

## CONCEPT: DEPRECIATION – DECLINING BALANCE METHOD

● **Depreciation** – breaks up the up-front cost of a long-term asset over its \_\_\_\_\_

□ When calculating depreciation (in all methods), we must know three things about the asset:

1. **Cost** – The initial cost of the asset

2. **Useful Life** – how long the company \_\_\_\_\_ the asset to help generate revenue

3. **Residual Value** – how much the company \_\_\_\_\_ the asset to be worth at the end of its useful life

- Residual Value is also called *salvage value* or *scrap value*

□ The **Declining Balance** method is an \_\_\_\_\_ depreciation method

- More depreciation is taken in the \_\_\_\_\_ years. This leads to \_\_\_\_\_ income and \_\_\_\_\_ taxes

- We focus on the **double-declining-balance (DDB) method**

Steps for calculating DDB depreciation:

1. Calculate the **DDB Depreciation Rate** that will be used each year. This is not depreciation expense, just a rate!

$$\text{DDB Depreciation Rate per year} = \frac{1}{\text{Useful Life, in years}} * 2$$

2. Multiply the **DDB Depreciation Rate** by the **Beginning Net Book Value** for that year. This is \_\_\_\_\_

3. Calculate the **Beginning Net Book Value** minus **Depreciation Expense** for the **New Net Book Value**.

4. Repeat until the final year.

5. The **Final Year Depreciation Expense** is a \_\_\_\_\_ to get us to our \_\_\_\_\_

**EXAMPLE:** On January 1, Year 1, Johnson & Johnson & Johnson Company purchased a delivery truck for \$42,000. The company estimated a useful life of 5 years and a residual value of \$2,000. What would be the entry to record depreciation when preparing the December 31, Year 1 financial statements and the net book value on that date?

Cost = _____; Estimated Residual Value = _____; Estimated Useful Life = _____					
Date	DDB Rate	Beginning Net Book Value	Depreciation Expense	Accumulated Depreciation	Ending Net Book Value
January 1, Year 1					
December 31, Year 1					
December 31, Year 2					
December 31, Year 3					
December 31, Year 4					
December 31, Year 5					
December 31, Year 6					

**PRACTICE:** ABC Company purchased a new machine on January 1, Year 1 for \$44,000. The company expects the machine to last ten years. The company thinks it could sell the scrap metal from the machine for \$4,000 at the end of its useful life. If the company uses the double-declining method for depreciation, what will be the net book value of the machine on December 31, Year 2?

- a) \$25,600
- b) \$26,400
- c) \$28,000
- d) \$28,160

**PRACTICE:** DBQ Company purchased a machine on January 1, Year 1 for \$60,000. The company estimated a five year useful life and \$8,000 residual value. If the company uses the double-declining-balance method for depreciation, what will be the amount of accumulated depreciation on December 31, Year 2?

- a) \$33,280
- b) \$38,400
- c) \$41,600
- d) \$48,000

**PRACTICE:** XYZ Company purchased a machine on January 1, 2018 for \$120,000. The company estimated a four year useful life and \$4,000 residual value. If the company uses the double-declining-balance method for depreciation, what will be the amount of depreciation expense for the year 2021?

- a) \$7,500
- b) \$11,000
- c) \$15,000
- d) None of the above