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2018 SuperfastCPA Review Notes

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Conceptual Framework and Financial Reporting

Conceptual Framework

Conceptual Framework

The conceptual framework is the “guiding principles” of GAAP and for FASB when setting new standards.

The main idea behind the framework is to make financial reporting <u>useful for making decisions.</u>

Another key idea is that the benefits of financial reporting should outweigh the costs.

There are two primary qualitative characteristics and their components (know which components go with each characteristic):

- Faithful Representation
  - Completeness: Are all necessary facts included in the information
  - Neutral: The information is free from bias
  - Free from error: Info doesn’t contain any material errors
- Relevance
  - Predictive value: Does it help make predictions about future events?

- Confirmatory value: Does it provide information about earlier expectations or predictions?
- Material: Does the information matter to the user? (from a size/scope standpoint)

There are four enhancing characteristics:

- Comparability: Can the info be used to compare to other companies in the same industry(consistency)
- Verifiability: Independent observers would reach the same conclusion
- Timeliness: The info is recent enough to make a decision with
- Understandability: A user with a reasonable understanding of business can understand and draw conclusions from the information

Generally Accepted Accounting Principles (GAAP)

GAAP addresses three main aspects of financial reporting:

- Recognition: when an item is recorded on financial statements
- Measurement: how an item is recorded on financial statements
- Disclosure: disclosing anything not on the financial statements

Standard Setting Process

Standard Setting Process:

- First a project gets added to the agenda
- Second, they conduct research and issues a discussion memorandum
- Third, they hold public hearings on the topic
- Fourth, they evaluate research and comments from interested parties and then issue an Exposure Draft, this is the first version of the new standard
- Fifth, they solicit additional comments and modify the exposure draft if needed
- Sixth, they finalize the new accounting guidance by a vote, they need a majority vote which is 4 out of the 7 FASB members. If approved, they issue the new standard as an Accounting Standard Update (ASU)

General Purpose Financial Statements

Balance sheet

The balance sheet reports economic resources and obligations as of a specific date. The main premise of the balance sheet is the accounting equation: Assets = Liabilities + Shareholders' Equity.

The order of items is:
Current assets
Long term assets
Short term liabilities
Long term liabilities
Shareholders' equity

Assets are presented in order of liquidity (cash at the top).

Current assets are assets expected to be used up within one year.

Examples of current assets:
- Cash
- Inventory
- Prepaid expenses
- Accounts receivable
- Short term investments

Examples of long term assets:
- Property, plant, and equipment
- Investments
- Goodwill
- Patents

Current liabilities are liabilities expected to be resolved within one year. They are presented in order of maturity, usually starting with accounts payable.

Examples of short term liabilities:

- Accounts payable
- Short term debt
- Bonds or dividends payable within the next year
- Income tax payable
- Accrued expenses
- Deferred revenue

Examples of long term liabilities

- Notes payable
- Capital lease obligations
- Bonds payable (noncurrent)

In comparison to the income statement, which shows a period of time - such as January 1 to December 31 - the balance sheet is just showing what a company has as of a certain date, usually December 31.

Other things you might see a question on:

Common ratios used to analyze a balance sheet:

Current ratio: This is used to evaluate current assets compared to current liabilities, or: Does the company have enough short-term resources to cover their short-term liabilities? You want to see a ratio of at least 1 to show that the company has more current assets than current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Quick ratio: This is a more telling version of the current ratio, with inventory taken out of the equation.

$$\text{Quick Ratio} = \frac{(\text{Current Assets - Inventory})}{\text{Current Liabilities}}$$

Debt to equity ratio: The ratio of what is owed to what is owned.

$$\text{Debt to Equity} = \frac{\text{Total Liabilities}}{\text{Shareholders' Equity}}$$

Goods that are out on consignment should be included in the company's inventory at their cost.

Money collected in advance for a product will go in the liabilities section as deferred revenue. The transaction has created a "liability" to provide goods or services to the customer who has now paid in advance.

Gift cards/gift certificates: They are deferred revenue until they are either used and become revenue, or if they expire they become revenue when they expire.

Income statement

On the income statement, revenues and expenses are from direct business activities, and gains or losses result from non-business activities such as a manufacturing company selling old equipment.

The income statement is organized to show a company's activities for the year with the end result being net income.

Here's how a multiple step income statement is organized:

Sales
- COGS
= Gross income
- Selling, general & admin expenses
- Depreciation
Equals operating income
+/- Misc revenue/gains/expenses/losses (interest income, misc. expenses)
= Income before tax
- Income tax expense
= Income from continuing operations
+/- Income from discontinued operations
= Net income

Multiple Step Income Statement vs Single Step Income Statement

A single step income statement is very simplified and just lumps revenues and gains together and then expenses and losses together, netting the two leaving net income.

The multiple step income statement breaks things out so that investors can see gross profit, operating income, and then non-

operating revenue/gains/losses separate from operating income, which all together is income from continuing operations. The last item is income from discontinued operations - if there is any - and then finally net income.

Other things you might see a question on:

Amortization of a discount on a note payable is an interest expense (it is a contra liability on the balance sheet and as it's amortized it's recognized on the income statement as an interest expense).

Know how to do problems where you're given amounts from different accounts that flow into each other to determine an ending amount being asked in the question.

Example:
ABC had the following transactions in year 1:

Disbursements for inventory purchases: $300,000
Increase in accounts payable: $20,000
Decrease in inventory: $30,000

To determine cost of goods sold for the year, you know that beginning inventory + purchases - ending inventory = COGS. Purchases are $300,000, and accounts payable increasing $20,000 for the year means that purchases exceeded cash payments by $20,000, so you'd add the $20,000. Inventory decreasing $30,000 would mean more inventory was sold than was purchased, so this would also be added, for COGS of $350,000.

You could be given the basic facts about a transaction and then asked where it would be reported on the income statement.

Example:
ABC purchased new sales software to run its stores. ABC expects to use the software for 10 years. How would this be reported on a multiple step income statement?

This is a simple depreciation question. ABC would include 1/10th the cost in the SG&A section of the income statement because it's simply the depreciation amount for one year. It wouldn't be in COGS, nor would the full amount of the purchase be included all in the first year.

Common ratios to analyze income statement:

Gross margin: Gross profit / net sales. This measures the percentage of sales available for expenses and profit after subtracting COGS.

Profit margin: Net income / net sales. This measures the percentage of sales that becomes profit.

Earnings per share: Net income / weighted avg. # of common shares outstanding. Measures net income on a per share basis. (this is obviously simplified and will be discussed in more detail in an upcoming section)

Statement of comprehensive income

The idea behind comprehensive income is to show a total picture of all operating income, gains, & losses.
Net income + other comprehensive income = Comprehensive income.

"Other Comprehensive Income" items

- Unrealized gains or losses on AFS securities
- Unrecognized gains or losses from pension costs
- Foreign currency translation adjustments
- Unrealized gains or losses from certain derivative transactions

Comprehensive income can be presented two ways:
In combination with the income statement: Other comprehensive income would be added just below 'net income'.
Or as a separate statement: You'd have the income statement and a separate statement of comprehensive income. The separate statement starts with net income and then reports other comprehensive income.

Reclassification Adjustments
"Accumulated other comprehensive income" (AOCI) is reported in the shareholders' equity section of the balance sheet. The OCI items are accumulated there until the gain is realized (such as an AFS security actually being sold), and then will be reclassified through net income and the AOCI is reduced by that amount, otherwise these gains would be counted twice. These reclassification adjustments are reported in the notes to the financial statements.

Statement of changes in equity

This statement shows changes during the year for the following items:

- Common stock
- Preferred stock
- Additional paid-in-capital
- Retained earnings
- Treasury stock
- AOCI

It can be part of the footnotes, or as a separate statement. Public companies show 3 years of comparative owners' equity on their statement of changes in equity.

Statement of cash flows

Statement of cash flows is to show the changes in cash during the period.
Users want to know about a company's ability to generate and control cash in order to assess the company's ability to meet its obligations.

There are three types of cash flows on a cash flow statement:

- Operating: Changes in cash resulting from business operations
  - Cash received from customers
  - Dividend income
  - Interest income/expense
  - Cash paid for business expenses
- Investing: Changes in cash resulting from investing activities
  - Purchase/sale of investments or long-term assets
  - Making loans (getting a loan would be financing)
- Financing: Changes in cash resulting from financing activities
  - Issuing and selling company stock
  - Purchasing treasury stock
  - Getting a loan (also making payments on a loan)
  - Paying dividends
  - Issuing bonds

Most common mistakes on this: Dividends received are part of net income and therefore an operating activity. Dividends paid are a financing activity. Interest expense is an operating activity, as is interest income. Also read questions carefully to identify non-cash transactions… they aren't classified on the statement of cash flows if no cash is involved.

Note: Under IFRS interest and dividends paid can be classified as either an operating or an financing activity, while interest and

dividends received can be classified as either operating or investing.

Non-cash activities: There can be transactions that are significant but don’t affect cash, and so would not be part of the statement of cash flows. An example would be converting debt into stock. These would be reported in the notes to the financials or in a separate schedule.

Difference in the Direct vs Indirect Method of Cash Flow Statement

The only real difference in the two methods deals with the operating activities section: in the direct method, each line is a “direct” statement showing cash paid or received such as “cash paid to customers” or “cash paid to suppliers”. On an indirect statement, operating activities starts with net income and works backwards to “cash provided by operating activities”, and several non-cash items such as depreciation expense or gain/loss on sale of equipment.

Indirect Method		
Cash flows from operating activities		
Net income		$50,000
Depreciation expense	10,000	
Decrease in accounts receivable	5,000	
Increase in inventory	(20,000)	
Increase in accounts payable	5,000	
Gain on sale of equipment	(3,000)	
Net cash provided by operating activities		**47,000**
Cash flows from investing activities		
Sale of land	15,000	
Sale of equipment	10,000	
Purchase of equipment	(40,000)	
Net cash used for investing activities		**(15,000)**
Cash flows from financing activities		
Sale of common stock	40,000	
Payment of dividents	(20,000)	
Net cash provided by financing activities		**20,000**
Net increase in cash		**$52,000**

Direct Method	
Cash flow from operating activities	
Cash received from customers	$80,000
Cash paid to suppliers	(20,000)
Cash paid to employees	(15,000)
Cash received for interest	2,000
Net cash provided by operating activities	**47,000**
Cash flows from investing activities	
Sale of land	15,000
Sale of equipment	10,000
Purchase of equipment	(40,000)
Net cash used for investing activities	**(15,000)**
Cash flows from financing activities	
Sale of common stock	40,000
Payment of dividents	(20,000)
Net cash provided by financing activities	**20,000**
Net increase in cash	**$52,000**

You'll notice that the investing and financing sections are essentially the same. It's only the operating section that differs.

When using the indirect method, you are taking net income (accrual basis) and converting it to cash basis. Here are a few common items and how they relate when doing so:

- A change in assets means cash moved in the opposite direction.
- A change in liabilities means cash moved in the same direction.

Examples:

- Increase in inventory means less inventory sold than purchased, this is a subtraction from net income.
- Decrease in inventory means more inventory sold than purchased, this is an addition to net income.

- Increase in a payable means more accrued than paid, so this is added to net income.
- Increase in a receivable means more accrued than received, so this is subtracted from net income.
- Depreciation expense is noncash but reduces net income on the accrual basis, so it is added to net income.

Notes to financial statements

Disclosures are a key part of the financial statements in that they provide info about assumptions and estimates.

Managements' Discussion and Analysis

This is a required part for publicly held companies, it discusses operations, liquidity, and capital resources.

Significant Accounting Policies

There needs to be disclosures on significant accounting policies and how they are applied. Some of the items should be included if applicable:

- A company's revenue recognition policies
- How a company determines what investments are cash equivalents
- How a company prices their inventory
- Methods for amortizing intangibles

Other Disclosures

During times of price instability, a disclosure is required discussing the effects of the instability on the company's business.

Related party transactions: Any significant related party information would be discussed in the notes.

Concentration of credit risk: If a business and most of its customers/suppliers all operate in the same industry, then a concentration of credit risk needs to be disclosed in the notes.

Contingent liabilities: Remember that possible liabilities that are not both probable and can be reasonably estimated (if it was both

it would be on the balance sheet) would be discussed in the notes instead being accrued on the balance sheet.

Consolidated financial statements

Consolidated financials present the assets, liabilities, equity, income, expenses, and cash flows of a parent company and its subsidiaries as one economic entity.

Some definitions:

Controlling interest: One entity has control of another if it owns more than 50% of that entity. A parent company must consolidate any subsidiaries under its control.

Non-controlling interest: An ownership stake of less than 50% of an entity.

Variable interest entity (VIE): An entity that is controlled by another entity, but not through voting rights. A VIE has a primary beneficiary, and when the beneficiary is a company, the company will consolidate the VIE's holdings onto its balance sheet, and produce consolidated financial statements. A VIE is usually setup by the controlling entity to perform a specific business purpose.

Primary beneficiary: In this instance we're talking about the primary beneficiary of a VIE. The "test" for being the controlling interest in a VIE is the following needs all three:

1. The direct or indirect ability to make decisions about the entity's activities through voting rights or similar rights
2. The obligation to absorb losses of the entity if they occur
3. The right to receive returns from the entity if they occur, which is compensation for taking the risk to absorb the entity's losses

At the date of consolidation, the assets and liabilities of the parent and sub are combined on the balance sheet, but the income

statement and statement of cash flows will only show from the parent, because their operations weren't combined until that date.

Example:
ABC purchases 100% of the common stock of XYZ for $100,000 when XYZ's net assets are $75,000.

	Pre-Consolidation			*Consolidated*
	ABC	**XYZ**		**ABC**
Current assets	100,000	50,000	- 100,000 ABC's cash	50,000
Noncurrent assets	200,000	100,000	+ 25,000 of Goodwill	325,000
Total assets	300,000	150,000		375,000
Current liabilities	50,000	25,000		75,000
Noncurrent liabilties	100,000	50,000		150,000
Total liabilities	150,000	75,000		225,000
Equity	150,000	75,000	-75,000 XYZ's equity	150,000
Total liabilities and equity	300,000	150,000		

Since XYZ's net assets are $75,000 and the price paid to acquire XYZ is $100,000, ABC recognizes $25,000 of goodwill. ABC's cash goes down by $100,000, and XYZ's equity is removed in the consolidated balance sheet.

Calculating Goodwill in a Consolidation

Goodwill in a consolidation is the difference between the cost of the acquired business and the fair value of the net assets. A lot of these types of problems will point out that one or more of the assets being acquired is listed on the books for less than its fair value. So you need to take the book value of the assets and add any fair value missing from the book value to get to the total fair value. This subtracted from the cost of the acquisition will give you the goodwill amount.

Example:
ABC purchased all the stock of XYZ for $500,000. XYZ's net assets had a book value of $300,000, but a piece of land on the books had a fair value of $50,000 more than its book value. In this case, ABC would show goodwill of $150,000 after the acquisition: 500,000 - 350,000 total fair value of assets = $150,000.

Issuance Costs/Legal Fees in a Consolidation

Costs to register and issue stock to acquire another company are netted against the paid-in capital account upon consolidation.

Legal or consulting fees due to the consolidation are just expensed as incurred.

All intercompany transactions must be removed on consolidated statements, or else the level of activity would be overstated for both entities.

A downstream transaction is when the parent sells to the sub. An upstream transaction is when the sub sells to the parent.

