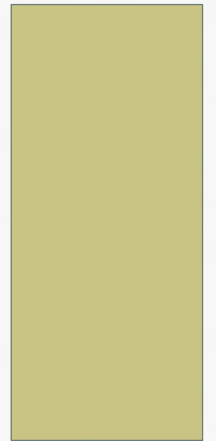


S 17- PROPERTY PLANT AND EQUIPMENT

PRESENTED BY FATIMA OMARJEE CA(SA)



LEARNING OBJECTIVES



- Distinguish items of PPE from other assets of an entity
- Identify when items of PPE qualify for recognition in financial statements
- Measure items of PPE on initial recognition and subsequently- on the cost and revaluation model
- To account for a change in residual value and change in an estimated useful life of PPE
- Identify when an item of PPE is to be derecognised or transferred to another classification of asset, and account for that derecognition or transfer
- To account for an impairment of an item of PPE
- To present and disclose PPE in financial statements

SCOPE S17.1

Property, plant and equipment

Investment property whose fair value
cannot be measured on an ongoing basis

It is important to note that this type of investment property will only be measured in terms of s17 however the disclosure will made be made in accordance with s16 investment property

DEFINITION OF PPE S17.2

1. Tangible **assets**

Distinction between tangible and intangible is important as intangible assets are accounted for under another section

2. To be used in the **a) production or supply of goods and services, b) rental to others or c) for administrative purposes**

Function

3. Expected to be **used during > 1 period**

Usage period

ITEMS THAT ARE NOT PPE AND NOT ACCOUNTED FOR IN TERMS OF THIS SECTION S17.3

Biological assets related to agricultural activity

Mineral rights and mineral reserves



RECOGNITION S17.4

What do we
recognise as
PPE?



Items that meet
the recognition
criteria in terms
of s2



- 1) It is probable that future economic benefits will flow to an entity
- 2) The cost can be reliably measured

