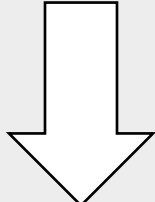
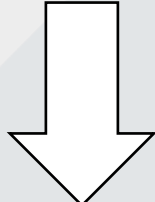
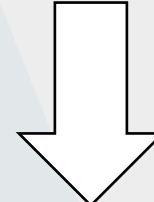


# Plant Assets & Intangibles

# Long-lived Assets

<b>Plant Assets</b>		<b>Natural Resources</b>		<b>Intangible Assets</b>
				
<b>Depreciation</b>		<b>Depletion</b>		<b>Amortization</b>



# Characteristics of Plant Assets

- Held for use in business
- Full cost includes several expenditures
- Last several years
- Can be sold or traded in

# Plant Asset Spending

## Capital expenditures

- Debited to an asset account
- Increase asset's capacity of efficiency OR
- Extend useful life

## Expenses

- Debited to an expense account
- Maintain asset in working order

# Capitalize or Expense? Impact of Accounting Errors

If a capital expenditure is incorrectly recorded as an expense:

Overstates expenses

Understates net income

Understates Capital

Understates assets

# Depreciation

- Allocation of a plant asset's cost to expense over its useful life
- Matches expense against revenue generated using the asset

# Depreciation Methods

**Straight-line**

**Units- of  
production**

**Declining-  
balance**

# Straight-Line Method

Depreciation expense	=	Cost- residual value	×	#
		Life		12





# Units- of Production Method

Depreciation per unit	=	Cost- residual value
		Life in units
Depreciation expense	=	Depreciation per unit × activity during the period



# Double-Declining Balance Method

- Accelerated method
  - Writes off more depreciation near the start of an asset's life
- Residual value is not in formula
  - Ignored until last year



# Double-Declining-Balance Method

Depreciation expense

(Cost- Accumulated depreciation)	×	2	×	#
Book Value		Life		12

Depreciation expense will decrease over the asset's life



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# Which Method is Best for Matching

<b>Straight- line</b>		<b>Units-of production</b>		<b>Double-declining balance</b>
For assets that generate revenue over time		For assets that depreciate due to wear and tear		For assets that produce more revenue in their early years



# Account for natural resources

## Natural Resources

- Plant assets extracted from the natural environment
  - Iron ore, oil, coal
- Expensed through depletion using the units-of-production method
- Accumulated depletion is a contra-asset account to the natural resource

# Depletion

Depletion per unit	=	Cost- residual value
		Estimated total units of natural resources
Depletion expense	=	Depletion per unit × number of units removed



# Account for intangible assets

## Intangible Assets

- Non-current assets with no physical form
- Provide exclusive rights or privileges
- Expensed through amortization using the straight-line method
  - Credit to the asset directly
  - If intangible has indefinite life, it is not amortized

# Types of Intangible

<b>Patent</b>	<b>Copyright</b>	<b>Trademarks and brand names</b>
Exclusive 20-year right to produce & sell an invention	Exclusive right to sell a book, musical work, film, art, software, or intellectual property	Represent distinctive products or services
Issued by the federal government		



# Types of Intangible

<b>Franchises &amp; Licenses</b>	<b>Goodwill</b>
Allows purchaser to sell goods or services under specific conditions	Excess of the cost to purchase another company over the market value of its net assets

# Goodwill

- Only recorded when a company purchases another business
- Not amortized
  - Current value measured each year
    - If value increases, no entry
    - If value decreases, a loss is recorded



# Research and Development (R&D) Costs

- Important to several industries, such as pharmaceutical companies
- Not an intangible
  - Expensed as incurred

# Describe ethical issues related to plant assets

## Capitalize or Expense

<b>Capitalize</b>		<b>Expense</b>
<ul style="list-style-type: none"><li>• Results in higher asset value and larger net income (Looks better to investors)</li><li>• If cost provides a future benefit, then capitalize</li></ul>		<ul style="list-style-type: none"><li>• Results in lower net income (Less taxes)</li><li>• If cost does not provide a future benefit, then expense</li></ul>