The following transaction types need to be eliminated in consolidated statements:

- Intercompany receivables/payables
- Intercompany revenues/expenses
- Intercompany inventory
- Intercompany fixed assets
- Intercompany bonds

Discontinued operations

The discontinued operations portion (if any) appears below continuing operations on the income statement.

The important thing to know about discontinued operations on the income statement, is that they are presented net of tax. Also, the "results of operations" are presented on one line, and then the gain or loss on the "disposal of the business segment" is reported on a separate line.

Example:
During 2018 ABC decides to dispose of business segment B. At the end of the year, segment B has generated $100,000 in income, and the result of disposing of B is a loss of $300,000. ABC's tax rate is 20%.

Here's what would appear on the income statement:

Discontinued Operations:
Results of Operations of Segment B (less income tax of $20,000): $80,000
Loss on disposal of Segment B (less tax savings of $60,000): ($240,000)

This results in an overall loss of $160,000 (240,000 - 80,000).

Going concern

Management is required to evaluate whether there are factors that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

The evaluation should be based on "relevant conditions and events that are known and reasonably knowable at that date that the financial statements are issued.

The yardstick to measure "substantial doubt" is if relevant conditions indicate that the entity won't be able to meet its obligations as they become due within one year after the date that the financial statements are issued.

There are two situations when disclosures are required related to this:

1. If substantial doubts arose but were then alleviated by management's plans, then a disclosure is required (see below)
2. If substantial doubts arose and were not alleviated, then a disclosure is required that states there is a going concern issue and there is substantial doubt that the entity will be able to meet its obligations within a year of issuing the financial statements.

In both cases, the disclosure should describe:

- Principal conditions or events that raised substantial doubt about the entity's ability to continue as a going concern (before consideration of management's plans if situation #1)
- Management's evaluation of the significance of those conditions or events in relation to the entity's ability to meet its obligations

- (Situation #1) Management’s plans that alleviated substantial doubt about the entity’s ability to continue as a going concern OR (Situation #2) Management’s plans that are intended to mitigate the conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern.

Financial Statements for Nonprofits

Statement of financial position

The statement of financial position is the ‘balance sheet’ for not for profit (NFP) organizations. The main difference is the “net assets” portion instead of shareholders’ equity, since there are no shareholders in a NFP.

So it’s broken down into assets, liabilities, and net assets. And again, assets = liabilities + net assets.

Net assets section:

The net assets section is broken out into two categories of net assets:

1. Net assets without donor restrictions
2. Net assets with donor restrictions

Net assets without donor restrictions
These are assets that have no restrictions and that the NFP can use how they want.

Net assets with donor restrictions
These are net assets with either a time restriction, purpose restriction, or even a permanent restriction. All restrictions are set by the donor at the time of the donation.

Statement of activities

The statement of activities focuses on the changes in each group of net assets, so there are 3 main segments on the statement:

1. Changes in net assets without donor restrictions
    - This section includes “net assets released from restriction”
    - Note that all expenses for the NFP will be listed in the unrestricted section
2. Changes in net assets with donor restrictions
3. Changes in permanently restricted net assets

Instead of “net income”, the bottom line on the NFP statement of activities is “Changes in net assets”.

Things you might see a question on:

For NFPs, unrealized gains and dividends from investments are included on the statement of activities for the year, and stay within the designation of the original investment, such as net assets with no donor restrictions or net assets with a donor restriction.

Example:
ABC, a NFP, made an investment of $100,000 using funds with no donor restrictions in Beta corp stock. At the end of the year, the investment in Beta had a FMV of $120,000, and ABC received dividends of $5,000 from Beta. As a result, ABC would include a increase in net assets with no donor restrictions of $25,000 for the year: The $20,000 increase in FMV + the $5,000 in dividends.

Reporting Expenses by Nature and Function (Statement of Functional Expenses)

Previously the statement of functional expenses was only required by “voluntary health and welfare organizations”, but now every NFP is required to report expenses by nature and function.

This can be done 1) within the statement of activities, 2) as a schedule in the notes to the financial statements, or 3) as a separate financial statement.

By “nature and function”, it means that expenses are broken out to show what was spent on “program services” and “supporting services”.

Program services are expenses directly related to the programs that fulfill the mission of the NFP.

Supporting services are management and general expenses, and fund raising.

Note that any given expense can be allocated to both the program services and supporting services, such as the salary of employees, depending on their role with the NFP.

Statement of cash flows

The statement of cash flows for NFP is just like the statement of cash flows for regular businesses.

The changes in net assets is part of the operating activities section. Unrestricted cash transactions will be reflected in the operating activities section, but any cash transactions with long-term restrictions appear in the financing section. Also, dividends received on investments with long-term restrictions would also be included in the financing activities section.

The investing activities section contain the same types of transactions that would appear in the investing section of a regular statement of cash flows.

Just like regular statements of cash flows, these can be prepared under either the direct or indirect method.

Public company reporting topics

Form 10-K

Form 10-K is the annual filing or “annual report”. The 10-K must be audited by an independent, registered auditor.

Filer Types:

Large accelerated filer: A company with market value of $700 million or more. Needs to file the 10-K within 60 days of fiscal year end, and the 10-Q within 40 days of end of quarter.

Accelerated filer: A company with market value between $75 and $700 million. Needs to file the 10-K within 75 days of fiscal year end, and the 10-Q within 40 days of end of quarter.

Nonaccelerated filer: A company with market value less than $75 million. Needs to file the 10-K within 90 days of fiscal year end, and the 10-Q within 45 days of end of quarter.

The 10-K is organized into 4 main parts:

1) Part 1
   - Description of the business
   - Risk factors
   - Properties & physical assets of the business
   - Legal proceedings
2) Part 2
   - Market price of stock overview
   - Consolidated financial info
   - Management’s discussion & analysis
   - Financial statements (going concern opinion)
   - Changes in disagreements with accountants
   - Controls & procedures
3) Part 3
   - Directors, executives, and corporate governance

- Executive compensation
- Security ownership of certain beneficial owners
- Certain relationships, related party transactions
- Principal accounting fees and services

4) Part 4
   - Exhibits, financial statement schedules, and signatures

Form 10-Q
Form 10-Q is the quarterly filing. The 10-Q is not audited, but is reviewed by an auditor. Disclosures in the 10-Q are not nearly as extensive as in the 10-K.

The 10-Q includes a balance sheet, income statements, and cash flow statements. Each of these is prepared as of YTD and includes prior year-end numbers as well.

Form 8-K
Form 8-K is for significant events that happen between 10-Ks and 10-Qs. These might include a bankruptcy, departure of a CEO, triggering events for material obligations, delisting from a stock exchange, change in accountants, etc.

Earnings Per Share

Basic earnings per share
The formula for basic earnings per share is:

$$\frac{\text{Net Income - Preferred Stock Dividends}}{\text{Weighted Avg. \# of Outstanding Common Shares}}$$

For the weighted average aspect, you'll see questions like this:
ABC corp has net income of $150,000 for 2018 and paid preferred stock dividends of $50,000. At the beginning of 2018, ABC had 1,000 outstanding shares of common stock. On July 1st, ABC issued another 500 shares of common stock. On October 1st, ABC issued another 100 shares. What was ABC's basic earnings per share for 2018?

Here's how to calculate the weighted average # of shares:

Date	Shares	Weight	Weighted Average
January 1st	1,000	12/12	1,000
July 1st	500	6/12	250
October 1st	100	3/12	25
		Weighted Avg. # of Shares	1,275

So then the calculation for earnings per share would be $100,000 / 1,275 = $78.43 EPS.

Note: If the problem includes a stock dividend or stock split at some point during the year, these are treated as being outstanding the whole year, so the weighting doesn't apply.

Diluted earnings per share
The idea is to calculate what the EPS would be if all possible shares were outstanding. This is because at any given time, a company might have millions of stock options or convertible bonds that would significantly impact the EPS if all those shares were outstanding.

There are things that can affect both the numerator and denominator in the diluted EPS calculation.

Items affecting the numerator:

- With convertible bonds, the interest expense needs to be added to net income in the numerator (but net of tax)

Items affecting the denominator:

- First, only dilutive (would lower EPS) potential common stock will be included. For convertible bonds it's possible that when adding back interest expense to the numerator and the potential shares to the denominator that it's actually non-dilutive, is so it wouldn't be used in the calculation of DEPS. This can also happen with stock options or warrants, see below.
- For stock options or warrants:
  - Assume the options are exercised, and that the company buys back as many shares as it could based on the exercise price
    - Example: 100 shares at $10 exercise price with market value of $20 = proceeds of $1,000 so they buy back 50 shares @ $20/share. This means the remaining 50 shares would be added to the denominator
    - Note: If the market value of the shares is less than the exercise price, this would be non-dilutive, and you wouldn't use the number
- For convertible bonds, assume the bonds are converted to shares and add the shares to the denominator
  - Example: 10 convertible bonds each convertible to 50 shares, so if converted there would be 500 shares. Add 500 to the denominator

Financial statements of employee benefit plans

Defined Benefit Pension Plan

With a defined benefit pension plan, there are different inputs and the annual retirement benefit is defined. The big thing with these is the annual pension expense and the ending liability, or the "projected benefit obligation".

The financial statements required are:

- A statement of net assets available for benefits as of the end of the plan year (ERISA requires this to be in comparative format)
- A statement of changes in net assets available for benefits for the year then ended
- Information regarding the actuarial present value of accumulated plan benefits
- Information regarding the effects, if significant, of certain factors affecting the year-to-year change in accumulated plan benefits

Defined Contribution Pension Plan

The financial statements required are:

- A statement of net assets available for benefits as of the end of the plan year.
- A statement of changes in net assets available for benefits

In a defined contribution plans, the annual employer contribution is defined and the performance is up to the employee.
These are much simpler to account for than defined benefit plans. The employer simply contributes a set annual amount into an investment account for the employee held by a third-party trustee.

Special purpose frameworks

When preparing financial statements based on an “other comprehensive basis of accounting” (OCBOA), the statement of cash flows is not usually prepared. The important thing is that the statements are descriptive about what basis of accounting has been used. This will usually mean a descriptive title, or a title you’re used to, with the addition of the basis used in the title such as “Statement of Assets and Liabilities - Modified Cash Basis”

Cash Basis of Accounting

Under pure cash accounting, revenue is when cash is received, and expenses are when cash is spent. There isn’t really a balance sheet under pure cash accounting, and an “income statement” would be titled something like “Statement of Cash Receipts and Disbursements”.

Modified Cash Basis of Accounting

This is the cash basis plus a few elements of accrual accounting usually by capitalizing and depreciating assets or recognizing accounts receivable & accounts payable, and accruing income taxes due.

The statements would be titled something like “Statement of Assets and Liabilities - Modified Cash Basis” and “Statement of Revenues, Expenses, and Retained Earnings - Modified Cash Basis”.

Tax Basis of Accounting

These statements obviously focus on presenting the information based on tax rules. There is a range of reporting certain aspects from cash basis to full accrual.

Again, the financial statement titles should specify the basis used such as “Statement of Revenues and Expenses - Income Tax Basis”.

Regulatory Frameworks

There are specific regulatory frameworks that have specific guidelines for financial reporting; these are considered an OCBOA but you don’t need to know them all for the CPA exams.

Keeping with the idea that financial statements need to be clear about the basis they were prepared on, a title you might see for an income statement prepared under a regulatory basis might be “Statement of Income - Regulatory Basis”.

Financial Statement Accounts

Cash

Cash and cash equivalents are assets that are readily available and unrestricted. A business might have cash that is restricted for use, such as for a bond sinking fund, and that would not be included under “cash” on the balance sheet.

Examples of cash
- Cash
- Coins or currency
- Cash in bank
- Negotiable instruments like checks
- Money orders

Examples of cash equivalents
- US treasury bills
- Commercial paper
- Money market funds

A certificate of deposit with a maturity more than 3 months from the date of purchase is not a cash equivalent. A CD with a maturity date less than 3 months from the date of purchase is considered a cash equivalent.

Reconciling Book Balance and Bank Balance

These problems are pretty simple you just have to think through them about what items would already be included in the book balance/bank balance and what outstanding items would affect each account.

Make sure to check dates the problem is asking about, and dates on items listed. For example, if it's asking what would be included in the balance sheet at year end, and then a few of the items listed didn't happen until January, you can leave those items out.

To reconcile bank balance to book balance, the format will be:
Bank balance
Add: Deposits in transit
Less: Outstanding checks
+/- Bank errors
+/- Errors on ledgers
= Book balance

Note: If a company has a multiple bank accounts and one bank account has a negative balance, remember that it would be listed as a liability/payable instead of just being netted against the other bank accounts.

Receivables

AR is recorded at net realizable value on the balance sheet- the amount of cash the company expects to actually collect.
Items that reduce AR are sales discounts, sales returns, non-collectible amounts.

When a company offers discounts, the sales can be recorded under net or gross method.
Under the gross method, when AR is recorded, the gross amount is shown, along with a journal entry for the discount.
Under net method, AR is recorded with the discount already factored in.

Uncollectible AR
There has to be some estimate of AR that won't be collected, because realistically not all AR will be collected.

Direct write-off method

This is rarely used and doesn't conform to GAAP.
When the account becomes uncollectible, it is written off to bad debt expense and AR is reduced by the same amount.

Example:

Bad debt expense	*XX*	
Accounts receivable		*XX*

Allowance method

The allowance is a contra account to AR, so it has a credit balance. The idea is that an allowance amount is set for the year, (it's an estimate), and when bad debt is actually written off, the allowance is debited (lowered). Then, to get the allowance back where management wants it, it is credited and that credit's debit side is bad debt expense.

To writeoff uncollectible debt:

Allowance for doubtful accounts	*XX*	
Accounts receivable		*XX*

To bring the allowance account back to where it needs to be:

Bad debt expense	*XX*	
Allowance for doubtful accounts		*XX*

Income statement approach
This approach estimates bad debt as a % of SALES, and it directly calculates the amount of bad debt expense.

Balance sheet approach
This approach estimates bad debt allowance as a % of AR instead of sales, and it directly calculates the ending balance of the allowance account.

Selling or Factoring Receivables
Many businesses will use their receivables as an immediate source of cash by “selling” or “factoring” the receivables. Basically, the company is selling their receivables at a discount in exchange for cash, but depending on the specifics of the transaction, it will either be considered a loan or a sale of the receivables.

Is it a loan or a sale?
There are 3 criteria for determining if a transfer of receivables is considered a loan or a sale. If all 3 are met, it is a sale. If any are not met, then it’s considered a loan.

1. The transferred receivables are not accessible by the company or its creditors (control is given up)
2. The transferee has the right to sell or pledge the receivables

3. There's no agreement that lets the company keep control of the receivables

Secured Borrowing
If the receivables are transferred but the transferee doesn't have the right to sell the receivables and the transferor keeps control, then the transaction is "secured borrowing". They are just using their receivables as collateral and receiving a loan.

To record a secured borrowing transaction:

Cash	*XX*	
Note payable		*XX*

Factoring Receivables
In this transaction, the company assigns their receivables to a factor (usually a bank) for a fee, and receives cash in return. This can be done with recourse, or without recourse. Without recourse is considered a sale of the receivables, because once transferred the receivables are up to the factor to deal with and collect on.