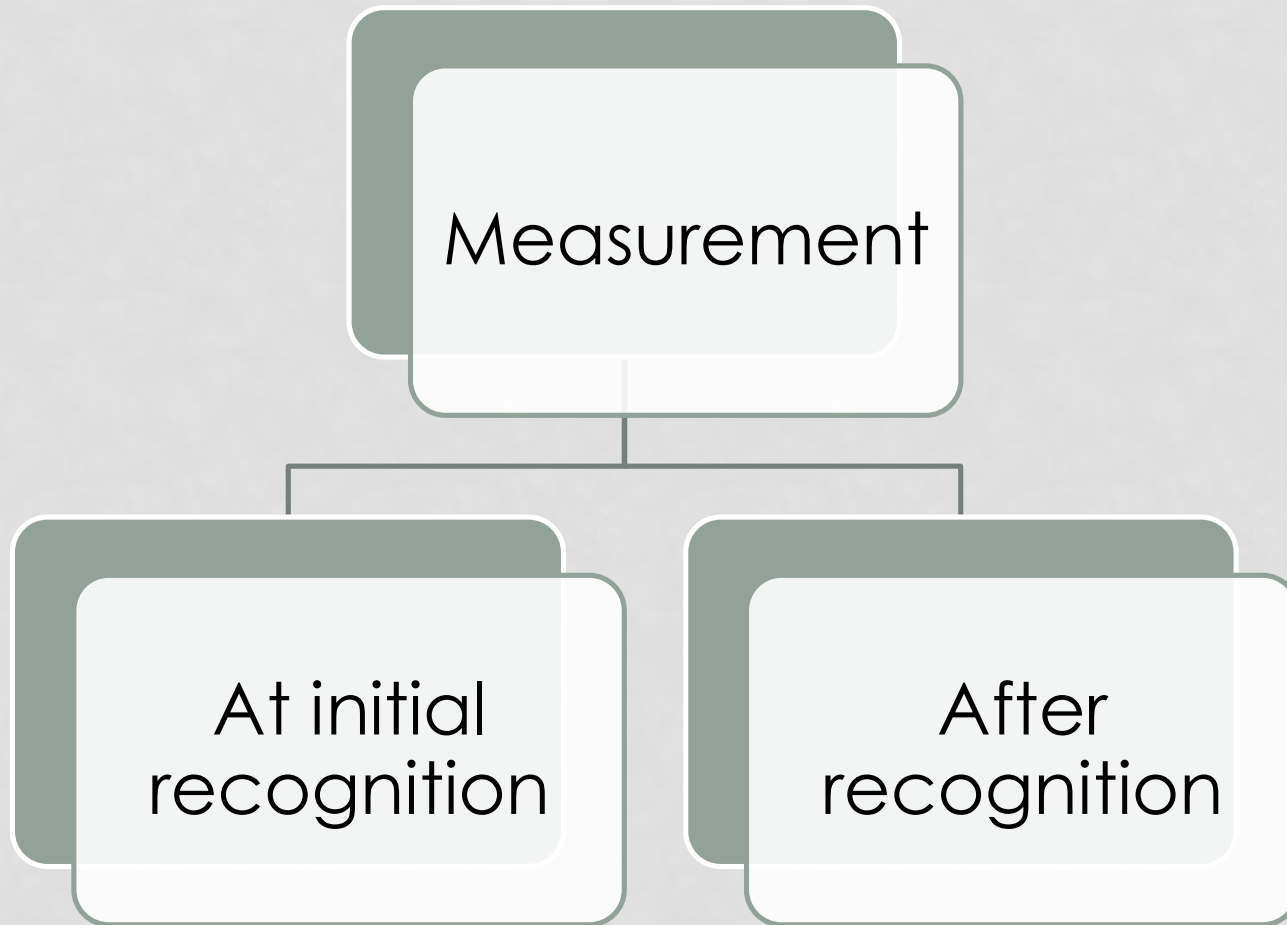
RECOGNITION OF S 17

Recognition deals
with recognising
items as PPE or not

RECOGNITION S17.5-S17.8

Item	Treatment
Spare parts, stand by equipment and servicing equipment	If they meet the definition of PPE, it will be treated as PPE. If not, these are treated as inventories
Replacement parts that are expected to add incremental future benefits	When replaced, carrying amount relating to that part should be derecognised and new cost of part should be added to the carrying amount of the item of PPE
Inspections	cost of inspection should be added to the carrying amount of the item of PPE and derecognised when a replacement is performed. If the cost of inspection was not recognised separately then a current estimate can be used
Land and buildings	Land and buildings should be disclosed and measured separately even though they are purchased as a single item

