Property, Plant and Equipment, and Intangible Assets

- Accounting Principles

2022. 5.

Yangin Yoon

Agenda

- Recap the previous class
- Property, plant and equipment
- Depreciation
  - Depreciation Methods
  - Change of Estimation
- Derecognition
- Capital expenditure vs. Income expenditure
- Impairment
- Intangible Assets

Recap the previous class

- We evaluate the value of receivable periodically.

  - If a customer is broken, or in trouble, we may not receive the promised amount of money from the customer. If so, we need to include this information in the financial statements.

Bad Debt Expense	XXX	Allowance for Bad Debts	XXX

* "Bad Debt Expense" is an expense type account.
"Allowance for Bad Debts" is an asset type account (A contra account to Accounts Receivable).

Company ABC
Income Statement

Sales Revenue	800
Cost of Goods	500
Bad Debt Expense	50
Net-Income	250

Company ABC
Statement of Financial Position

Cash	300	Bank loan from Shinhan	350
Account Receivable	800		
Bad Debt Allowance	(50)	Capital Stock	900
Inventory	400	Retained Earning	200
		Total equity	1,100
Total assets	1,450	Total Liability and Equity	1,450

Recap the previous class

- Finally, it is settled that the account receivable is paid by cash (all, som e, or nothing).

  - If the final decision is made, we remove (derecognize) the relevant acc ounts from our accounting book.

Cash	XXX	Accounts Receivable	YYY
Allowance for Bad Debts	ZZZ		
Bad Debt Expense	YYY – XXX - ZZZ		

Recap the previous class

- ST Toy bought raw material from its supplier. ST Toy paid $200 to its s upplier. In addition, ST Toy paid $80 to the factory workers as wage. Th e accounting department employees of ST Toy were also paid $40. ST T oy manufactured toys and used up all of its raw material. All transactio ns occurred with cash.
- Paragraph 10 – "The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to thei r present location and condition."
- Journal Entry

Raw material (asset)	$200	Cash	$200
Factory worker salary expense	$80	Cash	$80
Acct worker salary expense	$40	Cash	$40
Product (asset, inventory)	$200	Raw material (asset)	$200
Product (asset , inventory)	$80	Factory worker salary expense	$80

Recap the previous class

- ST Toy bought raw material from its supplier. ST Toy paid $200 to its s upplier. In addition, ST Toy paid $80 to the factory workers as wage. Th e accounting department employees of ST Toy were also paid $40. ST T oy manufactured toys and used up all of its raw material. All transactio ns occurred with cash.
- The toys can be sold $100 in the market.

  - Provide the general entry.
- Paragraph 10 – "Inventories shall be measured at the lower of cost and net re alisable value."
- Journal Entry

Inventory write-down (expense)	$180	Product (asset)	$180

Or

Inventory write-down (expense)	$180	Accumulated loss (asset)	$180

Any Questions?

Property, Plant and Equipment

- For business operations, a company needs to have (and use) various assets.

  - For example, companies need land, buildings, machines, cars, etc.

- Some of assets are tangible, and the company directly use these assets for its business operation.

  - These are different from inventories, financial assets, and intangible assets.

Property, Plant and Equipment

- Initial Acquisition

  - These items are recorded as an asset.

Machine	AAA	Cash	AAA

* "Machine" is an asset type account.

Building	BBB	Cash	BBB

* "Building" is an asset type account.

Car	CCC	Cash	CCC

* "Car" is an asset type account.

Land	DDD	Cash	DDD

* "Land" is an asset type account.

Depreciation

- If we use PPE assets over the years, the values of PPE assets are changed.

  - In most cases, the values are decrease.

  - We cannot use machines or cars forever. For example, we can use them for 10 years or at most 20 years, depending on the situation.

→ So, we need to change the value of these assets.

Depreciation

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. And after 10 years, ST Consulting thinks the car has no value (For example, used car dealers will not buy this car, because it has no value.)

  - IAS 16, Paragraph 50 – "The depreciable amount of an asset shall be allocated on a systematic basis over its useful life."

  - IAS 16, Paragraph 60 – " The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity."

→ What is the required journal entry(entries) in each year?

Depreciation

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. An d after 10 years, ST Consulting thinks the car has no value (For exampl e, used car dealers will not buy this car, because it has no value.)
- Journal Entry

2022.1.1.