Here's the general journal entry for factoring receivables without recourse:

Cash	*90*	
Loss on sale of receivables	*10*	
Accounts receivable		*100*

If the transaction is with recourse to the company, it depends on the specifics whether it's treated as a sale or borrowing. The company might be required to make payments to the factor or possibly buy back receivables. If the transaction meets the requirements of a sale but there is recourse, then a "recourse liability" must be reflected in the books.

Here's the general journal entry for factoring receivables with recourse:

Cash	*90*	
Loss on sale of receivables	*15*	
Accounts receivable		*100*
Recourse liability		*5*

Pledging (or "assigning") Receivables

This is another form of using receivables as collateral for a loan, but is less formal than secured borrowing. There is nothing reflected in the accounts with a pledge - the agreement is basically that the company will use collections from receivables to pay back the loan, and if the company defaults the transferee can assume the remaining receivables as collateral.

Inventory

Cost Flow Assumptions

The different ways to value inventory use either “lower of cost or net realizable value” or “lower of cost or market” to calculate the carrying value of inventory.

FIFO and average-cost method: These use lower of cost of net realizable value
LIFO: This uses lower of cost or market

Net realizable value (NRV) = Selling price - Costs of completion

Lower of cost or market:
This is replacement cost subject to a ceiling and floor. If replacement cost is in between the ceiling and floor, then use replacement cost.
Ceiling = NRV
Floor = NRV - profit margin

To illustrate the difference in carrying amounts of FIFO, LIFO, and average cost methods, we’ll use an example:

ABC’s inventory at year-end has the following values:

- Purchased for: $100,000
- Selling price: $130,000
- Current replacement cost: $90,000
- Normal profit margin: $20,000
- Costs of completion: $5,000

If ABC uses FIFO to value its inventory:
FIFO will be the lower of cost or net realizable value. Cost is $100,000 and NRV is $130,000 - $5,000 or $125,000, so carrying value would be the $100,000 cost.

Note: Using the average cost method also uses the lower of cost or NRV, so the inventory would be valued at the same $100,000 historical cost.

If ABC uses LIFO to value its inventory:
LIFO will be the lower of cost or market value, which is current replacement cost subject to a floor of NRV less profit margin, and a ceiling of NRV.

Cost:	$100,000
Replacement cost:	$90,000
Ceiling:	$130,000 - $5,000 = $125,000
Floor:	$125,000 - $20,000 = $105,000

So the lower of cost ($100,000) or market (the $105,000 floor) will be historical cost of $100,000.

Impairment losses on inventory:
If inventory was valued at cost, meaning cost was lower than market or NRV, but then the inventory's market price or NRV declines below cost, the inventory's value is written down.

Example:
ABC uses FIFO to value its inventory and carried their inventory at cost of $100,000. After an analysis, ABC determined that the NRV of its inventory was now $80,000. ABC would recognize an impairment loss of $20,000.

Journal entry:

Loss on inventory write down	*$20,000*	
Inventory		*$20,000*

Casualty loss on inventory:
A loss on inventory will be equal to the amount of loss less any sales of damaged inventory and less any insurance proceeds. If a pack of wild dogs got into ABC's warehouse and ruined $50,000 worth of inventory, but ABC was able to sell the damaged inventory for $5,000, and ABC received insurance proceeds of $30,000, then the loss ABC would recognize is $15,000.

Specific identification: This is used with large items such as cars where each item has an individual cost.

Inventory Basics

FIFO: First in, first out.
When prices are rising using FIFO, COGS is the lowest and provides the highest net income, also the highest ending inventory.

LIFO: Last in, first out.
When prices are rising using LIFO, this gives the highest COGS and lowest net income, and lowest ending inventory

Perpetual inventory system
A perpetual system records the purchases and sales of inventory items as they occur- in other words a computer system that tracks inventory moving in and out. Physical counts still take place to verify the inventory.

FIFO: Costs are the same under both a perpetual and periodic system
Lowest COGS, highest net income, highest ending inventory.

LIFO: Under a perpetual system LIFO will have different inventory values than a period system because a cost is assigned after each sale.
Last item purchased is the first one sold.

Highest COGS, lowest net income, lowest ending inventory.
LIFO provides tax advantages because it causes lower net income.
LIFO liquidation is when the oldest layer of cost is reduced because more units were sold in the current year than purchased, which taps into the older “layers” of inventory.

Dollar Value LIFO
This is using LIFO ‘pools’ to track inventory
Main point is that this uses a “conversion index” to determine inventory value for the LIFO layer added in the current year

Conversion index is:
Ending inventory in current year dollars / ending inventory in base year dollars.
Then, you use that multiplier to convert current year prices to base year prices.

Gross margin method
This is used to estimate COGS using gross margin
Sales - cost = margin
100 - 70 = margin of 30
Then you know that COGS is 70% of sales, and margin is 30%
You can use this to figure out these margin problems

Retail Inventory Method
This is used by retailers to estimate the cost of ending inventory.

Basic steps:

- Calculate ending inventory at retail prices
- Calculate the cost to retail ratio
- Apply cost to retail ratio to ending inventory at retail prices to get ending inventory at cost

Inventory errors

These are problems where they'll say something like "purchases were overstated, what was the effect?"
You will see some of these on the test, the best approach is to write out the inventory equation and walk through the info in the question.

Inventory equation:
Beg inventory
ADD: Purchases
EQUALS: Goods available for sale
LESS: Ending inventory
EQUALS: Cost of goods sold

Purchase commitments

Companies will enter into agreements to purchase certain amounts of certain items, sometimes within a certain time period
If the market price of an item subject to this kind of agreement goes down, the buyer might have to recognize a loss on the purchase commitment.

If the terms can be modified, then the potential loss can be disclosed in a footnote but doesn't have to be recognized in the financials.
If the terms CANNOT be modified, then the loss is probable and must be accrued and recognized on the balance sheet.

IFRS Inventory Differences
Under IFRS inventory is valued at lower of cost or net realizable value.
LIFO is NOT allowed at all under IFRS.
Reversal of inventory write-downs IS allowed under IFRS. This is NOT allowed under GAAP.

Other inventory items you could see a question on:

Shipping Transactions:
Free on board (FOB) destination means the “ownership” (and risk of loss) of the inventory doesn’t change until it reaches its destination (the buyer’s warehouse). The seller “owns” the inventory until it reaches the buyer.

Free on board shipping point is the opposite: As soon as the inventory is shipped, the buyer now owns it and will include it in their inventory.

Inventory costs- what items are included/excluded from the cost of inventory?
Included:

- Purchase returns
- Freight-in (shipping costs to get the inventory to the warehouse)
- Sales tax on acquisition
- Insurance on transit

Excluded

- Freight out- this is a selling expense
- Interest on purchase - this is financing

Property, plant, and equipment

PPE are assets that produce revenue for the business, and so their cost is allocated over time through depreciation.
PPE includes:

- Buildings
- Machinery and Equipment
- Land- only asset that is NOT depreciated
- Land improvements- these have a finite life, so they are depreciable
- Natural resources- oil well, coal mine. Instead of "depreciation", these assets are "depleted".

Carrying Amount

When determining the carrying amount of PPE, the basic factors are:

Historical cost (includes capitalized costs)
Less: Accumulated depreciation
Less: Any impairment losses
= Carrying amount

Capitalized costs

These are costs that included in the asset account instead of being expensed. There are basically two categories:

- Costs to get the asset ready to use
  - Usually any cost necessary to bring the asset to its intended use and location, so it would include: sales tax, testing costs, shipping costs, etc.
- Costs to extend the asset's useful life or increase productivity
  - If a cost just maintains the asset, like an oil change, this is a regular expense and is NOT capitalized

Example:
If ABC buys a piece of land for $100,000, and spends $10,000 on surveying fees, $20,000 to raze an old building on the land, then ABC would list the land on its books at $130,000. None of this would be depreciated, it would continue to sit on the books at $130,000. However, if ABC built a new building on the land, the building would be depreciated.

Disposal of PPE Assets
When a PPE item is sold, a gain or loss is recognized based on the amount realized from the sale compared to the carrying amount of the asset sold.

Example:
ABC sold machinery for $100,000. ABC purchased the machinery for $200,000, and it had accumulated depreciation of $140,000. On this transaction, ABC would recognize a gain of $40,000 since the carrying value of the machinery was $60,000 (200,000 - accumulated depreciation of 140,000).

The journal entry would be:

Cash	*100,000*	
Accumulated depreciation	*140,000*	
Machinery		*200,000*
Gain on sale		*40,000*

If the sale would have been for $50,000, it would look like this:

Cash	*50,000*	
Accumulated depreciation	*140,000*	
Loss on sale	*10,000*	
Machinery		*200,000*

Impairment Losses
An asset's value should be written down if its fair value becomes less than carrying value. When an asset's value is written down, this is an impairment loss.

The test for impairment is: Is the carrying value greater than the sum of the future net cash flows from the asset? (the sum of the cash flows will usually be given to you in a problem)

If this is the case, then the carrying amount is considered to be "not recoverable", and an impairment loss is recognized.

- Assets held in use
  - impaired when carrying value is greater than fair value
  - impairment loss is CV - FV
-

Example:
ABC has an asset with a carrying value of $200,000. Management does an analysis and determines that the net future cash flows of the asset equal $180,000, and the current fair value of the asset is $150,000. In this case, the asset fails the carrying value > future cash flows test, so the loss = carrying value - fair value, which is $200,000 - $150,000 = $50,000 impairment loss.

The journal entry is:

Impairment loss	*$50,000*	
Accumulated depreciation		*$50,000*

Note: The loss takes the carrying value down to $150,000, and this is the new base for depreciation going forward.

Another note: Impairment losses on assets held for use are recognized as a component of income from continuing operations.

Non-Monetary Exchanges

This is when one asset is exchanged for another asset.
A transaction has “commercial substance” if the asset acquired will significantly change the cash flows to the company, or if the asset acquired in the exchange is significantly different than the item exchanged. If the asset received in the exchange doesn’t really change anything, then the transaction “lacks commercial substance”.

Accounting treatment for exchanges WITH commercial substance:

The valuation of the new asset should be its fair value and gains/losses are recognized on the exchange.
If neither asset’s fair value can be determined, then no gain or loss is recognized, and the new asset is recorded at the BV of the old asset plus cash paid, or less cash received.

Determining gain or loss on the exchange:
When the transaction has commercial substance, you treat it as if the asset was sold for its fair value.

Example:
ABC exchanges some equipment with DEF. ABC’s asset had book value of $80,000 and FV of $100,000. ABC also gives DEF $30,000 as part of the exchange.
ABC would recognize a gain of $20,000 on this exchange. Note that regardless of the details of the equipment received from DEF, ABC’s gain will be equal to the difference in the FV and the book value of the asset it exchanged.

Determining the value of the new asset:
The rule is that the value assigned to the property received in the exchange is equal to the fair value given up. If no cash is involved, then both parties value the incoming asset at the fair value of the asset they exchanged.
If cash is involved, then the giver of cash adds that to their fair value given up, and the receiver of cash subtracts the cash from their fair value given up.

Example:
ABC exchanges some equipment with DEF. ABC's asset had book value of $80,000($120,00 cost and $40,000 acc dep) and FV of $100,000. ABC also gives DEF $30,000 as part of the exchange. DEF's property has a fair value of $120,000, cost of $150,000 and acc dep of $40,000.
ABC will record the asset received at $130,000(total FV given up) on its books. DEF will record the asset received from ABC at $90,000 ($120,000 FV - $30,000 cash received).

ABC's Journal Entry:

Equipment(received)	*130,000(value given up)*	
Accumulated depreciation	*40,000*	
Equipment(exchanged)		*120,000*
Cash		*30,000*
Gain on exchange		*20,000*

DEF's Journal Entry:

Equipment (received)	*90,000(120,000 - cash received)*	
Accumulated depreciation	*40,000*	
Cash	*30,000*	
Equipment(exchanged)		*150,000*
Gain on exchange		*10,000*

Exchanges WITHOUT commercial substance
If there is a loss, record the loss and then record the new asset at its fair value.
If there is a gain but no cash is received, then no gain is recognized, but you record the new asset at the BV of the asset exchanged + any cash you paid.
If there is a gain and you received cash, recognize the gain in proportion to the cash received and the new asset is recorded at FV less the unrecognized portion of the gain.
IF the proportion of cash received to total consideration received is more than 25%, record the gain in full and the asset acquired at FV.

Assets Held for Sale

Assets can be classified as being “held for sale” if certain criteria are met:

- Management has an active plan to sell the asset
- The sale is highly probable within a year
- The asset is available for sale in its current condition
- The company is marketing the asset for sale

Assets being held for sale or disposal are kept on the books at the lower of the carrying amount or the fair value less any costs to sell. Once listed as “held for sale” the asset is no longer depreciated, and they are listed under “other assets” on the balance sheet and not included with PPE. If carrying value is greater than fair value less costs to sell, then a write down of the value is performed and a loss is recognized.

- Assets held for sale
  - Fair value less cost to sell is the NRV
  - If CV > NRV then record a loss
  - If CV < NRV then record a gain but only to the extent of losses previously recognize on write-downs

- Assets to be disposed of other than a sale
  - Continue to treat as a regular asset
  - It's depreciated like normal
  - Apply impairment if applicable

Example:
ABC chooses to sell equipment it had used in its operations. The equipment meets all the requirements to be listed as "held for sale". The equipment has a carrying value of $200,000, a fair value of $180,000 and costs to sell of $10,000. Based on these facts, ABC would write down the equipment to $170,000 and recognize a loss of $30,000.

Another example:
A year after ABC listed the equipment as "held for sale", it's determined that the fair value of the equipment is now $220,000. ABC could recognize a gain, but only to the extent of the previous loss. So, ABC could recognize a gain of $30,00 and would list the equipment as "held for sale" at $200,000.

Depreciation Methods
Non-accelerated methods
- Straight line: (cost - salvage value) / number of years
- Service hours method: (cost - salvage / total service hours) x hours used
- Units of output: (cost - salvage/total units) x units produced

Accelerated methods:
- Sum of years digits: (# years remaining x(cost - salvage)) / sum of the years
- Double declining: 2x straight line rate x (cost - acc depreciation)

Natural resources
Acquisition costs are costs to acquire natural resources such as land or a cost to lease a property.
Exploration costs are costs to locate the natural resources.
Successful efforts: only costs of successful exploration are capitalized, unsuccessful are expensed.
Full cost: all exploration costs are capitalized.

Depletion
Depletion is the allocation of the natural resource to inventory.
Depletion is debited to inventory and credited to a contra account for the natural resource asset.

Fixed Assets GAAP/IFRS Differences
Under GAAP, you cannot reverse impairment of assets. Under IFRS reversal of impairment is permitted if circumstances change- but not on goodwill.

Under IFRS, an annual review of the estimated useful life and depreciation method is required. Under GAAP this is only required if circumstances change or there is a reason to re-evaluate.

IFRS uses component depreciation: different components of an asset that has different useful lives should be depreciated by their respective useful lives.

Investments

Financial assets at fair value

When a company holds financial assets as investments, trading securities and available-for-sale(AFS) securities are reported at fair value in the financial statements.

Fair Value Option

Also, a company can elect to report almost any financial asset or liability at fair value according to the fair value option. When the FVO is elected for an item, unrealized gains and losses will be included in earnings at each reporting date, and the value on the balance sheet is adjusted to fair value at each reporting date. This treatment and examples would be identical to the journal entry examples for trading securities below.