MEASUREMENT OF S 17

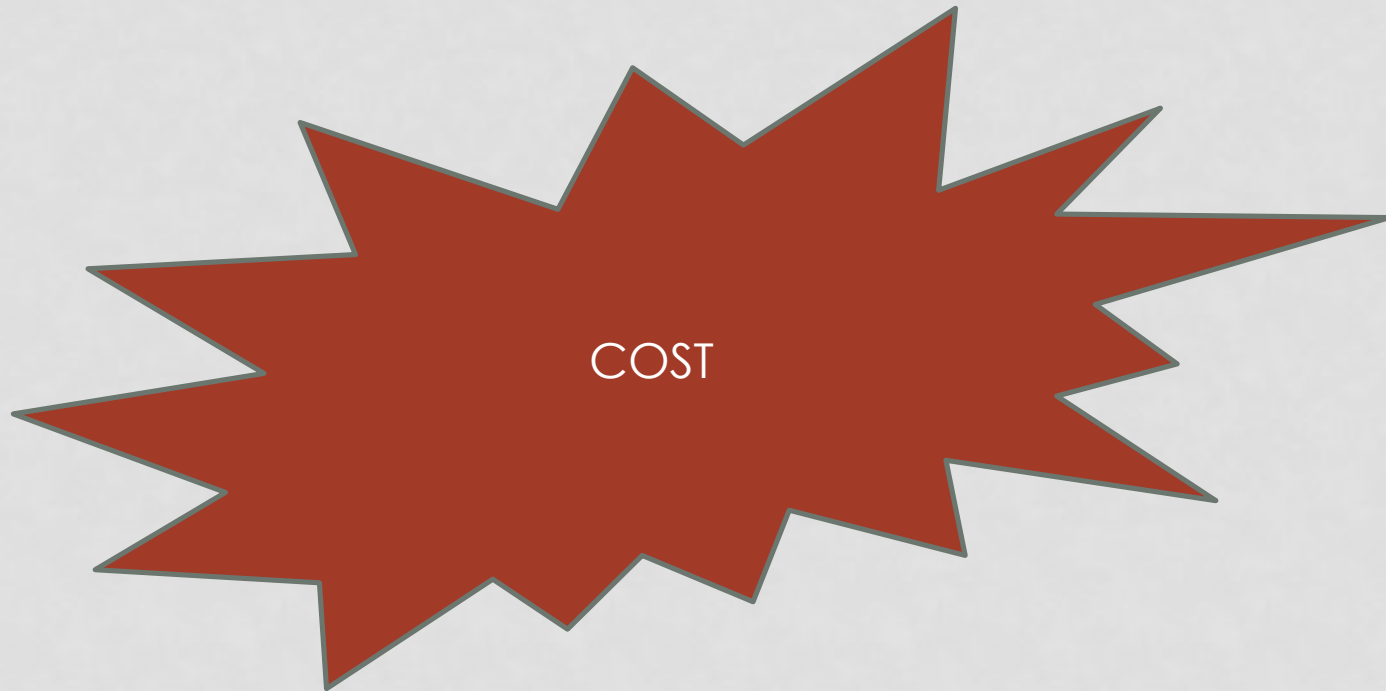


MEASUREMENT OF S 17

Measurement with the value at which PPE will be reflected in the financial statements

MEASUREMENT AT INITIAL RECOGNITION S17.9

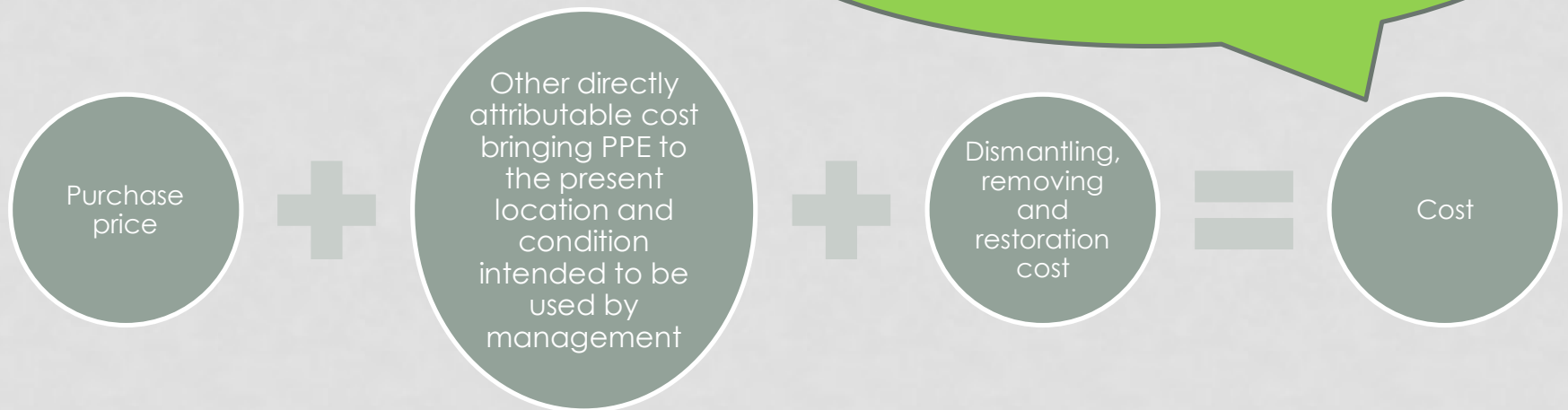
PPE at initial recognition is measured at:



WHAT ARE THE ELEMENTS OF COST

S17.10

The cost is the cash price equivalent of all its elements at recognition date . If payment is deferred beyond normal credit terms, the cost is the PV of all future payments