Car (asset)	$10,000	Cash	$10,000

2022.12.31.

Depreciation expense	$1,000	Car (asset)	$1,000

* "Depreciation expense" is an expense type account.

2023.12.31.

Depreciation expense	$1,000	Car (asset)	$1,000

2031.12.31.

Depreciation expense	$1,000	Car (asset)	$1,000

Depreciation

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. And after 10 years, ST Consulting thinks the car has no value (For example, used car dealers will not buy this car, because it has no value.)
- Journal Entry (Contra-asset account)

2022.1.1.

Car (asset)	$10,000	Cash	$10,000

2022.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

* "Depreciation expense" is an expense type account. "Accumulated depreciation" is an asset type account.

2023.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

2031.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

Depreciation

- Financial Statements
- 2022

ST Consulting

Income Statement

FOR THE YEARS ENDED DECEMBER 31, 2022

Sales Revenue	8,500
Cost of Goods	6,000
Depreciation expense	1,000
Net-Income	1,500

ST Consulting

Statement of Financial Position

DECEMBER 31, 2022

Cash	3,000	Bank loan	7,000
Inventory	5,000		
CAR	10,000	Capital Stock	7,000
Accumulated depreciation	(1,000)	Retained Earning	3,000
		Total equity	10,000
Total assets	17,000	Total Liability and Equity	17,000

- 2023

ST Consulting

Income Statement

FOR THE YEARS ENDED DECEMBER 31, 2023

Sales Revenue	9,500
Cost of Goods	6,300
Depreciation expense	1,000
Net-Income	2,200

ST Consulting

Statement of Financial Position

DECEMBER 31, 2023

Cash	4,000	Bank loan	7,000
Inventory	7,200		
CAR	10,000	Capital Stock	7,000
Accumulated depreciation	(2,000)	Retained Earning	5,200
		Total equity	12,200
Total assets	19,200	Total Liability and Equity	19,200

Any Questions?

Depreciation - Variations

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. And after 10 years, ST Consulting thinks the car has no value. (For example, used car dealers will not buy this car, because it has no value.)

- Other Assumptions (Accounting Estimation)

  - Estimated Residual Value (Salvage Value)

    : If the car is expected to be sold for $3,000 after 10 years, then?

    → Annual depreciation amount = (10,000 – 3,000) / 10 = $800

  - Estimated Useful life

    : If the car is expected to be used for only 5 years, then?

    → Annual depreciation amount = (10,000 – 3,000) / 5 = $1,400

Derecognition (disposal)

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. And after 10 years, ST Consulting thinks the car has no value. (For example, used car dealers will not buy this car, because it has no value.)

- After 10 years, the company disposes the car. No cash is involved.

2031.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

2031.12.31.

Accumulated depreciation	$10,000	Car (asset)	$10,000

Derecognition (disposal)

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. An d after 10 years, ST Consulting thinks the car has no value. (For exampl e, used car dealers will not buy this car, because it has no value.)

- After 10 years, the company disposes the car. ST Consulting sells the ca r for $500.

2031.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

2031.12.31.

Accumulated depreciation	$10,000	Car (asset)	$10,000
Cash	$500	Gain on disposal of cars	$500

* "Gain on disposal of cars" is a revenue type account.

Derecognition (disposal)

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. An d after 10 years, ST Consulting thinks the car has no value. (For exampl e, used car dealers will not buy this car, because it has no value.)

- On June 30th, 2029, the company disposes the car. ST Consulting sells t he car for $1,500.

2029.6.30.

Depreciation expense	$500	Accumulated depreciation	$500

2029.6.30.

Accumulated depreciation	$7,500	Car (asset)	$10,000
Cash	$1,500		
Loss on disposal of cars	$2,000		

* From 2022.1.1. to 2029.6.30. , it is 7.5 years.

Depreciation – Change of estimation

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the car for 10 years. And after 10 years, ST Consulting thinks the car has no value. (For example, used car dealers will not buy this car, because it has no value.)
- On January 1st , 2024, the company re-estimates that it can use the car for 5 additional years. The residual value is $500.

2023.12.31.

Depreciation expense	$1,000	Accumulated depreciation	$1,000

2024.12.31.

