

  - **HST payment to government**

HST payable	$	45,600		
HST receivable			$	37,200
Cash			$	8,400

Warranty Expense/Liabilities

- Generally a % of sales
  - estimates ending bal
- ignore prior balance of warranty accounts
- **Total warranty expense** = what was credited to warranty
- **Value of repairs/warranty serviced** = what was debited
- **Estimated warranty** = Op bal - debit + credit
- **Est. warranty for previous years** = op bal.

- **Journal entries**
  - **Record provision at beginning of period**

Warranty Expense ($300,000 x 4%)	12,000	
Warranty Liability		12,000

- **Warranty serviced**

Warranty Liability	8,000	
Cash/Inventory/Wages		8,000

Provisions

- a liability of uncertain timing and amount, i.e. it is probable that we will have to pay something in the future, we just don't know when or what the exact amount will be (lawsuit)
  - A provision should be recognized when:
    (a) an entity has a present obligation as a result of a past event;
    (b) it is probable (i.e. more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation; and
    (c) a reliable estimate can be made of the amount of the obligation.
- **Journal Entries**
  - **Recording probable estimated provision**

Breach of contract expense	$1,000,000	
Provision liability (or accrued liability)		$1,000,000

  - If given range of estimate (IE 500k to 1 million)
    - sum the estimate and average it
  -

Chapter 10

Journal Entries

- **Purchase of shares**
  - Common shares

Cash	$100,000	
Common shares		$100,000

- **Exchanges for common shares**

Land	$250,000	
Common shares		$250,000

- **Retired/Repurchase Common shares**
  - Total shares value / total # of shares x # of shares being retired

Common shares (20,000 x $16.09[1])	321,800	
Retained Earnings	28,200	
Cash		350,000

- **Dividends**
  - **Declared**

Retained earnings	XXX	
Dividends payable		XXX

    - **Common shares calculation**
      - total # of shares x declared $ amount per unit

$$1{,}000{,}000 \text{ shares} \times \$5 = \$5{,}000{,}000$$

    - **Preferred shares calculations**
      - total # of preferred shares x # amount per unit x # of years since last payment
      - OR total value of preferred shares x %
        - Example

$$100{,}000 \text{ shares} \times \$8.00 \times 2 \text{ years} = \$1{,}600{,}000$$

  - **Paid**

Dividends payable	XXX	
Cash		XXX

Stock Split

- In order to reduce the share price, the company will split the stock
  - 2:1 means double the outstanding # of shares
    - share prices will be reduced by half
- No journal entry is required
- Only # of shares change depending on the split

Retained Earnings

- **Statement of retained earnings**

Retained earnings, beginning of year	$ XXX
Premium on redemption of shares	-XXX
Net income (loss) for the year	±XXX
Dividends	-XXX
Retained earnings, end of year	$ XXX

- **Statement of Changes in Shareholders Equity**

Statement of Changes in Shareholders Equity

		Preferred Shares	Common shares	Retained Earnings	Total
	Balance, Dec 31, 2017	10,000,000	45,000,000	8,000,000	63,000,000
Add the issues of shares (19M + 35M + 0.45M)	Issue of common shares		54,450,000		54,450,000
Add the repurchase of shares (3.2M + 1.065M)	Repurchase of common shares		(4,265,498)	(1,754,502)	-6,020,000
	Net income			9,500,000	9,500,000
	Dividends			(3,480,000)	-3,480,000
	Balance, Dec 31 2018	10,000,000	95,184,502	12,265,498	117,450,000

- **Partial Balance Sheet**

Partial Balance Sheet

Shareholders Equity	
Preferred shares	10,000,000
Common shares	95,184,502
Retained earnings	12,265,498
	117,450,000

Chapter 11

Three Components of Statement of Cash Flow

- **Cash flow from Operations**
  - **shows how much cash is generated or used up by the company in its daily operating business**
    - Start with net income
    - ADD depreciation and amortization
    - LESS Changes in all operation related accounts
      - IE
        - AR (net), inventory, prepaid
          - change = last year - current year
        - AP, salaries payable, interest payable, tax payable
          - change = current year - last year
      - Exclude non operation related
        - IE. loan payable, notes payable, dividends payable
          - dividends payable will be added to dividends paid in financing section
          - notes payable will be added to financing section (LESS any amount for PPE purchases, AKA non-cash transactions)
  - Direct method
  - Indirect method
- **Cash flow from Investing activities**
  - **any changes in the long-term liability and shareholders' equity section of the Statement of Financial Position**
    - Buying and selling of long-lived assets
      - **Cash paid** for long-lived assets
    - Buying and selling of long-term debt or equity investments
      - **Cash proceeds** from disposals of long-lived assets
    - Lending money and collecting the loans
      - Changes in long-term investment accounts that indicate purchase and sales of investments
- **Cash flow from Financing activities**
  - **cash that was generated or used through the sale or purchase of long-term assets**
    - Obtaining **cash** from issuing **debt** and using cash to repay debt
    - Obtaining **cash** from **shareholders**
    - Paying **dividends**
    - **Exclude non-cash transactions**
      - Note **exceptions** (short-term notes payable issued **for lending purchases**)