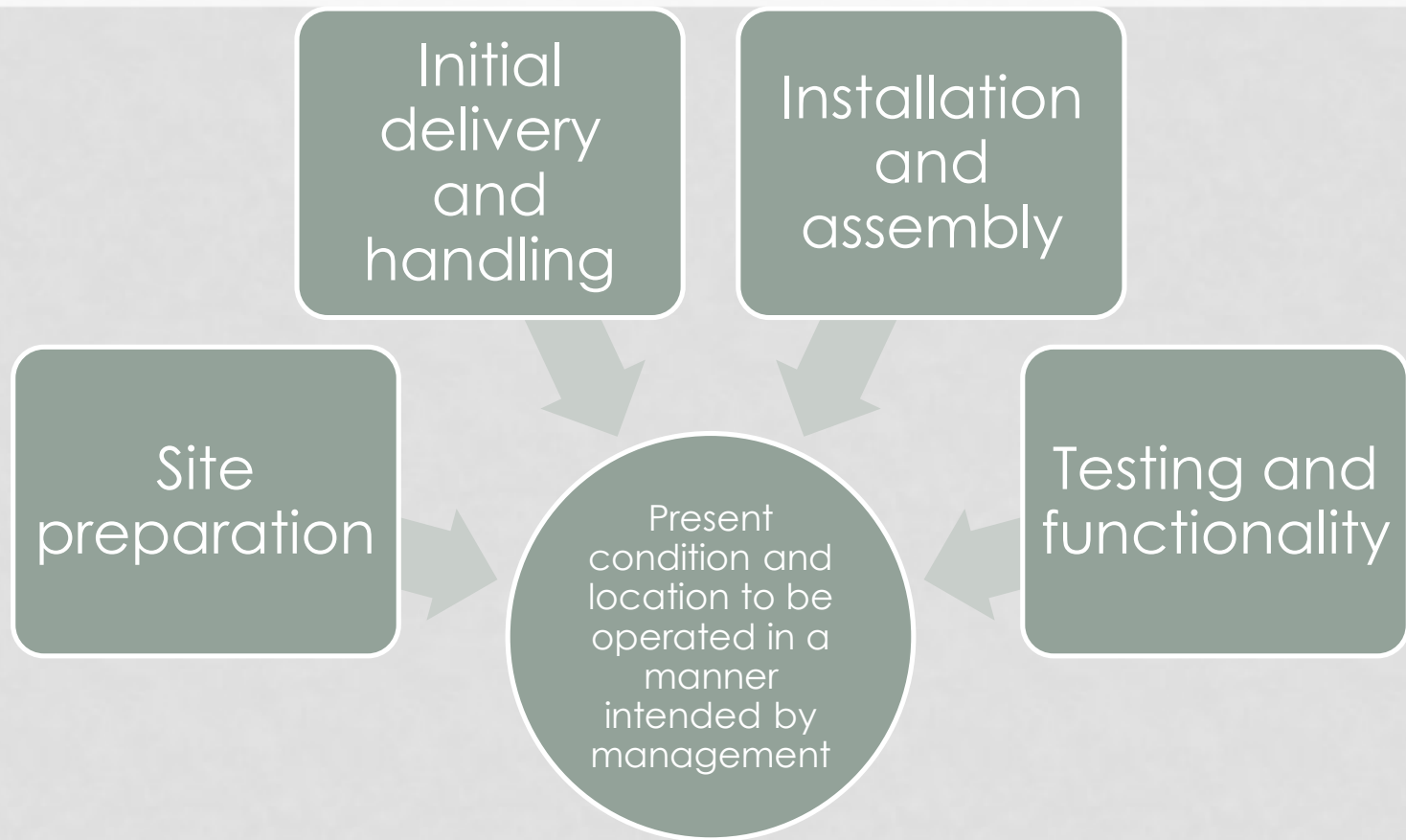


PURCHASE PRICE

The purchase price

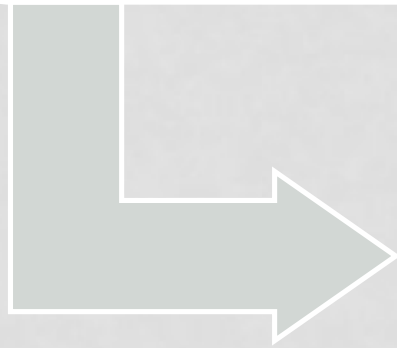
- This includes legal and brokerage fees, import taxes and **non-refundable** purchase taxes after deducting trade discounts and rebates

DIRECTLY ATTRIBUTABLE COSTS



COST TO DISMANTLE REMOVE AND RESTORE

When an entity has an **obligation** to remove , dismantle or restore an item of PPE as a result of **acquiring that asset** or **by using that asset**