Depreciation expense	$1,500	Accumulated depreciation	$1,500

* (10,000 – 1,000*2 - 500) / 5 =1,500

2025.12.31.

Depreciation expense	$1,500	Accumulated depreciation	$1,500

Capital expenditure vs. Income expenditure

- ST Consulting bought a new building by paying $1,000,000 of cash on J anuary 1st, 2022. ST Consulting guesses that it will use the building for 20 years. And after 20 years, ST Consulting thinks the building has no v alue.

- Income expenditure

  - On 2024. 1. 1., the company painted the building. It costs $1,000

2024.1.1.

Maintenance expense	$1,000	Cash	$1,000

* "Maintenance expense " is an expense type account.

2024.12.31.

Depreciation expense	$50,000	Accumulated depreciation	$5,000

* (1,000,000 – 0) / 20 = 50,000

Capital expenditure vs. Income expenditure

- ST Consulting bought a new building by paying $1,000,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the building for 20 years. And after 20 years, ST Consulting thinks the building has no value.

- Capital expenditure
  - On 2024. 1. 1., the building has 10 office rooms. The company added 2 more rooms. The total cost is $72,000. The residual value is still zero.

2024.1.1.

Building	$72,000	Cash	$72,000

* "Building " is an asset type account.

2024.12.31.

Depreciation expense	$54,000	Accumulated depreciation	$54,000

* (1,000,000 – 0) / 20 = 50,000

** (1,000,000 – 50,000 * 2 + 72,000 – 0) / (20 – 2) = 54,000

Any Questions?

Depreciation Methods

- Depreciation and Accounting Standard

  - IAS 16, Paragraph 50 – “The depreciable amount of an asset shall be al
  located on a systematic basis over its useful life.”

  - IAS 16, Paragraph 60 – “ The depreciation method used shall reflect th
  e pattern in which the asset’s future economic benefits are expected t
  o be consumed by the entity.”

Depreciation Methods

- Straight-Line Method

  - Assume that an asset will benefit all periods equally and that the cost should be assigned on a uniform basis for all periods.

- Units-of-Production Depreciation

  - Allocates an asset's cost on the basis of use rather than time.

- Accelerated Depreciation

  - Methods that assign more depreciation to the earlier years and less to the later years. An asset's carrying amount is multiplied by a constant depreciation rate.

Depreciation Methods

- ST Consulting bought a new car by paying $10,000 of cash on January 1st, 2022. It will use it for 5 years, and the estimated residual value is $ 500. The estimated total mileage is 200,000 km.

  - The car is used for 30,000km (1st year), 60,000km (2nd year), 40,000km (3rd and 4th year), and 30,000km (5th year).

- What is the depreciation amount in each year?

	Straight-Line	Units-of-Production	Accelerated Depreciation	
			Carrying Book Value (A)	**Depreciation Amount (A * 0.45)**
1st year	1,900	1,425	10,000	4,507
2nd year	1,900	2,850	5,493 (=10000 – 4507)	2,476
3rd year	1,900	1,900	3,017 (=5493 – 2476)	1,360
4th year	1,900	1,900	1,657	747
5th year	1,900	1,425	910	410
Total	9,500	9,500	21,077	9,500

* $1 - \sqrt[5]{\frac{500}{10000}} = 0.45$

[or $10{,}000 * (1-0.45)^5 = 500$]

Any Questions?

Impairment

- ST Consulting bought a new building by paying $1,000,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the building for 20 years. And after 20 years, ST Consulting thinks the building has no value.

- Impairment

  - On 2023. 12. 31., the recoverable amount of the building is 700,000. The estimated residual value and expected useful life are the same.

2023.12.31.

Depreciation expense	$50,000	Accumulated depreciation	$50,000

2023.12.31.

Impairment Loss	$200,000	Accumulated Impairment Losses	$200,000

* "Impairment Loss" is an expense type account.
"Accumulated Impairment Losses" is an asset type account (contra-asset).

Impairment

- ST Consulting bought a new building by paying $1,000,000 of cash on January 1st, 2022. ST Consulting guesses that it will use the building for 20 years. And after 20 years, ST Consulting thinks the building has no value.

- Impairment

  - On 2023. 12. 31., the recoverable amount of the building is 700,000. The estimated residual value and expected useful life are the same.