Trading Securities

These can be debt or equity securities held for the short-term. They are reported at fair value on the balance sheet, and unrealized gains or losses are included in earnings(income statement) for the period. Dividends are income.

Example:

ABC purchased 10 shares of XYZ for $1,000 and classified it as a trading security.

Journal entry at purchase:

Trading securities	*$1,000*	
Cash		*$1,000*

At the balance sheet date if the fair value of the XYZ shares is now $1,250:

Trading securities	*$250*	
Unrealized gain		*$250*

If ABC received dividends of $50 on their XYZ investment:

Cash	*$50*	
Dividend income		*$50*

At the next balance sheet date if XYZ investment is now worth $950:

Unrealized loss	*$300*	
Trading securities		*$300*

Available for Sale Securities

These are debt or equity securities that are “available for sale” but not classified as trading securities. These are reported at fair value on the balance sheet, and unrealized gains or losses are reported in other comprehensive income(OCI), NOT in earnings. Dividends are income.

Example:

ABC purchased 10 shares of XYZ for $1,000 and classified it as an AFS security.

Journal entry at purchase:

AFS securities	*$1,000*	
Cash		*$1,000*

At the balance sheet date if the fair value is now $1,250:

AFS securities	*$250*	
Unrealized holding gain(OCI)		*$250*

At the next balance sheet date if XYZ is now worth $950:

Unrealized holding loss(OCI)	*$300*
AFS securities	*$300*

AFS securities are evaluated for impairment.

For AFS equity investments: If a decline in FV is considered permanent (other than temporary) and goes below the investment cost, it is a realized loss in earnings and the investment is written down to FV.

For AFS debt investments: If a decline in FV is considered permanent (other than temporary) and goes below the amortized cost, it is a realized loss in earnings and the investment is written down to FV.

Amortized cost = cost basis +/- net unrealized holding gains/losses

Example:
If the fair value of the XYZ investment goes down to $800, ABC will have a recognized loss in earnings of $200. (Original cost of $1,000 - $800 = $200 loss).

Financial assets at amortized cost

Held to maturity(HTM) investments are reported at amortized cost. These are debt securities that the investor intends to “hold until maturity” of the investment. The fair value option can be elected for a held to maturity investment, and if so then fair value rules apply (see previous section).

The investment is recorded at cost (includes brokerage or transfer fees if applicable). Unrealized gains and losses aren’t tracked or measured for HTM investments.

Interest income is recognized in earnings (income statement).

Example:
ABC purchased a debt investment that it intends to hold until maturity. The cost of the investment is $100,000.

Journal entry to record investment:

HTM investment	*$100,000*	
Cash		*$100,000*

If ABC receives $5,000 in interest income from the investment:

Cash	*$5,000*	
Interest income		*$5,000*

HTM investments are evaluated for impairment. Impairment would be a decline in fair value that is considered other than temporary and goes below the amortized cost of the investment.

An impairment loss is recognized in earnings and the investment is written down to fair value.

Example:
ABC evaluates its HTM investment and determines that the FV of the investment is now $80,000 and the change in value is other than temporary. In this case, ABC will recognize a $20,000 impairment loss.

Equity method investments

This is the method used when an investor owns more than 20% but less 50% of voting shares in an entity and/or has “significant influence” over the investee (more than 50% ownership would require consolidation).

It’s possible to own 21-49% and still not have significant influence if the investee opposed investor, another investor owns more and “blocks” your interests, you don’t have representation on the board. In this case the fair value option would be used.

Also, you can own less than 20% and HAVE significant influence if you own the highest % of stock, if you have representation on the board, or are technologically interdependent with the investee. In this case the equity method could be used.

If the investment is greater than the proportionate FV of net assets, the excess is goodwill. However, the goodwill from the equity method is not separated on the balance sheet, it is just included in the investment account.

If an entity was accounting for an investment with another method, and then switched to the equity method, that change will be applied <u>prospectively.</u>

Recording the investment:
The cost of the investment is recorded as “Investment in XYZ”.

Example:
ABC corp makes an investment in XYZ corp that equals 30% of the stock of XYZ and gives ABC significant influence. The cost of the investment was $100,000.

Entry to record investment:

Investment in XYZ	*$100,000*	
Cash		*$100,000*

Dividends reduce the investment on your books, and it's pro-rata:

XYZ pays $10,000 in dividends for the year. ABC would make the following entry:

Cash	*$3,000*	
Investment in XYZ		*$3,000*

Dividends received are considered a return of investment and lowers the investment account.

Income is the opposite: If XYZ had net income of $30,000, ABC's "share" as a 30% owner is $9,000. The entry would be:

Investment in XYZ	*$9,000*	
Investment income		*$9,000*

If XYZ reported a net loss of $30,000 for the period:

Investment loss	*$9,000*	
Investment in XYZ		*$9,000*

Impairment

An equity method investment can be evaluated for impairment just like an AFS investment. If the change in FV is considered other than temporary, the investment is written down to FV and a loss is recognized in income.

Other equity method facts:

The rules for dividends only apply to the common stock of the investee. If the investor also had preferred stock, dividends

received from the preferred stock would be regular dividend income.

If an investment made is more than the book value for the proportionate amount due to an undervalued intangible asset, as that asset is amortized it will reduce the investment account:

Example:
ABC purchases 25% of the common stock of XYZ for $500,000. The book value of the shares was $400,000 due to an undervalued intangible asset. ABC determines the useful life of the intangible asset to be 10 years, so each year ABC will amortize $10,000, which will reduce ABC's "investment in XYZ" account by the $10,000.

Intangible assets

Intangible assets are either created or acquired. They are assets that don't have a physical form, but are useful to a business for longer than a year. Although stocks and other securities sound like they fit this definition, intangible assets are separate from financial assets or investments.

Intangibles either have a definite life, or an indefinite life, but all intangibles can be evaluated for impairment.

Identifiable: these can be legally identified such as copyrights, customer lists, patents
Unidentifiable: goodwill

2 types of "life"

- Definite life: has a finite life legally or other factors limit its life
  - Patents, copyrights
  - "Useful life" means how long the asset will provide a benefit, not strictly its legal life on paper. If a patent legally has 20 years left, but management projects it will only generate cash flows for 10 more years, its useful life is 10 years
- Indefinite life: no foreseeable limit on the life of the asset
  - Trademarks

For definite life intangibles:

- You capitalize external costs (legal fees, etc)
- They are amortized over their useful life on the straight-line method
- There is impairment if book value is greater than recoverable cost
- Impairment loss is BV - FV

For indefinite life intangibles:

- You capitalize external costs
- They are NOT amortized (although goodwill can be amortized for nonpublic companies straight-line over 10-year period)
- Impairment loss is BV - FV

Goodwill

Goodwill is the excess over fair market value of the acquired company's assets. It represents brand value, customer loyalty, etc.

Goodwill is not amortized, but it can be impaired. A private(nonpublic) company can elect to amortize goodwill on a straight-line basis over a 10-year period.

Impairment loss on goodwill if the entity's carrying value of goodwill is greater than the entity's fair value. The difference would be the impairment loss.

If determined that goodwill is impaired, impairment loss is part of continuing operations.

IFRS and Intangibles

Under GAAP, re-valuation of goodwill is NOT allowed. Under IFRS it is allowed if in an active market.

Under GAAP, reversal of impairment loss is NOT allowed. Under IFRS a reversal of an impairment loss is permitted.

Under GAAP, goodwill is recognized at the "reporting unit" level. Under IFRS it is recognized at the cash-generating unit level.

Payables and accrued liabilities

Liabilities are classified as either ‘current’ or ‘non-current’.
Current liabilities are expected to be paid within one year or one operating cycle.
Current liabilities are not interest-bearing. Current liabilities are primarily accounts payable and accrued liabilities/expenses.

Accounts Payable

These are short-term liabilities due to purchasing goods or services on credit.

Journal entry:

Office supplies	*50*	
Inventory	*50*	
Accounts payable		*100*

Accrued Expenses

These are expenses that are recognized in the books before they are paid for, with the main example being payroll, interest, and taxes.
Payroll liabilities are the wages that are accrued as employee’s work, and then are paid out as wage or salary expense on payday.
Payroll liabilities also include the employer portion of taxes and fringe benefits such as FICA and Medicare.

Journal entry:

Wages expense	*500*	
Wages payable		*500*

When the wages are paid:

Wages payable	*500*	
Cash		*500*

Exit or Disposal Activities

This is usually referring to a situation when a company is going to lay off employees and determining the liabilities for termination benefits. The liability is recognized on the “communication date”, which means the liability meets the requirements to be recognized and the termination has been communicated to employees. The liability is recognized at fair value, and if it’s in the distant future then it would be discounted to present value.

Example

ABC has 10 employees that it no longer needs. ABC decides to provide a one-time termination benefit of $10,000 per employee. On the communication date, ABC would recognize a liability of $100,000 related to the termination benefit.

Asset Retirement Obligations

With certain assets that have environmental impact or are affected by other regulations, there will be significant costs to dispose of the asset. These future costs need to be accounted for as an “asset retirement obligation” (ARO).

These types of assets include closing a mine, decommissioning nuclear processes, or site reclamation.

The future asset retirement costs are capitalized as an asset, and as a liability.

The amount capitalized is the weighted present value of the future costs to retire the asset.

The asset’s base is depreciated over its useful life.

The ARO is increased each year as time goes on, this is 'accretion expense', which is increasing the present value of the ARO up to its full amount the closer it gets to being retired.
The accretion expense is the ARO balance x the discount rate at initial measurement.
Annual accretion expense is an operating expense and is NOT considered interest expense.

Example:
ABC purchases a mine for $100,000 and is required by the government to seal the mine at the end of the 5-year operation. The estimated costs to seal the mine will be $10,000.

The $10,000 ARO will be discounted to present value, let's say the present value of the ARO is $7,500. The initial entry will be:

Mine	*$107,500*	
Cash		*$100,000*
Liability for ARO		*$7,500*

The entry to recognize accretion expense each year:

Accretion expense	*$500*	
Liability for ARO		*$500*

Note: The $500 is just an example. The actual accretion expense would be calculated by multiplying the ARO by the discount rate each year, and each year's accretion expense is added to the ARO, moving toward the full value of $10,000.

By the end of year 5 when the money is paid and the mine is actually sealed, this would be the final entry:

Asset retirement obligation	*$10,000*	
Cash		*$10,000*

Long-term debt

Modification of Terms vs Extinguishment of Debt

What happens here is something like interest rates changing and the issuer of debt recalling the debt and then reissuing it at the current interest rates. Then the question is, was this an "extinguishment of debt" (and a "substantially different" new loan) or just a "modification of the terms" (substantially the same loan)?

To be considered an extinguishment: There needs to be a 10% or greater difference in the present value of the new loan's cash flows and the present value of the old loan's remaining cash flows. Also, if any embedded conversion options were changed, it could be considered "substantially different" and would be considered an extinguishment.

If neither of these apply, then the new loan is not substantially different and it would just be considered a modification.

What Constitutes a Troubled Debt Restructuring?

The simplest definition for a TDR is when the creditor grants the debtor a concession that they wouldn't normally consider. This is based on two conditions:

- The debtor must be experiencing financial difficulties
- The creditor must grant a concession as a result of the debtor's financial difficulties

Another way to look at it is if the creditor modifies the debt in a way that results in less overall money being paid back then before the restructure, indicating the creditor has made a concession. Would rather get paid back a portion of what is owed then nothing if the debtor is forced to default.

When this happens, the creditor will record a loss (they essentially have a note receivable that just went down in value), and the debtor records a gain, because they were released from a portion of debt they otherwise would have paid back.

Debt vs Equity Instruments

Some instruments have features of both debt and equity. There are certain characteristics that help clarify what an instrument should be classified as on the balance sheet.

Convertible debt: Debt that can at a later date be exchanged for common stock will be classified as debt until the conversion takes place. If the conversion can be settled with cash then it remains classified as debt.

Bonds with detachable warrants: The proceeds from the issuance are allocated to 1) the fair value of the warrants without the debt (paid in capital account-equity) and 2) the fair value of the debt instrument (classify as debt).

Issuing shares worth a fixed dollar amount: If a firm agrees to a transaction where they will issue shares worth a fixed dollar amount in the future, this would be considered debt. They are essentially just agreeing to pay a certain price in the future for the transaction… which fits the description of debt.

Issuing a fixed number of shares: If a firm agrees to a transaction where they will issue a certain number of shares, but not at a fixed price, this would be classified as equity.

Bonds

Bonds and long-term notes use essentially the same principles.

Types of bonds:

- Secured and unsecured: A secured bond has a claim to specific assets. Unsecured has no such claim and the bondholders are unsecured creditors
- Serial bonds: bonds that mature at staggered intervals
- Single maturity bond: Most CPA problems are this type of bond and it just means a bond with a single maturity date
- Callable and redeemable bonds: Bonds that can be matured before the maturity date a specified price
- Convertible and non-convertible: a convertible bond can be converted into stock. Most bond problems will be “regular” bonds that are not convertible, and just have a single maturity date

For bond problems you’ll need to know:

- Issue date
- Face value- this is usually stated something like 10, $1,000 bonds for a total of $10,000 of bonds
- Coupon rate or stated interest rate- this determines the cash interest paid
- Effective rate or yield rate- this determines interest expense and bond price
- Interest payment dates- this is usually twice a year
- Maturity date of bond
    - Again, if the market rate is greater than stated rate, there is a discount
    - If the market rate is less than the stated rate, there is a premium
    - If the market rate is the same as the stated rate, there is no premium or discount
    - Bond price is the present value of future cash payments discounted at the yield rate

Premium on bonds = Cash proceeds - face amount
Discount on bonds = Face amount - cash proceeds

NOTE: For bond problems on the exam, they will usually give you the present value of the bond price. You won't usually need to calculate the PV of a bond price yourself.
Or, they make it easy by saying something like, "ABC issued $100,000 of bonds at 97". This means they issued the bonds at a discount, and you multiply 100,000 by .97 to get the present value of the bond price. Bonds issued at "102 or 103, etc" just mean there is a premium and you would multiply the bond price by 1.02 or 1.03 to get the present value.

Discount Example:
ABC issues $100,000 of 10% bonds at 97. ABC receives $97,000 in cash, so there is a discount of $3,000.

Entry to record bond issue would be:

Cash	*$97,000*	
Discount	*$3,000*	
Bonds payable		*$100,000*

Premium Example:
ABC issues $100,000 of 10% bonds at 102. ABC received $102,000 in cash, so there is a premium of $2,000.

The entry to record the bond issue would be:

Cash	*$102,000*	
Bonds payable		*$100,000*
Bond premium		*$2,000*

When you're figuring out interest payments and amounts, keep track of your dates and the number of payments each year.

If the stated rate is 10% and there is an interest payment twice each year, remember to either use 5% (half of 10) to get the payment, or to multiply the face amount by 10% and then divide it in half to get each payment.

If bonds are issued on something like Oct 1 and they ask you what the interest expense for the year was, remember that it's only 3 months instead of 6 or 12. Keep the dates in mind and the number of months that are applicable to the question being asked.

Premium or Discount Amortization

As each bond payment is made, the premium or discount is amortized.

The actual cash payment is equal to the bond's stated rate x the face amount. This doesn't change from payment to payment.