The initial estimate of dismantling, removing or restoring the item should be added to the initial cost of PPE

COSTS THAT CANNOT BE RECOGNISED AS PPE S17.11

- Cost of opening a new facility
- Cost of introducing a new product or service
- Cost of conducting a business in a new location
- Administration or other general overhead costs
- Borrowing costs



EXAMPLE 1-INITIAL COST

MoneyBuild (Pty) Ltd, A VAT vendor, constructed a piece of machinery for use in its operations. The following costs were incurred:

- Purchase price of materials for construction – R684 000 (this is repayable after 1 year at a fair market interest rate is 10%) including VAT at 14%
- Labour costs incurred in constructing the machinery – R100 000
- Labour costs incurred in training staff to use the machinery – R20 000
- Testing costs to ensure the machine was functional – R10 000
- Operating losses incurred due to lower production while machine was being constructed – R100 000
- The machine took exactly one year to complete.

EXAMPLE 1-INITIAL COST

You are required to

- | | |
|---|--|
| A | Calculate the cost of the machine manufactured by MoneyBuild assuming the entity is a VAT vendor. Provide explanations for any costs included or excluded from the cost. |
|---|--|

SOLUTION

Cost	Reason	Amount
Purchase price	Include at present value due to deferral a) $684\,000 \times 100/114 = R\,600\,000$ b) $FV=600\,000; i=10\%; n=1$ PV=SOLVE PV=545 455	545 455
VAT	Refundable purchase tax	-
Borrowing costs	Never included in the cost of an asset (s17.11(e))	-
Construction labour	Directly attributable cost (s17.10(a))	100 000
Training costs	Recognised as expenses in profit or loss. The equipment was capable of operating in the manner intended by management without incurring the training costs.	-
Testing costs	Directly attributable cost per s17.10(b)	10 000
Operating losses	Not directly attributable to the PPE construction – s17.12	-
		655 455

EXCHANGE OF ASSETS S17.14

An asset can be purchased in exchange for a non-monetary asset

If the fair value of the acquired asset can be established



The acquired asset should be measured at its fair value

If the fair value of the acquired asset can not be established or if it lacks commercial substance



The acquired asset will be measured at the carrying value of the asset given up

SUBSEQUENT MEASUREMENT



Subsequent
measurement
period

The diagram illustrates a timeline for asset measurement. A horizontal line with an arrow at the right end represents the duration. A vertical line at the start is labeled 'Initial recognition at initial cost'. A vertical line at the end is labeled 'Point of derecognition'. A speech bubble above the line, spanning from the start to the end, is labeled 'Subsequent measurement period'.

Initial
recognition
at initial
cost

Point of
derecognition

MEASUREMENT AFTER INITIAL COST

S17.15

The choice between the two models is an accounting policy choice. The model should be applied consistently to an entire class of PPE

Measurement after initial cost

For both models depreciation and impairment losses are relevant

Cost model

OR

Revaluation model

Cost less accumulated **depreciation** and any accumulated **impairment losses**

Fair value less subsequent accumulated **depreciation** and any accumulated **impairment losses**

An entity should obtain the fair value of the item of PPE at regular periods so that the carrying amount does not differ materially from the fair value

COST MODEL

Always at initial
cost unless
there are
additions or
disposals

ABC Co. Extract of SOFP	
PPE at carrying value	<u>Xxxx</u>
PPE at cost	Xxx
Accumulated depreciation and impairment	(xx)

Calculated based
on initial cost

REVALUATION MODEL

ABC Co. Extract of SOFP		
PPE at carrying value	Xxxx	Latest revalued amount
PPE at cost	Xxx	
Accumulated depreciation and impairment	(xx)	Based on latest revalued amount

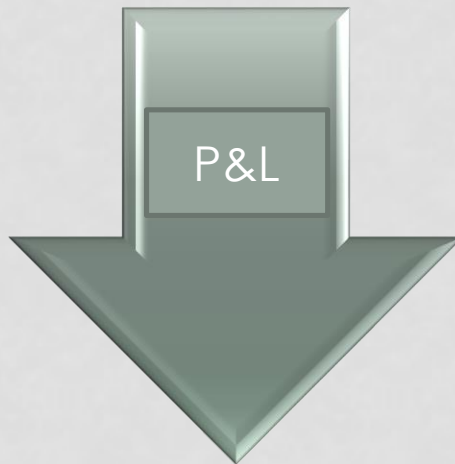
Using the net replacement method

REVALUATION MODEL S17.15C&D



Increase in CA due to an **increase** a revaluation increase will be recognised in **OCI**.