ST Consulting

Statement of Financial Position

DECEMBER 31, 2023

Cash	4,000	Bank loan	200,000
Inventory	7,200		
Building	1,000,000		
Accumulated depreciation	(100,000)	Capital Stock	500,000
Accumulated Impairment Losses	(200,000)	Retained Earning	11,200
		Total equity	511,200
Total assets	711,200	Total Liability and Equity	711,200

Any Questions?

Intangible Assets

- Rights and privileges that are:
  - Long-lived.
  - Not held for resale.
  - Have no physical substance.
  - Providing owner with competitive advantage over other firms.
- Internally Generated Intangible Assets
  - They are not recognized on the balance sheet, but they have economi cal values.
- Acquired Intangible Assets
  - Valued at the amount paid to acquire them (e.g., patent, goodwill)

Intangible Assets

- Acquisition

  - Recognized as the paid value

- Amortization

  - The process of cost allocation that assigns the original cost of an intan gible asset to the periods benefited.

  - Straight-line amortization is generally used.

  - Directly written-off without contra-account (unlike depreciation)

Amortization Expense	$5,000	Patent	$5,000

* "Amortization Expense" is an expense type account.
"Patent" is an asset type account (intangible asset).

Chapter Summary

- Property, plant and equipment
  - Depreciation , Expected useful life, Expected residual value
  - Change of estimation
- Depreciation Methods
  - Straight-Line Method, Units-of-Production Depreciation, Accelerated Depreciation
- Capital Expenditure vs. Income Expenditure
- Impairment
- Intangible Assets

Any Questions?

Depreciation (exercise)

- Self-Study Material

P 9-4

LO 3

Depreciation Calculations

Gretchen, Inc., a firm that makes oversized boots, purchased a machine for its factory. The following data relate to the machine:

Price	$46,000
Delivery charges	$350
Installation charges	$650
Date purchased	May 1, 2017
Estimated useful life:	
In years	10 years
In hours of production	25,000 hours of operating time
Salvage value	$2,000

During 2017, the machine was used 1,800 hours. During 2018, the machine was used 2,900 hours.

Required:

Determine the depreciation expense and the year-end carrying amount for the machine for the years 2017 and 2018, assuming that:

1. The straight-line method is used.
2. The units-of-production method is used.
3. Interpretive Question: If you were Gretchen, which method would you use in order to report the highest profits in 2017 and 2018 combined?

Depreciation (exercise)

- Self-Study Material

P 9-6

LO 2
LO 3

Purchase of Multiple Assets for a Single Sum

On April 1, 2018, Cajun Company paid $210,000 in cash to purchase land, a building, and equipment. The appraised fair market values of the assets were as follows: land, $70,000; building, $120,000; and equipment, $60,000. The company incurred legal fees of $8,000 to determine that it would have a clear title to the land. Before the facilities could be used, Cajun had to spend $4,000 to grade and landscape the land, $3,500 to put the equipment in working order, and $14,000 to renovate the building. The equipment was then estimated to have a useful life of seven years with no salvage value, and the building would have a useful life of 20 years with a net salvage value of $10,000. Both the equipment and the building are to be depreciated on a straight-line basis. The company is on a calendar-year reporting basis.

Required:

1. Allocate the single purchase price to the individual assets acquired.
2. Prepare the journal entry to acquire the land, building, and equipment.
3. Prepare the journal entry to record the title search, landscape, put the equipment in working order, and renovate the building.
4. Prepare the journal entries on December 31, 2018, to record the depreciation on the building and the equipment.

Any Questions?

Liabilities

- Accounting Principles

2022. 5.

Yangin Yoon

Agenda

- Recap the last class
- Bond (Liability)

  - Simplified

  - Using Contra Account
- Bonds Retirements before Maturity
- Contingent Liability

Recap the last class (Financial Assets)

- For example, the company gets \$500 annually for three years, and \$10,000 (principle) three years later.

  - The current annual interest rate is 6%. What is the fair value of this cash flow?