What does change is the carrying value of the bond and the premium or discount. With a bond discount, the portion of discount amortized with each payment is bringing the carrying value of the bond back up to its face amount by the bond's maturity date.

With bond premium, the portion of premium being amortized with each payment is bringing the carrying amount back down to the face amount by the bond's maturity date.

Discount Example

Take ABC's discounted bond where they received $97,000 with a face amount of $100,000, and the stated rate is 10%. Market rate is 11%.

Year	Beginning Carrying Amount	Market Rate	Interest Expense	Cash Paid	Discount Amortized	Ending Carrying Amount
1	$97,000	11%	$10,670	$10,000	$670	$97,670
2	$97,670	11%	$10,744	$10,000	$744	$98,414

You can see that the carrying value of the bond is being brought back towards the face amount of $100,000 as the discount is amortized.

Premium Example

Take ABC's premium bond where they received $102,000 with a face amount of $100,000, and the stated rate is 10%. Market rate is 9%.

Year	Beginning Carrying Amount	Market Rate	Interest Expense	Cash Paid	Discount Amortized	Ending Carrying Amount
1	$102,00	9%	$9,180	$10,000	(820)	$101,180
2	$101,180	9%	$9,106	$10,000	(894)	$100,286

You can see that the carrying value of the bond is being brought down towards the face amount of $100,000 as the premium is amortized.

**these examples also illustrate the effective interest method, where interest expense is calculated on the carrying value using the market rate and is different than the actual cash payment attached to the face value and stated interest rate.*

Bond issue costs
Some problems will include bond issue costs.
Bond issue costs are reported on the balance sheet as a deduction to the bond carrying amount.
The issuance costs are amortized over the life of the bond to interest expense.
Bond issue costs include accounting fees, legal fees, printing fees, and underwriting fees. IFRS works the same way.

Fair value option for bonds (or notes payable)
A company can elect to record a bond at fair value - the fair value option. The election can never be changed and it can apply to one or several bonds.
The bond is recorded at fair value.
The amortization of a premium or discount still applies.
Any change in fair value is recognized in earnings as unrealized gains or losses.
Increase in fair value means a loss: the company owes more.
Decrease in fair value is a gain: the company owes less.

Conversion of convertible bonds
Book value method: at conversion you just transfer the bond balances to stock accounts and no gain or loss is recorded
Market value method: at conversion the stock accounts are credited for the market value of the stock or bonds, the bond accounts are closed, and a gain or loss is recorded for the difference
You're comparing the market value of the bonds to the market value of the stock, and the difference will be either a gain or loss.

Bonds with warrants

A company can issue bonds that also give the bond purchaser stock warrants (stock rights).

Both the bonds and the warrants need to be allocated a value.
If the fair value of both the bonds and the warrants is known (this will be given to you in the problem), then you allocate the total bond price in proportion to the fair values.

If only one fair value is known, you assign the fair value to that security and allocate the remaining bond price to the other security.
When allocating a value to the warrants, this is recorded in equity, not debt.

Notes payable

Notes payable and discounts/premiums work exactly like bonds.
With notes payable problems, you might be given two interest rates:

- The stated rate: this is the rate stated in the note and determines the actual cash payment of interest each period
- The effective rate, or yield rate, is the market rate of interest. If the note is to be reported at present value, then you use the effective rate
    - When the effective rate is bigger than the stated rate, the note is issued at a discount. When the effective rate is lower than the stated rate, the note is issued at a premium.

A discount is a contra account to the note. A discount is amortized over the life of the note and the discount increases the liability of the note.

A premium is an adjunct account to the note. A premium is amortized over the life of the note and decreases the liability of the note.

Debt covenants

These are when a creditor gives a debtor specific covenants that they have to meet. These are usually financial ratios that the debtor has to stay within a certain range of, for example, total liabilities to tangible net worth.

If the debtor falls “out of covenant”, there are penalties such as the debt being due immediately.

Equity

Common vs Preferred Stock

The biggest difference in common stock vs preferred is that common stock usually has voting rights and preferred doesn't, and preferred stock usually has dividends and dividend priority when common stock might not receive dividends

Stock Issuance

When a company issues stock, there are usually 3 accounts hit:

- 'Cash' for the amount of the stock issued (cash received)
- 'Common stock' (#shares * par value)
- 'Paid-in capital excess of par'- whatever is above the par value

If you issued 10 shares of $1 par value stock for $100, you would receive $100 in cash, credit 'common stock' for $10, and credit 'additional paid in capital' for $90.

If the stock is "no par" stock, then the entry would just be a debit to cash of $100 and a credit to 'common stock' of $100.

Preferred Stock

Preferred stock can be

- callable
- redeemable
- convertible

If redeemable preferred stock has a specified date at a specified price, it is usually classified as debt and associated cash dividends are reported as interest expense.

When callable or redeemable stock is called or redeemed, any dividends in arrears are paid first.

Treasury Stock
Treasury stock is when a company purchases its own stock. It does not represent ownership and it lowers cash and owners' equity.
Treasury stock is a contra- owners' equity account.

It is not an asset or an investment, income is never affected, earnings per share is increased, and retained earnings can be decreased but not increased by treasury stock.

There are two methods of accounting for treasury stock:
Cost method: this debits the treasury stock account at cost. When treasury stock is purchased, cash is credited and 'treasury stock' is credited for the same amount.

Example:
ABC purchases 100 of its own shares for $20 per share. The entry would be:

Treasury stock	*$2,000*	
Cash		*$2,000*

Notice there's no mention of par value - the treasury stock account is simply debited for the amount spent. If ABC later reissued 20 of these shares at $30 per share:

Cash	*$600*	
Contributed capital from treasury stock		*$200*
Treasury stock		*$400*

The original purchase of treasury assigns a value of $20 to each share of treasury stock, and this acts like a "par value" for the treasury stock in subsequent reissues of the treasury stock.

Par method: this debits the treasury stock account at par.
When treasury stock is purchased, common stock is reduced pro-rata for the # of treasury shares purchased.

Example:
ABC purchases 100 shares at $30/share of its own $10 par stock that was originally issued at $20 per share. The entry would be:

Treasury stock	*$1,000*	
Contributed capital excess of par	*$1,000*	
Contributed capital from treasury stock	*$1,000*	
Cash		*$3,000*

If the treasury stock was purchased for $15 per share it would be:

Treasury stock	*$1,000*	
Contributed capital in excess of par	*$1,000*	
Contributed capital from treasury stock		*$500*
Cash		*$1,500*

Under the par method, treasury stock is debited for the par amount of shares purchased, and then "contributed capital excess of par" is debited up to the amount of the original issue price. The remainder is either debited or credited to "contributed capital from treasury stock" depending on whether the treasury stock purchase price was more or less than the original price.

Dividends

Dividends are a distribution of cash or other property from a firm to its owners. They are a distribution of earnings, so they are not an expense.

The liability for dividends is recognized at the declaration date.

The ‘date of record’ is the cutoff date for the owners who will receive dividends. If you bought stock in the company after the date of record, no dividends for you.

Payment date is the date the dividends are actually paid out.

Dividends in arrears are dividends that accumulate because they weren’t actually paid out during a period. However, no liability is recorded on dividends in arrears until dividends are declared.

Dividends reduce the owners’ equity account when paid.

Scrip dividends

This is when a firm declares dividends but doesn’t have the money to pay them.
It’s essentially a note payable from the firm to the owners, and interest is paid on the note until the dividends are paid.
Liquidating dividends are when dividends are a return OF capital instead of a return ON capital.
These usually happen in industries involving natural resources.

Stock Dividends

This is when a firm pays ‘dividends’ of additional stock in the company.

It increases the # of shares outstanding, but it doesn't change ownership percentages, and it doesn't reduce the firm's owners' equity.
If the dividend is LESS than 25% of outstanding shares, then the dividend is capitalized at market value.
If the dividend is MORE than or equal to 25% of outstanding shares, the stock is capitalized at par value.

Stock split
This simply doubles the number of outstanding shares if it's a 2-for-1 split, or triples if it's a 3-for-1 split, and so on.
Retained earnings nor the common stock account is affected by a stock split.

Allocation of Dividend Payments
In general, the order of dividend payment is the following:

- Preferred shareholders receive any dividends in arrears they are owed
- Preferred shareholders receive the current period dividend
- Common shareholders receive a matching amount which equals the preferred % x total par of common outstanding
- Preferred receive an additional percentage if any dividends remain
- Common receive any remaining dividends after that

Retained earnings
Retained earnings = Income to date - dividends declared to date +/- other adjustments.

It is just keeping track of the earnings to date by a firm, and it is not the same thing as cash… it is not money sitting in a bank account somewhere.

A retained earnings statement can be a separate statement in the financials, or it can be part of the Statement of Changes in Owners' Equity.

Adjustments to retained earnings

There are two things that can change prior year balances of retained earnings:

- The cumulative effect of an accounting principle change
- The correction of an error that results in a prior period adjustment

Book value per share

The formula for calculating book value per share is:
(common stockholders' equity) / (# of common shares outstanding)
OR
(Total owners' equity - preferred stock claims) / (# of common shares outstanding)

Revenue recognition

Two main criteria for recognizing revenue:

- The revenue is earned, meaning the goods or services have been provided to the customer
- There is reasonable assurance that the receivables will be collected

ASC 606 - Revenue from Contracts with Customers

This standard is now the main framework for revenue recognition, <u>except</u> for specific items such as leases, nonmonetary exchanges, insurance contracts, and the specifics of different financial instruments. This standard aims to clarify the principles for recognizing revenue and simplify previous industry-specific revenue recognition.

The main idea behind ASC 606 is the “5 steps”:

1. Identify the contract with the customer.
2. Identify the performance obligations in the contract. If there are different performance obligations (products) in the contract, these are accounted for separately.
3. Determine the transaction price. This is the amount that the providing entity expects to be entitled to in exchange for providing the goods or services to the customer.
4. Allocate the transaction price to the performance obligations in the contract. The price is allocated on the basis of standalone prices of the goods or services promised in the contract. If standalone prices are not observable, the entity estimates them.
5. Recognize revenue when (or as) the entity satisfies the performance obligation.

A few notes to this before we do examples:

- If a contract includes a significant financing component, whether it's explicitly stated or not as "financing", then interest income or expense should be recognized separately from the revenue from the contract with customers. This can be ignored if the time between payment and performance of the contract is less than a year, or if the performance of the contract is highly variable and not within control of the entity or customer.
    - The idea is that the revenue recognized should reflect what the customer would pay right when the goods or services were available to be transferred to the customer.
    - When it's determined that a contract does include a significant financing component, then the effective interest method is used.
- The transaction price is the final amount expected to be exchanged for providing goods or services to a customer, and it excludes amounts collected for third parties such as taxes. Also, sales discounts or volume discounts - if they are expected to be hit, are subtracted from the transaction price.
    - *A restaurant contracts to cater a sports team's dinners through the season for $1,000 per dinner for 30 dinners. The restaurant offers a discount of $100 per dinner if the total dinners hit 20, then the transaction price of the contract is $900 x 30 which equals $27,000.*
- If there is a contract modification that entails distinctly different goods or services at their standalone price, then this is considered a separate contract.
- The performance obligation is fully satisfied when the good or service is transferred to the customer, and a good or service is "transferred" when the customer <u>obtains control of that good or service</u>.

Example- Identifying Performance Obligations
An HVAC business contracts with a customer to sell and install an air conditioning unit in the customer's home. This is two separate performance obligations: 1) The sale of an air conditioning unit, and 2) the installation of the unit. The contract price will be allocated to these two separate obligations.

Example - Allocating the Transaction Price to Multiple Products
ABC contracts with XYZ to sell XYZ its three most popular products, Alpha, Beta, and Omega. The total contract price is $100,000. ABC normally sells Alpha for $30,000, Beta for $75,000, and Omega for $45,000. To determine how much revenue ABC will allocate to each product based on the contract, you take the percentage of each item relative to the total:

Alpha is 30/150 = 20%, Beta is 75/150 = 50%, Omega is 45/150 = 30%

ABC would recognize the following revenue per product:
Alpha = $20,000
Beta = $50,000
Omega = $30,000

Recognizing Revenue Over Time

When recognizing revenue over time, there is the input method and the output method. The input method is the most common, and is very similar to the percentage of completion approach. The input method recognizes revenue based on satisfying the performance obligation relative to the total performance obligation to be performed, such as recognizing revenue on construction

project as costs are incurred relative to the total estimated cost to finish the project.

For example, if the contract is to build a house, the customer has control of the house as it's being completed, so revenue is recognized as the construction is completed.

The input method is used when the costs being tracked are things like costs incurred, labor hours, machine hours, etc.

The output method recognizes revenue based on the value transferred to the customer relative to the total value to be transferred. These are things such as units produced or delivered, milestones reached, etc.

Example:
ABC corp contracts to construct a building for XYZ for $1,000,000. The building will be completed by the end of year 2. ABC uses the input method using costs incurred. ABC estimates that the total costs will be $500,000. These are first year's results:

Costs incurred	*$300,000*
Costs remaining	*$200,000*

Based on this, in year 1 ABC incurred 60% of the total cost of the project (300,000 / 500,000 = 60%), so it will recognize 60% of the revenue in year 1, which is $600,000. Gross profit recognized would be $300,000(total gross profit in project = 500,000 x 60%).

In year 2, as long as nothing major changes, ABC completes the remaining 40% of the project and will recognize $400,000 of revenue in year 2.

**Revenue, gross profit, and costs are essentially based on the percentage complete approach as illustrated in this example.*

Not-For-Profit Revenue from Contributed Services

A NFP can recognize revenue from donated services if:

1. The services provided require special skills
2. The services are provided by someone who has the skills
3. Such skills would be paid for if they hadn't been donated

Example:

A dentist spends a Saturday doing dental cleanings for free for a NFP organization. The dentist would have charged $200 per hour and he volunteered for 8 hours that day. The NFP would recognize $1,600 in contribution revenue. If the dentist had volunteered but simply volunteered to wash cars with other volunteers, there would be no revenue recognized.

Compensation and benefits

Compensated Absences

This an account that accrues the expense for paid days off for employees. Like any other expense, the payment of the compensation needs to be probable and able to be estimated, and for paid days off this is fairly straightforward.

Example
ABC gives their 10 employees 10 paid vacation days each year. Each employee makes an average of $100 per day. ABC estimates that 80% of the days will be used this year, and the remaining 20% the following year.

The entry to record this would be:

Vacation expense	*$10,000*	
Vacation days payable - current		*$8,000*
Vacation days payable - noncurrent		*$2,000*

Defined Benefit Plans

With a defined benefit plan, the annual retirement benefit is defined. The big thing with these is the annual pension expense and the ending liability.

Defined Benefit Pension Plan

Annual pension expense is an income statement item.

There are 5 components of pension expense:

- + Service cost= the increase in PBO based on what employees earn in the current year
- + Interest cost= the growth in PBO based on interest accruing. This is the PBO at beg of year x the discount rate

- - Expected return on plan assets= the expected amount of growth in the pension fund for the year. This is the beg balance of plan assets x the expected rate of return
- +/- Amortization of prior service cost
- +/- Amortization of net gain or loss

The ‘projected benefit obligation’ (PBO), is a balance sheet item.

The basic formula for PBO:

- Beginning PBO
- + Service cost
- + Interest cost
- + Prior service cost
- - Prior service credit
- +/- Liability gain or loss
- = Ending PBO

An increase in the PBO is a PBO loss.
A decrease in the PBO is a PBO gain.