However the increase will be recognised in P&L to the extent that it reverses a revaluation decrease of the same asset previously recognised in P&L



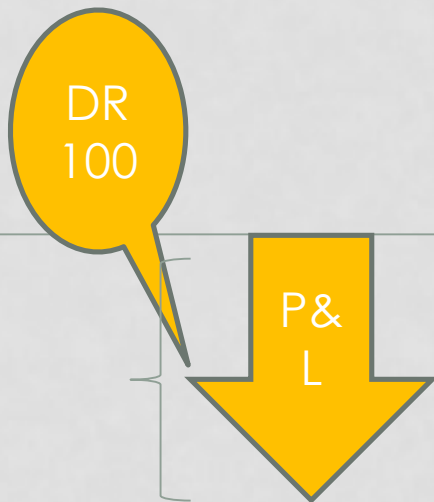
Revaluation **decreases** will be recognised in P&L.

However the decrease will be recognised in **OCI** to the extent that it reverses a revaluation increase of the same asset previously recognised in OCI

REVALUATION INCREASE

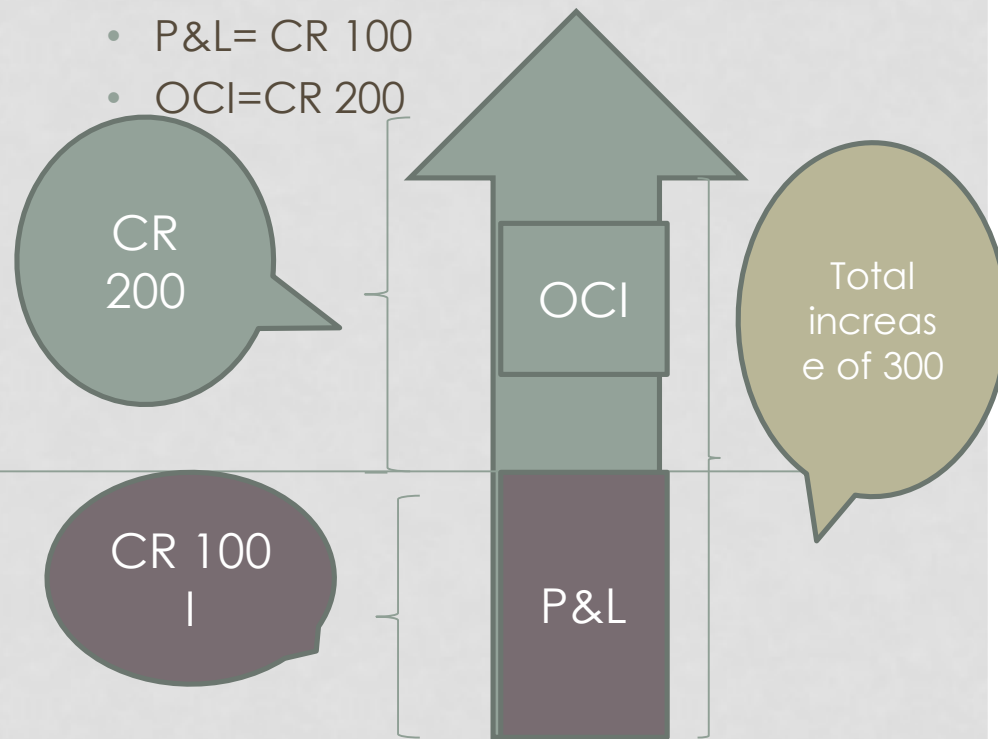
**Prior period revaluation
decrease of 100 in P&L**