→ Present value $= \frac{500}{(1+0.06)^1} + \frac{500}{(1+0.06)^2} + \frac{500}{(1+0.06)^3} + \frac{10{,}000}{(1+0.06)^3} = 9{,}733$

	2022.1.1.	**2022.12.**	**2023.12**	**2024.12**	**Sum of three years**
Nominal amount	0	500	500	10,500	11,500
Interest rate	0.06				
Discount factor	1	0.943	0.890	0.840	
Present Value	0	472	445	8,816	9,733

Recap the last class (Financial Assets)

	Interest Income	Value before the interest payment (A)	Small payback (B)	Value after payment (C=A-B)
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,773 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2022.1.1.

Financial Assets	9,733	Cash	9,733

2022.12.31.

Financial Assets	84	Interest income	584
Cash	500		

9,733*0.06 = 584

2023.12.31.

Financial Assets	89	Interest income	589
Cash	500		

9,817*0.06 = 589

Any Questions?

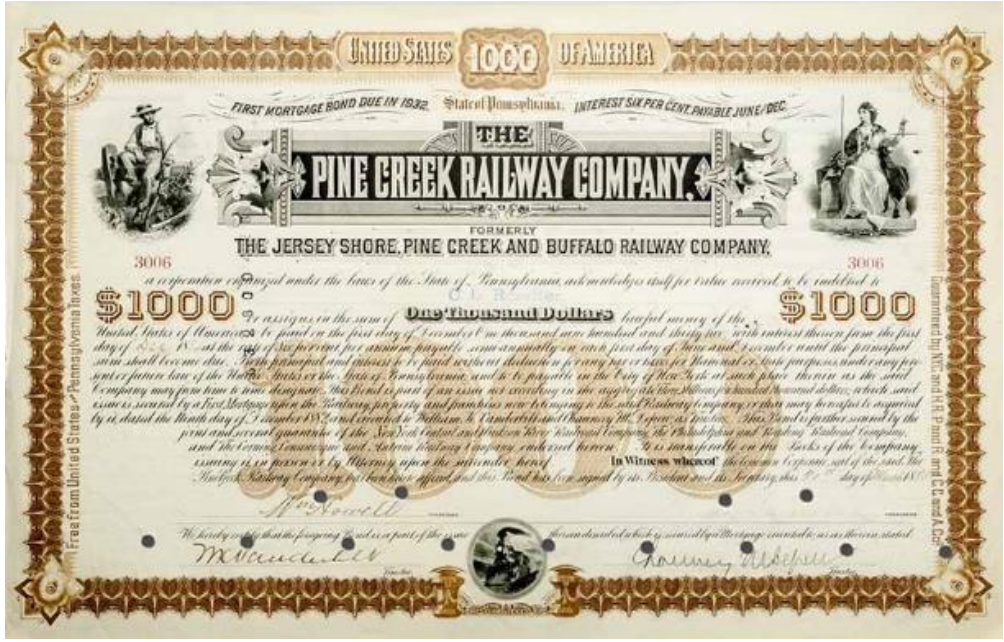
Bond (Liability)

- One of the sources that a company borrow fund is bond.
- Bond has three elements.

  - Face value (principal amount)

  - Coupon rate

  - Maturity



- The initial price is calculated by calculating the present value of future cash flow.

  - When we calculate an NPV, we use an effective interest rate (market interest rate).

Bond (Liability)

- For example, the face value is \$10,000, and annual coupon rate is 5% w ith three-year maturity.

  If the market interest rate is 6%, what is the fair price of this bond?

  → Present value $= \frac{500}{(1+0.06)^1} + \frac{500}{(1+0.06)^2} + \frac{500}{(1+0.06)^3} + \frac{10{,}000}{(1+0.06)^3} = 9{,}733$

- The company issues this bond and receives \$9,733 of cash.

	2022.1.1.	**2022.12.**	**2023.12**	**2024.12**	**Sum of three years**
Nominal amount	0	500	500	10,500	11,500
Interest rate	0.06				
Discount factor	1	0.943	0.890	0.840	
Present Value	0	472	445	8,816	9,733

Bond (Liability)

- There are three main events:

1) Bond issuance

Cash	YYY	Bonds Payable	XXX
Discount on Bonds Payable	XXX- YYY		

2) Interest payments

Bond Interest Expense	AAA	Cash	BBB
		Discount on Bonds Payable	AAA - BBB

3) Principal payments

Bonds Payable	XXX	Cash	XXX

Bond (Liability) - Simplified

	Effective Interest	Bond Value before Interest Payment	Coupon A mount	Bond Value after Payment
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,773 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2022.1.1.