The pension equation is trying to figure out what needs to be contributed by the employer on an annual basis in order to have the money to pay an employee a certain amount each year once the employee reaches retirement age.

Stock Compensation (Share-Based Payments)

Stock options: Stock options give employees the right to purchase their employers stock at a fixed price after working for the company for a period of time.

There are a few main elements of stock options:

Grant date: This is the date the options are awarded to the employee.

Vesting date: This is the date in the future when the employee can actually exercise the option.

Service period: This is the amount of time from grant date to vesting date.

Compensation expense: This is the expense recognized during the service period.

Total compensation expense will be equal to the fair value of the options expected to be exercised.

Fair value is measured at the grant date using an option pricing model (usually Black Scholes).

Total compensation expense is amortized on a straight-line basis over the service period. If an estimated forfeiture rate changes, then so does compensation expense.

The change in compensation expense is recognized in the current year, no prior years' comp expense is changed.

Example:
ABC decided to let 10 key employees each buy 10,000 shares of ABC stock as additional compensation. Starting on January 1, 2018, the employees could purchase the shares at $8 each, and when the market value of the stock was $10 per share. The stock has a par value of $5 per share. Using the Black Scholes model, the fair value of the options at the grant date is determined to be $6 per share. The options vest on December 31, 2020, a service period of 3 years.

Based on these facts, ABC would recognize compensation expense of $600,000 (100,000 shares x $6 fair value) over the 3-year period, or $200,000 each year.

The entry for 2018 would be:

Compensation expense	*$200,000*	
Paid in capital- share options		*$200,000*

On January 1st, 2020, 2 of these employees quit, so the total amount of compensation to be recognized would only be for 8 employees, which would equal $480,000 (8 x 10,000 shares x $6 fair value). By 2020, $400,000 of compensation expense has already been recognized as part of the options, so the compensation expense for 2020 would be $80,000 (480,000 - 400,000).

The entry for 2020 would be:

Compensation expense	*$80,000*	
Paid in capital - share options		*$80,000*

If on January 1, 2021, 4 of the employees exercised the options when the market price of the stock was $20, this would be the entry:

Cash	*$320,000*	
Paid in capital - share options	*$240,000*	
Common stock		*$200,000*
Additional paid in capital		*$360,000*

*the amount of “paid in capital - share options” that was credited along with compensation expense is debited back out as the options are exercised and closed to “additional paid in capital”.

Performance Based Options
These are options that require some performance target is met before the options will vest.
The change in expected number of options to be exercised is treated the same way as changes in forfeiture rate.

Expiration of Options
With fixed options, if the options expire un-exercised, there is no reversal of the compensation expense.
With performance-based options, if the performance criteria is not met and no options are exercised, then the compensation expense that was recognized IS reversed.

Stock Awards
When an employee is given a stock award, the stock is restricted until the stock vests.
Total compensation expense is the fair value of the stock on the date that the employee receives the “award”.
The employee does not own the stock until the award vests.
Compensation expense is recognized over the service period.
If the award does not vest, then the compensation expense is reversed.

Stock Appreciation Rights
This is a form of stock compensation that pays an employee an amount equal to the increase in the stock price between a grant date and exercise date.

If cash will be paid, a liability is recorded, ‘SAR liability’.

Income taxes

Uncertain Tax Positions

A company can take certain tax positions that will provide different tax benefits if sustained. If the company determines a position is more likely than not (>50%) to be sustained, then its effects will be recognized in the financial statements. If the possible outcomes are varied, the company will take the largest benefit that is more likely than not to be realized.

Temporary and Permanent Differences

Differences will arise between accounting income and tax income, this is caused by temporary differences and permanent differences.
Permanent differences never reverse.

Permanent differences arise from interest on something like municipal bonds- there would be interest income in accounting income, but it wouldn't be counted in taxable income.

Other permanent differences include:

- Any tax-exempt interest
- Fines and penalties
- Life insurance premiums on key employees
- Dividends received deduction

Temporary Differences

These are items that are recognized in different years between accounting income and tax income.

Items that will taxable in the future create a deferred tax liability, because there is an amount that will increase taxable income in the future, and therefore increased taxes.

Items that will be deductible in the future create a deferred tax asset, because it will reduce taxable income in the future.

Valuation Allowance

With deferred tax assets, there needs to be future taxable income in order to realize the tax asset.
A valuation allowance is a contra account to the deferred tax asset.
Uses a “more likely than not” standard to determine if a valuation allowance should be used or not.

Net Operating Losses

When you have deductions that exceed your taxable income, or negative taxable income, a net operating loss is created.
This can be carried back or forward to absorb taxable income in the past or future.
NOLs can be carried back 2 years, and forward 20 years.

Select Transactions

Accounting changes and error corrections

Management may change significant estimates or accounting principles, or a material error may be found that would have affected prior year's financial statements.

Estimate changes: this is when you change the estimated useful life of PPE or change depreciation methods. This requires prospective application.

Accounting principle changes: this is changing from one GAAP principle to another such as LIFO to FIFO. This requires retrospective application but is not considered restatement.

Error correction: this is when an error is discovered that affects prior year income. This requires retrospective application and restatement.

Two accounting approaches to deal with these changes or errors:

- Prospective application (going forward only)
  - This is used with changes in estimates
- Retrospective application (going back in time)
  - This is used with changes in accounting principle, AND for the correction of errors.

Prospective Application

The new estimate is applied to the current and future years. Does not need to be applied to prior years.

Retrospective Application
The change is prior years is recorded and an adjustment to retained earnings is made.

The adjustment to retained earnings is either a:

- ‘Cumulative effect’ of the change in accounting principle
- Or, a ‘prior period adjustment’ for error correction

Business combinations

A business combination is when an acquiring business gains control of another business.
Control is considered as greater than 50% of voting ownership.

Types of combinations

- Merger: Entity A merges with entity B. Entity B no longer exists in a merger, just entity A
- Consolidation: Entity A and entity B consolidate their net assets and become entity C. Entity A & B no longer exist, just the new entity C
- Acquisition: Entity A acquires a controlling interest in entity B, but BOTH entity A and B continue as separate legal entities

If the price paid for the business is greater than the fair market value of the net assets, the difference is booked as goodwill.
**See "Consolidated Financial Statements" section for examples.*

All transaction costs associated with a business combination are expensed as incurred. This includes legal fees, audit fees, finder fees, etc

Income Determination

At the date of acquisition, consolidated net income is just the parent's net income.

For the full year of the combination, consolidated net income is the parent's net income for the year, + the sub's net income AFTER the combination.

For years after the combination, consolidated net income is the parent's net income + the sub's net income each year.

Disclosure requirements for Business Combinations

Non-quantitative disclosures

- The name and description of acquiree
- Acquisition date
- Percentage voting equity acquired
- The primary reason for combination
- Description of how the acquirer gained control
- Qualitative factors that make up the goodwill amount

Acquisition Date Value Disclosures

- Fair value of each class of consideration transferred and total amount transferred
- Fair value of non-controlling interest and techniques/inputs used to determine fair value

Goodwill Disclosures

- Amount allocated to each reportable segment
- Amount expected to be tax deductible

For bargain purchase:

- Amount of gain
- Where the gain shows in financial statements
- Description of basis for gain

- **Publicly Traded Entity Disclosures**
- Amounts of post-combination revenue and earnings of sub included in consolidated income
- Revenue and earnings for the period as though combination occurred at beginning of period

IFRS vs GAAP Differences

- Under GAAP, contingent assets and liabilities can be recognized if criteria are met. Under IFRS, contingent assets are not recognized

- Under GAAP, goodwill allocation is to the reporting units. Under IFRS, goodwill is allocated to the cash-generating units
- Goodwill impairment testing is a one-step process under IFRS, and a two-step process under GAAP

Contingencies and commitments

Contingent liabilities are potential liabilities that a company is aware of, and depending on how probable they are, there are different requirements.

- If the contingent liability is “probable” and can be estimated, then it should be recognized on the financial statements.
  - The “best estimate” in a range is what should be accrued, if no estimate is better than any other, then the minimum should be accrued
- If it is probable but cannot be estimated, or reasonably possible, then a description of the contingency and a range of possible loss must be disclosed.
- If the possibility is ‘remote’, then it doesn’t need to be disclosed.

Gain contingencies are never recognized until realized (the gain has actually been received), they will be mentioned only in a footnote.

IFRS Differences

Under GAAP, if a contingent liability is going to be recognized, you use the lowest amount in the range of possibilities. Under IFRS, you use the midpoint in the range of possible liability.

Derivatives and hedge accounting

Derivatives are a financial instrument with an underlying, a notional amount, and a net settlement (such as a stock option). An underlying is a specified price or rate, such as a stock price.

A notional amount is a specified unit of measure, such as # of shares.

The settlement amount is determined by the underlying being multiplied by the notional amount, such as 100 shares at $20 per share.

Common types of derivatives:

- Option contracts
- Future contracts
- Forward contracts
- Swap contracts- these are usually swapping fixed interest rate for a variable rate

Measurement
Derivatives are recognized as either an asset or a liability and they are measured at fair value.
Changes in fair value result in gains or losses that are recognized in earnings.

Hedges
An item that you would “hedge” against (a hedging item), is an asset or liability that is subject to a possible loss.
A ‘hedging instrument’ is a contract or some other arrangement that mitigates the possible loss of the hedging item.
So remember, you use a ‘hedging instrument’ to ‘hedge’ against a ‘hedging item’.

To qualify for hedge accounting, the hedge must be considered to be “highly effective”, meaning it effectively offsets the changes in cash flows or fair value that is being hedged against.

Items you would use hedging for:

- Commodity price fluctuation risk
- Foreign exchange fluctuation risk
- Interest rate fluctuation risk
- Credit risk

Fair Value Risk

This is the risk of a loss due to a change in the fair value of a hedged item. This converts fixed risk into a floating risk.
A ‘firm commitment’ is an agreement that is usually legally enforceable that has been entered into with a third party. This agreement specifies all significant terms such as dates, prices, and quantities. A fair value hedge would be used to hedge against this risk, because at the date the agreement is made, prices are locked down by the contract, but by the actual date of the transaction, market prices could have gone up or down.

Basic accounting formula for fair value hedge:

- Adjust hedging instrument to FV at balance sheet date
- Adjust hedged item to FV at balance sheet date
- Recognize in current income the gain/loss from revaluing each
- If the hedge does not exactly offset the gain or loss on the hedged item, the difference is a gain or loss in current income

Cash Flow Risk

This is the risk of loss due to a change in cash flows from a hedged item.
This converts a floating risk into a fixed risk.

A forecasted transaction is an example of this type of risk. This is a transaction that is expected to occur. A cash flow hedge would be used with this type of transaction.

Basic cash flow hedge accounting:

- Determine change in present value of expected cash flow of hedged item
- Recognize the difference in the fair value of the derivative up to the amount of change in present value of expected cash flow in other comprehensive income. This is the effective portion.
- The amount different than the change in present value of expected cash flow in current income, this is the ineffective portion.

Disclosures

Specific disclosures are required for entities that issue derivatives AND/OR hold derivatives.

Entities that hold derivatives must disclose a lot of info about their reasons for using derivatives and the purposes of using derivatives.

They must also disclose information that distinguishes between fair value derivatives and cash flow derivatives.
BOTH the net gain or loss recognized in earnings during the period and the amount of gain or loss deferred in other comprehensive income must be disclosed.

Foreign currency transactions

These are transactions that are done in another currency, but reported in the US dollar. So the issue is how to convert these transaction to USD and the related gains/losses.

Terms to know:

Exchange rate: the price of one unit of one currency in terms of another currency.

Direct rate: The domestic price of one unit of a foreign currency. This would be 1 Euro = $1.57, or 1 Peso = $0.32.

Indirect rate: This is the foreign price of 1 unit of domestic currency. $1 = 0.87 Euro, or $1 = 3.2 Pesos.

Spot rate: The exchange rate at the current date.

Forward rate: The exchange rate now, for a date in the future.

Functional currency: the currency of the primary economic environment that the business operates in: A Chilean company's functional currency would be the Chilean peso.

When the domestic currency weakens compared to a foreign currency, accounts receivable creates an exchange gain because when you get paid you're getting more than you were initially owed, and therefore accounts payable create an exchange loss because you're paying back more money than you originally owed.

When the domestic currency strengthens against a foreign currency, accounts rec. creates an exchange loss and accounts pay. creates an exchange gain.

Transactions:

- On the day of the transaction, multiply foreign currency by spot rate to get the dollar value.
- At balance sheet date, do the same thing to get a new dollar value.
- The difference is an exchange gain or loss, and adjust the value of the receivable or payable.
- At settlement date of transaction, determine the new dollar amount to settle transaction (same as before: F/C units x spot rate = new dollar value).
- The difference between the new dollar value and what's on the books is an exchange gain or loss.

Foreign Currency Contracts

FX exchange contract: this is an obligation to buy or sell a foreign currency.

FX option contract: this gives the right to buy or sell a foreign currency, but not an obligation to do so.

If the instrument is used for speculation, then any gains or losses are recognized in current income.

If the instrument is a fair value or cash flow hedge, then the gains or losses apply to the related rules.

Translating Foreign Financial Statements

There are many reasons why a U.S. firm might need to translate the financials of a foreign sub into U.S. dollars

Terms to know:

Recording currency: the currency that the foreign books and financial statements are in.

Reporting currency: the currency that the final financial statements will be in.

Functional currency: the currency of the primary economic environment that the entity operates in. Except when:

- If the local economy is in hyperinflation, which means inflation of 100% or more for 3 straight years, the reporting currency is the functional currency
- If the foreign operations could not operate without the U.S. entity's operations, then the reporting currency is also the functional currency

When the sub's local recording currency is the functional currency, you "translate" the sub's financials to US dollars using translation.

When the sub uses the US dollar as the functional currency, but records in the local foreign currency, then the financials are "remeasured" to US dollars.

When the sub's functional currency is something other than the functional currency, then the sub's financials are 'remeasured' from recording currency to functional currency, and then 'translated' from functional currency to US dollars.

Translation

Assets and liabilities are translated using the spot rate (current rate) at balance sheet date.

Income statement accounts are translated using:

- the exchange rate at the date the item was earned or incurred
- the weighted avg exchange for the period (it will usually just be this)

Retained earnings is computed- the converted trial balance will not balance.

A ‘translation adjustment’ is made to balance. It is an item of other comprehensive income.

Remeasurement
Use current spot rate for all monetary assets and liabilities (like AP, AR).

Use historic rates for non-monetary items like fixed assets, prepaid assets, COGS, depreciation.

Use weighted avg for revenues and expenses that occurred evenly throughout the year.

To remember the difference between remeasurement and translation, remeasurement is the only one that uses any type of historic rates.

Remeasured trial balance will not balance either.

A ‘remeasurement adjustment’ is needed to make it balance.

This remeasurement adjustment is recognized as a gain or loss in income from continuing operations and flows through to retained earnings.

Remeasurement, then Translation
It’s simply re-measured, then translated.
There are two conversion adjustments:

- First, a remeasurement adjustment which goes through the income statement
- Second, a translation adjustment which goes through the statement of other comprehensive income

Leases

There are two types of leases:

- Operating: this is basically a rental agreement
- Capital lease: this is treated as if it were a sale

4 criteria for determining if a lease is a capital lease instead of an operating lease:

- If ownership transfers at the end of the lease
- If there is a bargain purchase option
- If the lease term is greater than or equal to 75% of the useful life of the leased asset
- If the present value of the lease payments is greater than or equal to 90% of the cash price of the leased asset

If ANY one of the above are true, it is a capital lease.