- P&L = Dr 100



**Current year revaluation
increase of 300**

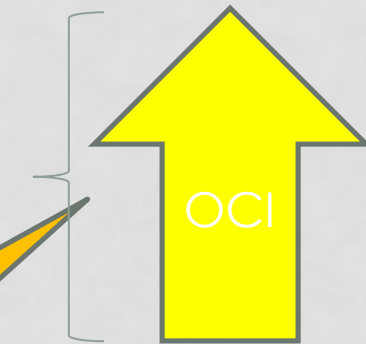
- P&L= CR 100
- OCI=CR 200



REVALUATION DECREASE

Prior period revaluation
increase of 100 in OCI

- OCI **balance** = CR 100



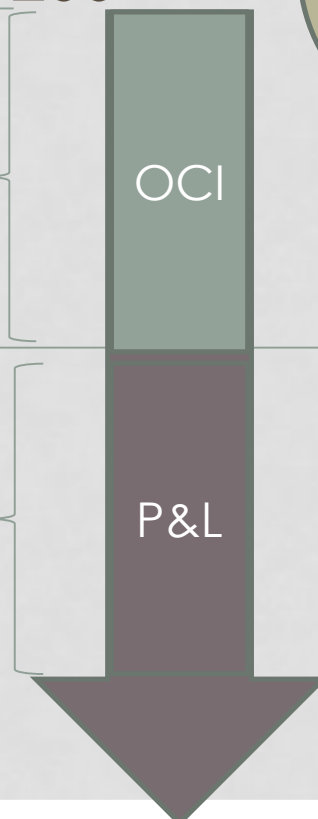
CR
100

Current year revaluation
decrease of 300

- OCI = DR 100
- P&L = DR 200



Total
decrease
of 300



NET REPLACEMENT VALUE

- Before an item is re measured:
 - Close off accumulated depreciation to the cost account
 - This is done by the following :
 - Dr the accumulated depreciation account
 - Cr cost
 - The effect is the item of PPE is now carried at its carrying amount and accumulated depreciation is zero



In effect , this is the
“new cost”

EXAMPLE 2- REVALUATION UPWARD

AAA (Pty) Ltd revalued its machinery to fair value for the **first time** on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R 1 500 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000).

Required:	
1.	Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.

SOLUTION

Date	Details	DR	CR
31/12/20 X6	Accumulated depreciation: machinery	600 000	
	Machinery: cost		600 000
	Reversal of accumulated depreciation against the cost of machinery before revaluation		

31/12/20 X6	Machinery: cost	300 000	
	Revaluation Surplus (OCI)		300 000
	Recognition of revaluation surplus upon revaluation to fair value		

EXAMPLE 3-REVALUATION DOWNWARD

AAA (Pty) Ltd revalued its machinery to fair value for the **first time** on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R 1 100 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000).

Required:	
1.	Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.

SOLUTION

Date	Details	DR	CR
31/12/20 X6	Accumulated depreciation: machinery	600 000	
	Machinery: cost		600 000
	Reversal of accumulated depreciation against the cost of machinery before revaluation		
31/12/20 X6	Revaluation decrease (P/L)	100 000	
	Machinery: cost		100 000
	Recognition of revaluation decrease upon revaluation to fair value		

EXAMPLE 4- UPWARD AND DOWNWARD

AAA (Pty) Ltd revalued its machinery to fair value for the on 31 December 20X6. The fair value of the machinery on 31 December 20X6 was reliably determined at R 1 100 000. The carrying amount of the machinery just before the revaluation amounted R1 200 000 (cost of R1 800 000 and accumulated depreciation R600 000). The balance of the revaluation surplus before the revaluation was R100 000.