To determine the effect of activity on cash flow

- Does the activity increase cash or decrease cash? (think journal entry)

To determine the amount

- Current year - previous year = change in cash flow

Changes in Working Capital and impact on Cash Flow

- Working capital accounts comprise of all current asset and current liability accounts
- General rule:
  - any increase in a current asset causes cash to go down
  - any decrease in a current asset causes cash to go up
  - any increase in a current liability causes cash to go up
  - any decrease in a current liability causes cash to go down

Cash Flow from Operations – Indirect Method

- start with Net Income as the first account
- then add back or subtract any non-cash items that may appear on the income statement
  - most common of these are depreciation expense and gains/losses on the sale of capital assets
- then add or subtract any changes in the non-cash current asset and liability accounts
  - changes in accounts receivable, inventory, as well as all current payable accounts
  - Increases (decreases) in current assets are cash outflows (inflows).
  - Increases (decreases) in current liabilities are cash inflows (outflows)
- **Example**

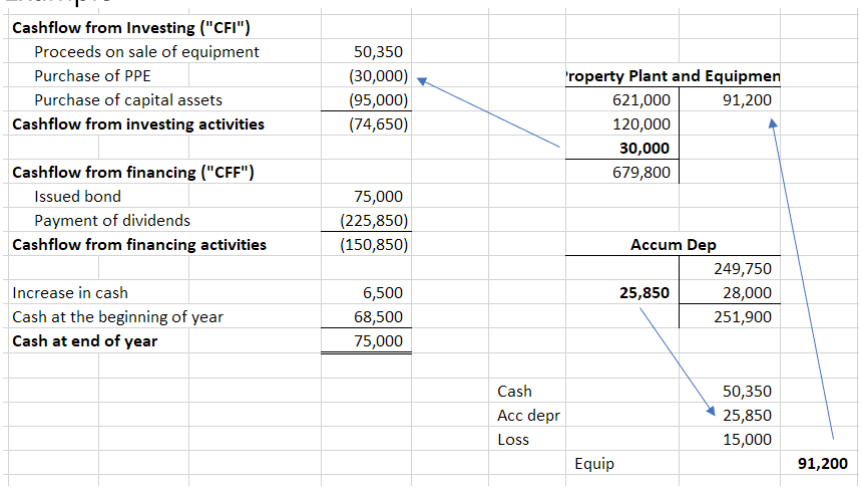
Cash flow from Operations:

Net Income	$ 67,400
Add back items not requiring a cash outlay	
Amortization expense	5,000
Adjust for non-cash working capital items:	
Increase in Accounts Receivable	(6,000)
Increase in Inventory	(2,000)
Decrease in Accounts Payable	(2,000)
Increase in Salaries Payable	2,000
Increase in Interest Payable	1,000
Increase in Taxes Payable	12,000
	$77,400

Gain and Loss on Sale of Equipment/Assets

- **Considered as non cash in operating activities**

    - **Gain** on sale is **deducted** in cash flow
    - **Loss** on sale is **increased** in cash flow
    - It will be included when calculating proceeds on sale in investing activities
- **Purchase cost of PPE**
    - Ending PPE - all debit PPE + all credit PPE = purchase of equipment
    - **If not all PPE transactions are known**
        - **Use T-acc on PPE and Acc depr**
        - **Find acc depr on sale of equipment**
            - beg bal + depr (income statement) - ending = acc depr on sale (debit)
        - **Find cost of equipment sold**
            - journal entry
                - cash + acc depr + loss or - gain = cost of equip sold
        - **Fill in all purchases and sales of PPE in T-acc**
        - **Find cost of hidden PPE purchased**
            - end - beg - purchases PPE + sales of PPE = hidden PPE purchase
        - Example



        P11-9
- **To find cost of machine on sale**
    - use t-acc
    - beg + total acquired cost - ending
        - P11-7

Calculating Proceeds on Sale of Equipment

- Cost - previous year amortization = NBV
    - NBV + **gain on sale**
    - OR NBV - l**oss on sale**
- Acc Dep on disposal = Beg bal + depreciation - ending bal

Issuance of shares

- Cash on issuance = Beg bal - credit bal - ending bal

Amortization expense, purchase cost on asset

- Ending - beg + original cost

Calculating Dividends

- Beg retained earnings + net income - end RE

Inflow Outflow

- Increase in CA are cash outflows
- Decreases in CA are cash inflows
- Increases in CL are cash inflows
- Decreases in CL are cash outflows