Formula for Calculating the Lease Obligation for the Lessee:

PV of Minimum Lease Payments = PV of rental payments + PV of guaranteed residual

OR

PV of Minimum Lease Payments = PV of rental payments + PV of bargain purchase option

Residual Value Guarantees & Bargain Purchase Options (BPO)

With leases there might be a guaranteed residual value or a bargain purchase option as part of the lease.

Guaranteed residual value: This is when the lessee guarantees a residual value, meaning if the value of the asset is less than the

guaranteed amount at the end of the lease, the lessee pays the lessor the difference. The guaranteed residual value is included in calculating the lessee's lease obligation at the beginning of the lease.

Example:
ABC leases equipment from XYZ. The lease payments total $100,000 with a present value of $90,000. ABC guarantees a residual value of $10,000 with a present value of $9,000. ABC's initial entry to recognize the lease liability is:

Leased equipment	*$99,000*	
Lease obligation		*$99,000*

**The present value amounts are simplified in this example, but the total lease payments and the residual or BPO are all discounted to present value at the beginning of the lease.*

Bargain Purchase Option: This is an amount that the lessee will buy the asset for at the end of the lease. By its definition it will be less than fair value of the asset at the end of the lease. This BPO amount is included in the lessee's obligation at the beginning of the lease.

The example above would be the exact same except just switch the guaranteed residual value with a bargain purchase option. In both cases, it's an additional amount that is discounted to PV and added to the total lease payments to get the total lease obligation.

Operating lease accounting:
Average rental per period is used for expense and revenue recognition. Even if there is a "free first month" or some other promotion that makes the cash payments unequal.

Example:
ABC leases a building from XYZ for 5 years for $100,000, and pays the entire amount up front. XYZ would put the $100,000 into unearned revenue and recognize revenue on a straight-line basis over the 5 years, equaling revenue of $20,000 per year.

Also, ABC would also recognize rent expense on a straight-line basis of $20,000 per year, even though they paid the entire amount up front. They would debit prepaid rent for the $100,000 and then credit prepaid rent and debit rent expense for $20,000 each year.

Leasehold improvements
Any costs for leasehold improvements are capitalized to a 'leasehold improvement' asset account and amortized over the shorter of either the remaining lease term, or the useful life of the improvement.

Example:
ABC leased a building and made leasehold improvements that cost $100,000. The useful life of the improvements is 10 years, but the lease is for 5 years. Based on this, ABC will amortize $20,000 per year of the leasehold improvement costs.

Capital lease accounting:
When capitalizing lease payments, exclude executory costs. Executory costs are things like insurance, maintenance, property taxes.
If the lease payment is $1,500 with $200 of executory costs, only $1,300 would be capitalized.

The lessee's interest rate on the lease will be the lower of the lessor's implicit rate, and the lessee's incremental borrowing rate,

which is the rate on similar debt (the problem will usually give you these two rates, and it's the lower of the two).

So the general journal entries will be to have a "leased asset" account and a "lease liability" or "lease obligation" account. Then, cash payments are lowering the lease liability, with a portion being interest expense on each payment.

Bargain purchase options are INCLUDED in the minimum lease payments.

'Unguaranteed residual' is excluded from minimum lease payments.

But, a 'guaranteed residual' by the lessee IS included in the minimum lease payments.

IFRS Difference

Under IFRS, instead of the 75% of the remaining life rule, any "major portion" of the remaining useful life would be a capital lease.

Likewise, instead of the GAAP 90% of cash value rule, under IFRS if the present value of minimum lease payments is 'substantially all' of the fair value of the asset, then it's a capital lease.

Another IFRS criteria is that if the asset under lease is specialized or unique to the point that only the lessee could use it without requiring major modifications, then it would be considered a capital lease.

Nonreciprocal transfers

Conditional and Unconditional Pledges to a NFP

With conditional pledges the nonprofit has to wait until the condition has been met to record the revenue.

With unconditional pledges, the nonprofit can recognize the revenue in the period the pledge is made.

Caveat to pledges is that the amount of revenue recorded is the net amount of the pledge expected to be collected within one year.

Donations on Behalf of a Beneficiary to a NFP

Sometimes a donation is made to an NFP and the NFP agrees to use the donation on behalf of a beneficiary.

If the donor grants the NFP variance power (to choose the beneficiary of the donation), then the NFP obviously records the donation at fair value. If the donor does not grant variance power to the NFP, then the NFP is just an intermediary and records a liability until the donation is transferred to the beneficiary.

If the donation is not a financial donation, such as materials or goods, the NFP doesn’t recognize the donation on its financial statements.

Endowments to an NFP
A regular endowment is when an external party donates money with the stipulation that the endowment amount has to remain intact forever. This would be classified as “net assets with donor restrictions.

If the donor wants the earnings of the endowment used for a specific purpose, then the earnings are ‘restricted’ and classified as net assets with donor restrictions.

If there is no restriction on the earnings, then they are net assets with no donor restrictions.

A ‘term endowment’ is an endowment made to a nonprofit with the stipulation that it is invested for a specific period of time and can then be spent. This makes it a net asset with donor restrictions.

Quasi endowment is an amount set aside by the governing body of the nonprofit. because it could also be spent by the governing body, these endowments are still considered net assets with no donor restriction.

A split interest agreement is when a nonprofit shares benefits in a trust with a donor or some other third-party
these can be revocable or irrevocable.

Nonprofits account for all investments at fair value.

Gains and losses are reported as changes to unrestricted net assets unless there is a donor imposed restriction
nonprofits do NOT use trading, AFS, or other investment classifications.

Contributions
Contributions can be conditional on some event or some other stipulation. If a contribution is conditional, the nonprofit has to wait until the condition has been met.

If a conditional contribution is received before the condition is met, then it is a liability until the condition is met.

The donor gets to place restrictions on the donation (endowment). These can be temporary restrictions or permanent restrictions.

A nonprofit can receive a donation as an ‘intermediary’, meaning that the nonprofit will then transfer the donation to another beneficiary.

If the nonprofit has a ‘unilateral right to redirect’, which means they get to pick the beneficiary of the donation, then the nonprofit will recognize the donation as contribution revenue.

If the nonprofit is NOT granted unilateral variance power (the right to redirect), then the contribution is recorded as a liability, because the nonprofit is simply transferring it to some other beneficiary.

Collections
Collections of works of arts or historical treasures do NOT have to be capitalized if:

- The items are held for public exhibition, education, or research
- AND they are protected and preserved

- AND they are subject to a policy that required proceeds of items sold to be used to purchase other items for the collection

Donated Services

Donated services must be reported at fair value as BOTH an expense and revenue if:

- The services donated require specialized skills that would have otherwise been purchased
- AND the person possesses those skills
- AND the value of the services can be measured

Research and development costs

All R&D costs are expensed, the issue is figuring out which costs can be considered R&D.

R&D activities (in the development phase):

- research aimed to discover new knowledge
- searching for ways to apply new research findings
- formulation and design of possible products or process alternatives
- product testing or testing of process alternatives
- modification of the design of a product or process
- design, construction, and testing of preproduction product prototypes
- design of tools and molds involving new technology
- the design and construction of a pilot plant not useful for commercial production
- engineering activity required to take a designed product to the manufacturing stage

As soon as a product hits the commercial production phase, nothing related to commercial production will be considered R&D. Quality control testing during commercial production would not be an R&D expense.

Legal fees for patent applications are not considered R&D.

Under IFRS, research costs are expensed, but development costs are capitalized.

Software costs

A firm can capitalize the costs related to the development of computer software once the software has reached technological feasibility.

So, before software being built is technologically feasible, it is in the R&D stage and therefore all costs are expensed.
Once it reaches technological feasibility, costs during this stage are capitalized.
Once the product is on the market and being sold, then the capitalized costs will start being amortized.

The rate for yearly amortization is the greater of:

- Ratio of software sales to expected total sales
- Straight-line method over economic life of the software

Amortization can switch between the two options year to year depending on the sales for a given year and which would result in more amortization.

Example:
ABC developed software and had capitalized costs of $100,000 and expected to sell $200,000 of the software. The estimated economic life of the software is 10 years. In year 1, ABC sold $40,000 of the software. Since straight-line would have been $10,000, ABC would amortize 20% or $20,000 (40,000 / 200,000 = 20%).

Software that in internal-use only (won't be sold commercially) is amortized straight-line over its useful life.

Cloud Computing Agreements
When a company enters a cloud computing agreement, it can take one of two treatments, and the deciding factor is if there is a software license transferred or not.

If it’s determined that there is a transfer of a license, then the accounting treatment is that the entire cost of agreement is capitalized and then amortized.

If there is no transfer of a license, then it’s a service contract and the cost is expensed as incurred.

IFRS Difference:
Under GAAP, software costs are expensed until technological feasibility is reached.
Under IFRS, research costs for software are expensed, but all development costs are capitalized.

Subsequent events

These are events that occur after the balance sheet date, but before the financial statements are issued.

Recognized Subsequent Events - Existed at Balance Sheet Date

Conditions that existed at the balance sheet date require recognition in the financial statements.

Unrecognized Subsequent Events - Did Not Exist at Balance Sheet Date

Conditions that did NOT exist at the balance sheet date require disclosure in the footnotes.

Fair value measurements

Fair value is defined as the price that would be received if you sell an asset in an active market
Assumptions:

- Transaction takes place in the most advantageous market available to the entity that maximizes the selling price
- Buyer/seller are willing and able to do business, and are each acting in their own best interest
- Not compelled to enter the transaction- they both act independently

Highest and best use considers what is:

- Physically possible
- Legally permissible
- Financially feasible

Fair value recognition and measurement
Approaches for determining fair value

- Market approach: Prices generated by real market transactions for identical or similar items
- Income approach: Discounts future amounts to current value
- Cost approach: Uses current amount required to replace the service value of an existing asset

Fair value option is not available for:

- Investments in entities that will be consolidated
- Obligations or assets related to pension or other employee-oriented plans
- Lease-related financial assets or liabilities
- Demand deposits of financial institutions
- Instruments that are components of shareholders' equity

Fair value election dates
Fair value can be elected only when:

- The item is first recognized (when the company acquires it)
- When an eligible firm commitment occurs
- When the accounting treatment of an investment in another entity changes

Fair value can be applied on an instrument-by-instrument basis
- Does not have to be applied to all instruments issued or acquired in a single transaction
- Must be applied to an entire instrument- not just to specific elements of an instrument

Fair value accounting at eligible election date
- Determine carrying value (CV)
- Determine fair value (FV)
- Determine difference between CV and FV
- Recognize difference as
  - A write up or write down
  - Recognize increase (gain) or decrease (loss) in current income

Fair value inputs
Inputs are assumptions and data that's used to determine FV.

There are:
- Observable inputs: derived from market data independent of the entity- example is stock exchange which gives real-time market prices for stocks
- Unobservable inputs: Value is based on the entity's assumptions based on the best information they have (essentially their best guess)

Levels of the fair value hierarchy

Level 1: Quoted market prices in an active market for identical items.

This is the highest level and involves observable inputs- which are the most desirable. Example is stocks listed on a major exchange, you know at any second what the exact value is for one share, all shares are identical.

Level 2: Observable inputs that don't meet all requirements for Level 1

- Quoted prices in active markets for similar items
- Quoted prices in markets that are not active

Example of Level 2 is comparing recently sold homes that are similar to your house to come up with a value.

Level 3: Unobservable inputs for the item being valued

- Lowest level with the least desirable inputs
- Usually based on the reporting firm's internal data

This basically means an entity's best guess based on their own internal numbers.

Disclosure Requirements

When fair value is used, disclosures are required:

- You must disclose the fair value at the reporting date
- You must disclose the valuation techniques used to determine the FV
- You must disclose the inputs used to determine FV
- You must disclose which items the fair value option is applied to
- Disclose the amounts of gains and losses associated with the fair value changes

GAAP vs IFRS

The GAAP vs IFRS differences have been mostly covered in the individual sections, but here is a summary of the most important differences:

Statement of Cash Flows

How to classify dividends and interest paid or received on the cash flow statement.

GAAP: Dividends paid are in the financing section. Dividends received, and interest paid and received are all included in the operating section.

IFRS: Dividends and interest paid can be classified as either operating or financing activities. Dividends and interest received can be classified as either operating or investing activities.

Inventory

LIFO is not allowed at all under IFRS, but is allowed by GAAP.

Writedowns: If inventory value is written down, no reversals are allowed under GAAP, but a subsequent reversal is allowed under IFRS, but never above the original cost.

Measurement: For IFRS, inventory is the lower of cost or NRV, with NRV being the selling price less completion costs. Under GAAP, inventory using LIFO or the retail inventory method is the lower of cost or market, otherwise it’s the lower of cost or NRV.

Equity Method
When an investment is between 20% to 50% ownership but the investor does NOT have significant influence.

GAAP: Either the fair value method or the equity method can be used.
IFRS: The equity method must be used.

PPE Carrying Value and Depreciation
Under GAAP, PPE is carried at historical cost less accumulated depreciation and any impairment losses.

Under IFRS, the “revaluation model” is allowed as well as historical cost. The revaluation model is basically the fair value option for PPE: whenever there is a difference in the carrying amount and the fair value of any PPE, then the value is written up or down to whatever the fair value is. If the value is written up, then the increase goes to other comprehensive income. If the value is written down, it is recognized in income.

Investment property under IFRS can also be carried at historical cost or use its fair value, except that any gain or loss in value under the fair value model is recognized in income instead of gains going through OCI like for PPE.

Remember that IFRS uses component depreciation, meaning that if major components of one piece of equipment has different useful lives, the similar components will be depreciated separately.

Impairment of Assets:
IFRS: It’s a one-step test that compares the carrying amount to the recoverable amount. The impairment loss would the the

difference in carrying amount and its recoverable amount. Also under IFRS an impairment loss can be reversed. These same one-step rule and reversal of impairments apply to intangible assets.

GAAP: It's a two-step test for impairment. Step 1: Is the carrying amount greater than the sum of future cash flows from the asset? Step 2: The impairment loss is equal to the difference between the carrying amount and the asset's fair value. An impairment loss under GAAP can't be reversed. The same rules for the tests and no reversal of impairment applies to intangible assets.

Intangible Assets

Intangible assets are carried at cost less amortization under GAAP.

IFRS allows for either historical cost or the revaluation model (see PPE revaluation above).

Government

State and Local Government Concepts

Conceptual Framework

Proceeds from taxation is unique to governments, no other form of organization can do this

The primary authoritative body for determining accounting standards for governmental funds is the Governmental Accounting Standards Board (GASB). The primary intended users of governmental financial statements are the citizens/taxpayers, school boards, and investors and creditors. Internal users are NOT considered primary users.

The 2 most important concepts of government financial reporting are:

- accountability
- AND inter-period equity

Inter-period equity means having current-year revenues cover current-year expenditures, so that future taxpayers don’t end up paying for benefits provided to current taxpayers.