Cash	9,733	Bonds Payable	9,733

2022.12.31.

Bond Interest Expense	584	Cash	500
		Bonds Payable	84

2022.12.31.

Bond Interest Expense	589	Cash	500
		Bonds Payable	89

2022.12.31.

Bond Interest Expense	594	Cash	500
		Bonds Payable	94
Bonds Payable	10,000	Cash	10,000

Bond (Liability) – Using Contra account

	Effective Interest	Bond Value before Interest Payment	Coupon A mount	Bond Value after Payment
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,773 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2022.1.1.

Cash 9,733 Bonds Payable 10,000
Discount on Bonds Payable 2
67

* "Discount on Bonds Payable" is a liability type account.

2022.12.31.

Bond Interest Expense 584 Cash 500
Discount on Bonds Payable
84

2022.12.31.

Bond Interest Expense 589 Cash 500
Discount on Bonds Payable
89

2022.12.31.

Bond Interest Expense 594 Cash 500
Discount on Bonds Payable
94
Bonds Payable 10,000 Cash 10,000

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Any Questions?

Bonds Retirements before Maturity

- The ABC company pays $500 annually for three years, and $10,000 (pr inciple) after three years.

  - The current market interest rate is 6%

	Effective Interest	Bond Value before Interest Payment	Coupon A mount	Bond Value after Payment
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,773 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

- On 2023.12.31., after paying $500, the ABC company gets the bond by paying $9,950 from the bond market.

2022.12.31.

Bonds Payable	9,906	Cash	9,950
Loss on Bond Retirement	44		

Or

2022.12.31.

Bonds Payable	10,000	Cash	9,950
Loss on Bond Retirement	44	Discount on Bonds Payable	94

* "Loss on Bond Retirement" is an expense type account (= "Losses on bond redempti on")

Contingent Liability

- A potential liability that depends on the future outcome of past events.

  - Possible obligation to be confirmed by a future event

  - Present obligation that may/may not require outflow of resources

  - Reliable estimate of amount of present obligation cannot be made

- Examples: future liabilities that may arise due to lawsuits, tax disputes, or alleged violations of environmental protection laws.

  https://dart.fss.or.kr/dsaf001/main.do?rcpNo=20220317000816&dcmNo=8471591

Any Questions?

Liability (exercise)

- Self-Study Material

P 10-5

LO 2

Accounting for Notes Payable

During 2017, Yuki Corporation had the following transactions relating to long-term liabilities:

May	1	Purchased a machine costing $600,000 from Kuma Corporation. Issued a three-year, interest-bearing note with interest payable on May 1 of each year. The note matures on May 1, 2020, and carries an interest rate of 7%.
July	1	Borrowed $25,000 from South-Central National Bank. The terms of the note require semiannual payments of interest on December 31 and June 30. The note matures in two years and carries an interest rate of 6%.

Required:

1. Prepare the journal entries made on May 1 and July 1 to record the issuance of these two notes.
2. Prepare all journal entries made on December 31, 2017.
3. Prepare all journal entries made during 2018.

Liability (exercise)

- Self-Study Material

P 10-10
LO 3

Accounting for Bond Interest Payments, Premium Amortization, and Redemption
The following is taken from the TED Inc. balance sheet.

TED Inc.
Balance Sheet (partial)
December 31, 2017

Non-current liabilities	
Bonds payable (face value $4,000,000), 7% due January 1, 2028	$4,240,000
Current liabilities Interest payable (for 12 months from January 1 to December 31)	280,000

Interest is payable annually on January 1. The bonds are callable on any annual interest date. TED uses straight-line amortization for any bond premium or discount. From December 31, 2018, the bonds will be outstanding for an additional 10 years (120 months).

Required:

1. Journalize the payment of bond interest on January 1, 2018.
2. Prepare the entry to amortize bond premium and accrue the interest due on December 31, 2018.
3. Assume that on January 1, 2019, after paying interest, TED calls bonds having a face value of $1,200,000. The call price is 101. Record the redemption of the bonds.
4. Prepare the adjusting entry on December 31, 2019 to amortize bond premium and to accrue interest on the remaining bonds.

Any Questions?