6 characteristics of effective financial reporting

- understandability
- reliability
- relevance
- timeliness
- consistency

- comparability

5 elements of the statement of financial position
- assets
- liabilities
- deferred inflow of resources
- deferred outflow of resources
- net position (not net assets, not equity)

The legally adopted annual budget has 4 financial reporting implications:
- expression of public policy
- expression of financial intent
- form of control
- may provide basis for evaluating performance

Measurement focus and Basis of Accounting

The measurement focus of accounting for governmental accounting happens in two ways:

1) for government fund accounting
2) for proprietary fund accounting

For government fund accounting, modified accrual basis is used, and the measurement focus is the flow of current financial resources. The idea is to show the extent to which financial resources obtained in the period are sufficient to cover claims against financial resources. Under modified accrual accounting, revenues are recorded when they are measurable and available. Under accrual accounting, revenues are recorded when measurable and earned - this is a key difference.

For proprietary fund accounting, the accrual basis is used, and the measurement focus is the flow of economic resources.

Purpose of funds

A fund is both a fiscal entity and an accounting entity.

There are 3 categories of funds:

- Governmental funds: these accounts for the sources and balances of general government financial resources, uses modified accrual accounting.
- Proprietary funds: accounts for business-type activities, uses accrual accounting.
- Fiduciary funds: accounts for resources held by a government as a trustee or agent for the benefit others, uses accrual accounting.

Governmental Funds

- General fund: this accounts for everything not required to belong in another type of fund
- Special revenue funds: these account for revenue sources that are restricted or committed to be spent for specific purposes other than debt service or capital projects
- Capital project funds: funds that are restricted for construction or acquisition of capital facilities
- Debt service funds: funds restricted or committed for debt service principal and interest expenditures
- Permanent funds: accounts for endowments for which the earnings are restricted to support government programs dedicated for a public purpose

Proprietary Funds (these are business type funds)

- Enterprise funds: accounts for business-type activities that the public is the primary user of
- Internal service funds: business type activities where other government agencies are the primary user

Fiduciary Funds (remember fiduciary means money held for others)

- Pension trust funds: assets held in trust to provide employee retirement benefits
- Private purpose trust funds: assets held in trust to benefit individuals
- Investment trust funds: accounts for assets held in trust for other governments
- Agency funds: accounts for assets held in a custodial capacity

Format & Content of the CAFR

Government-wide financial statements

Government-wide financial statements:

Includes two statements:
- Statement of Net Position
- Statement of Activities

Statement of Net Position:
This includes a government-wide balance sheet, it's on the accrual basis, and it has 2 separate columns:
Governmental activities and business activities (does NOT include fiduciary funds).
'net position' is the last part of this statement

Statement of Activities:
This includes a government-wide statement of operations. It's prepared on the accrual basis.
The sections include:
- Program expenses
- Program revenues
- Net program (expense) or revenue
- General revenues

Governmental activities and business-type activities are separated on the statement. It does NOT include fiduciary funds either - remember that these are funds being held in custodial capacity, so they aren't resources for the government's use.

The measurement focus for the government wide financial statements is the economic resources focus. The government

wide statements are prepared on the accrual basis, which reflects the economic resources measurement focus.

Governmental funds financial statements

Government Fund Financial Statements

The financial statements of a governmental fund include:

- Balance Sheet
  - Assets and Deferred Outflows of Resources section
  - Liabilities, Deferred Inflows of Resources, and Fund Balances section
  - Has a column from left to right of the general fund, special revenue fund, capital projects fund, debt service fund, a column that totals all non-major funds, and then a totals column
- Statement of Revenues, Expenditures, and Changes in Fund Balance
  - Revenues section
  - Expenditures section
  - Shows the changes in fund balances at the bottom
  - Has separate columns for each major fund and a column showing combined non-major funds like the balance sheet

*Note that governmental fund statements don't include a statement of cash flows

Budget Comparison

Budget-to-actual comparison is required for the general fund, and any annually budgeted major special revenue fund.

The general fund is a required fund. It used modified accrual accounting, and uses budgetary and encumbrance accounting. Revenues come from taxes, licenses and permits, charges for services, fines. Remember that revenue must be measurable and available.
Property tax revenues are recorded after they are levied at the estimated collectible amount.

Expenditures are salaries, operating expenses, capital outlays for buildings & improvements, debt service such as principal & interest payments.

Special Revenue Funds
These are for revenue sources that are committed to a specific purpose other than debt service or a capital project.
They use modified accrual accounting.
They use budget and encumbrance accounting.

Debt service funds
These are for resources used to pay interest and principal on general long-term debt.
The life of the fund is tied to the underlying debt.
They use the modified accrual basis of accounting.

Capital Project Funds
These are used for resources that are restricted for capital outlay for buildings, land, or improvements. These use modified accrual basis.

Permanent Funds
Resources held in trust by the government for the benefit of the government or its citizens.
The principal is required to remain intact.
Earnings are transferred to the general fund or to a special revenue fund.

Proprietary funds financial statements

Proprietary Fund Statements

The required statements are:

- Statement of net position
- Statement of revenues, expenses, and changes in net position
- Statement of cash flows

It is organized in order by:

- Operating revenues
- Operating expenses
- Operating income or loss
- Non-operating revenues & expenses
- Ends with “change in net position”

*Major fund reporting does not apply to internal service or enterprise funds

Equipment purchased to be used within a proprietary fund will be depreciated over it’s useful life just like in a for-profit business. The proprietary funds use accrual accounting just like a for-profit entity.

Fiduciary funds financial statements

Fiduciary Fund Statements

The required statements are:

- Statement of fiduciary net positions
  - Assets
  - + Deferred outflows of resources
  - Less: Liabilities
  - Less: Deferred inflow of resources
  - Ends with: Net position
- Statement of changes in fiduciary net position
  - Additions
  - Less: Deductions
  - Ends with: Net increase or decrease in fiduciary net position

Fiduciary fund statements include a separate column for each fund type. Remember that fiduciary funds are NEVER major funds.

Notes to financial statements

The notes to government financial statements are similar to notes to for-profit financial statements in that disclosures are required for items that require disclosures or more additional explanation.

The main segment is the summary of significant accounting policies, which would include a government's policies for things like capital assets, pension plans, debt service schedule, long term liabilities, major projects, etc.

Management's discussion and analysis

The MD&A in the CAFR discusses the current year’s results compared to prior years. It provides and explanation of the included financial statements and how the different statements relate to each other.

It will also discuss overall financial position, reasons for any major changes in fund balances, deviations from the budget, etc.

Budgetary comparison reporting

Every CAFR should include a budget to actual comparison statement. Adherence to the budget is extremely important to government stakeholders, and key decisions are driven by the budget.

Required supplementary information

Other supplementary information is required in the CAFR, such as:

- Budget comparison: The initial budget, how/if it changed, actual results compared to budget
- Disclosures about infrastructure assets using the modified approach
- Other statistical data or schedules to provide additional info on significant elements of the government

Financial reporting entity, blended & discrete units

You might see questions on the ‘financial reporting entity’, which means determining a primary government and its component units. A component unit is a legally separate organization that the primary government officials are financially accountable for, OR, the relationship is such that leaving it out of the financial statements would be misleading or incomplete.

Once component units have been identified, there are two ways in which the component units are reported in the financial statements:

- Blended
- Discretely

Blended Presentation

If the component unit is part of the primary government in substance, then the balances for its funds are included with similar funds in the primary government, hence, “blended”.

Discrete Presentation

For all other component units, a separate column is added to the right of the primary government’s data. This is discrete presentation.

Typical Items & Specific Transactions

Net position and components thereof

“Net position” is the “equity” section for proprietary and fiduciary fund types.

There are 3 categories of net position:

- Unrestricted: Funds that aren’t “restricted” or “net investment in capital assets”
- Restricted: To be “restricted”, the restriction needs to be due to an external reason such as creditors or legislation. The city council’s decision on how to use funds would still be “unrestricted”
- Net investment in capital assets: Balance is equal to capital assets - accumulated depreciation - any debt related to the capital assets

Fund balances

“Fund balance” is the ‘equity’ section for governmental fund types.

There is a “non-spendable” and “spendable” classification, and further classifications of “spendable” balances:

- Non-spendable: not in a spendable form or legally required to remain unspent, such as permanent endowments
- Spendable
  - Restricted: reserved for a specific purpose by external parties such as creditors, regulations, or imposed by law
  - Committed: constrained by the government’s highest level of authority. Note the difference to “restricted”
  - Assigned: intended to be used for a specific purpose but doesn’t meet restricted or committed criteria
  - Unassigned: resources available for any purpose

Capital assets

Capital assets will be reported in the proprietary or fiduciary funds, not in the governmental funds.

Capital assets are recorded at historical cost and depreciated, except for land and inexhaustible works of art or historical items.

Infrastructure Assets

These are assets such as bridges, roads, water systems, etc that have much longer useful lives than ordinary capital assets such as machinery.

Because of this, “inexhaustible” infrastructure assets are not depreciated, and the rest are treated as capital assets and the depreciation will be reported in the government-wide statements, the proprietary fund statement of revenues, expenditures, and changes in fund net position, and the statement of changes in fiduciary net position.

Alternatively, governments have the option to take the “modified approach” which means the asset won’t be depreciated, but the government will record maintenance costs instead of depreciation. If this approach is taken the government must document that the asset is being preserved at a disclosed level.

General and proprietary liabilities

General liabilities in the government-wide financial statements:

- Unmatured long-term debt is reported in the government-wide statement of net position.
- “unmatured long-term debt” includes
  - bonds, capital leases, judgements, underfunded pension plans, notes, and other government debt
- Debt in the GW financial statements can be reported at face value or discounted value

Due to the financial resources focus of governmental funds, there might be liabilities that are not currently due and are therefore not reported on the governmental balance sheet, but need to be reported on the accrual basis (economic focus) of the government-wide financial statements.

Also, the liabilities of internal service funds, which are proprietary funds, are not included in the governmental funds but will be reported on the government-wide financial statements in the statement of net position.

Interfund activity & transfers

There are 4 types of inter-fund transactions:

- Inter-fund sales/purchases: these are business-type transactions between funds. These are recorded as revenue and expenditures or expenses
  - The fund receiving the service records an expenditure and the providing fund records revenue
- Reimbursements: one fund reimburses another fund. These are recorded as an expenditure or expense in the fund giving the reimbursement, and a reduction in expenditure or expense in the fund that is reimbursed (NOT revenue)
- Transfers: these are transfers between funds with no repayment required
- Loans: amounts between funds that are expected to be repaid. A receivable and payable is recorded. “Due” and “due from” is used for short term loans, and “advance to” and “advance from” are long term loans

Inter-fund receivables and payables will be eliminated when preparing the government-wide financial statements, similar to consolidation and eliminating entries.

Transactions between the government and any discretely presented component units are treated as external transactions and are not eliminated.

Nonexchange revenue transactions

Nonexchange revenue is mainly from taxes. There are 4 main classes of nonexchange transactions:

Derived Tax Revenues
These are taxes imposed on exchange transactions such as taxing personal income or taxes on goods and services.

Imposed Nonexchange Transactions
These are taxes on non-government entities (individuals or property) but not on exchange transactions. These include property taxes or fines.

Government Mandated Nonexchange Transactions
When one government entity provides resources to another government entity to be used for a certain purpose. Example would be state government reimbursing a school district for certain programs.

Voluntary Nonexchange Transactions
A contractual agreement entered by two parties willingly, such as a donor donating funds to a local school, or endowments.

Nonexchange revenue under the modified accrual basis:
Under the modified accrual basis, a government recognizes revenue as cash is received during the year, and up to 60 days after the end of the year when it is measurable and available.

Example:
City of ABC levies $500,000 in taxes. They estimate that $300,000 will be collected in the current year, $50,000 more within 60 days of the end of the year, and the remaining $150,000 over the rest of the following year.

Under the modified accrual basis, ABC will recognize $350,000 of revenue in the current year.

Nonexchange revenue under the accrual basis:
This is the same as how it would be for a business: If a city levied $500,000 in taxes, it would report $500,000 in revenue less any amount the city estimated to be uncollectible. So if they estimate $20,000 will be uncollectible, then revenue of $480,000 would be reported on the government-wide statement of activities.

Expenditures and expenses

In questions on governmental accounting, if the term “expense” or “net position” is used, then it is referring to a proprietary fund or fiduciary fund, because those use accrual accounting.

If the term “expenditure” or “fund balance” is used, then its referring to governmental funds since they use the modified accrual basis of accounting.

Expenditures are decreases in net assets, and they are recognized when a payment or a disbursement happens, where an expense isn’t necessarily a cash payment, such as depreciation.

Special items

Special items are listed separately at the bottom of the statement of activities. These are significant transactions that unusual or infrequent but not both. Another distinction from extraordinary items is that special items are considered within the control of management.

Extraordinary items are transactions or events that are both unusual in nature and infrequent in occurrence.

Budgetary accounting & encumbrances

Only certain types of government accounts are budgeted, and therefore use budgetary accounting:

- The general fund is budgeted
- The special revenue funds are budgeted
- Other funds are not usually budgeted

The most important thing to know are the accounts and how they're used:
'Estimated revenues' is the first step in the budgetary process. this account has a debit balance. this is the beginning of the budget process and is simply the amount of estimated revenue.

Next, they estimate how much of that revenue will be spent, and this account is called 'appropriations. this account has a credit balance. So you have estimated revenues and then the estimated amount of that revenue that will be spent, and that is called appropriations.

Next is the 'estimated other financing sources' account, and this is a debit balance which includes expected inflows that are not categorized as revenues.

Next is the 'estimated other financing uses' account which has a credit balance. This estimates other outflows of funds that wouldn't be classified as expenditures, such as transfers to other funds.

What's left over is the 'budgetary fund balance'. this account doesn't have a normal credit or debit balance, it is debited or credited to make the budgetary entry balance.

These steps are to setup the budget. there are normally no changes to this during the year unless the governing body meets

and amends the budget or if revenues are much different than predicted.

Entry to close the budget
In general, the closing entry for the budget is to simply reverse the opening entry by now debiting ‘appropriations’ and crediting ‘estimated revenues’.

Encumbrance Accounting

Appropriations are amounts set aside for certain purposes. an ‘encumbrance’ is like an appropriation inside an appropriation. If you have $10,000 appropriated for computer purchases during the year, and then you issue a purchase order to actually buy $2,000 worth of computers, you would ‘encumber’ $2,000 of the $10,000 appropriation.

When the goods are actually received, you reverse the encumbrance and record an expenditure.

The amount of an appropriation that is left over after expenditures and any encumbrances is called the ‘unencumbered, unexpended appropriation’.

The formula is:

- Appropriation
- LESS encumbrances
- LESS expenditures
- = Unencumbered, unexpended appropriation

REMEMBER: when money from an appropriation is actually going to be spent, the first step is an encumbrance (usually initiated with a purchase order), when the goods are actually received for that encumbrance, the encumbrance is REVERSED and then an

expenditure is recorded. So the encumbrance is basically turned into an expenditure when the goods are received.

- Appropriations are a credit balance
- Encumbrances are a debit when recorded (to lower the appropriation)
- When encumbrance is reversed it’s credited (to reverse the debit)
- Expenditure is a debit

Other financing sources and uses

Other financing sources will be non-revenue sources of funding such as bonds or long-term debt. They can also be transfers from other funds.

The actual titles you might see are:

- Other financing sources - transfers in
- Other financing sources - transfers out
- Other financing uses

Transfers from the general fund or debt service fund will always be listed as “other financing sources” and won’t be listed as “revenue”.