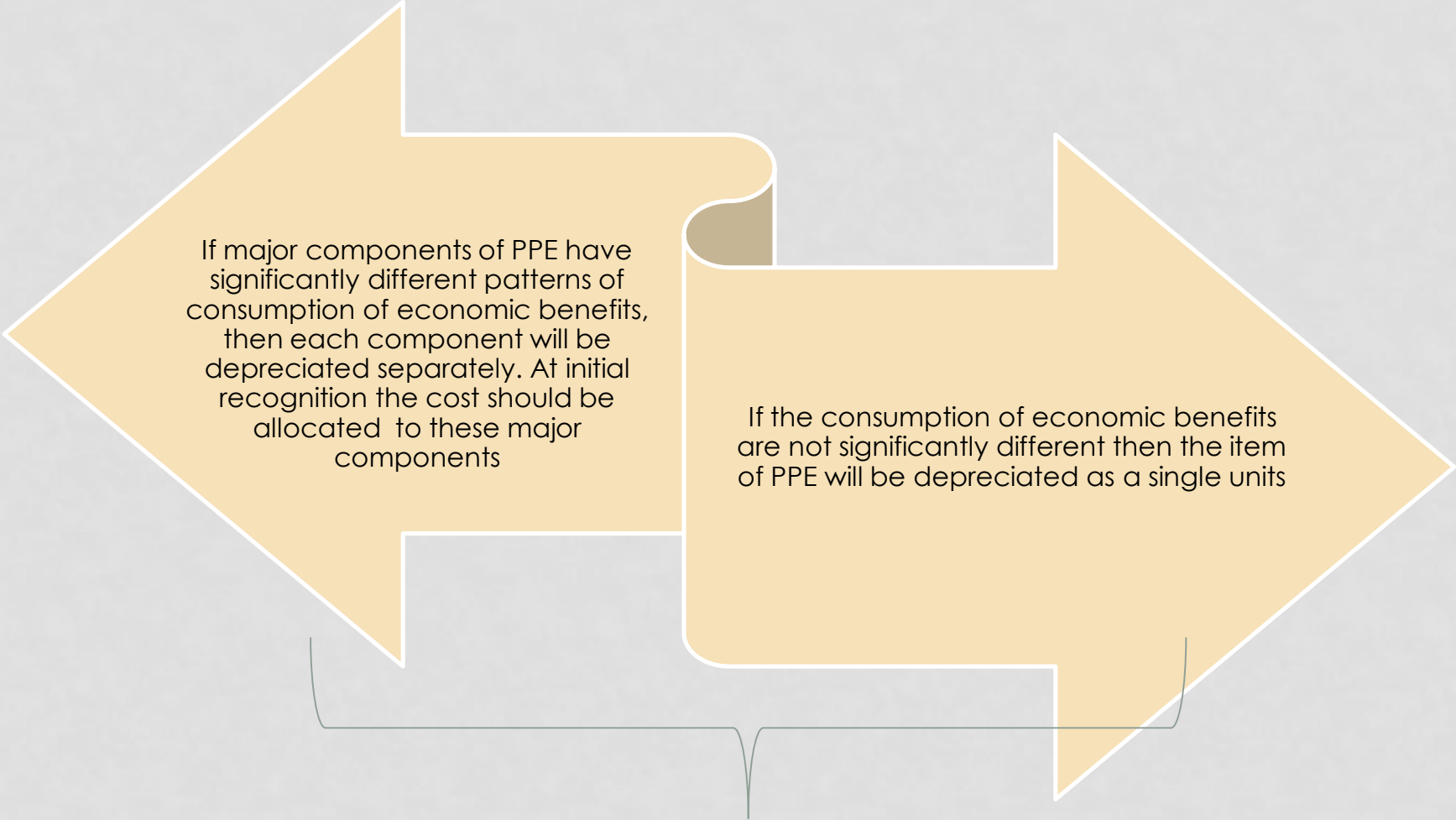
Required:	
1.	Prepare the journal entries to give effect to the revaluation that was performed on 31 December 20X6.

SOLUTION

Date	Details	DR	CR
31/12/20 X6	Accumulated depreciation: machinery	600 000	
	Machinery: cost		600 000
	Reversal of accumulated depreciation against the cost of machinery before revaluation		

31/12/20 X6	Revaluation Surplus (OCI)	100 000	
	Machinery: cost		100 000
	Recognition of revaluation decrease upon revaluation to fair value against existing balance of revaluation surplus		

DEPRECIATION S17.16-S17.17



If major components of PPE have significantly different patterns of consumption of economic benefits, then each component will be depreciated separately. At initial recognition the cost should be allocated to these major components

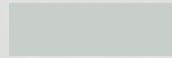
If the consumption of economic benefits are not significantly different then the item of PPE will be depreciated as a single units

Depreciation expense should be recognised in most instances in P&L

DEPRECIABLE AMOUNT

The estimated amount that an entity would **CURRENTLY** obtain from disposal of an asset less estimated cost of disposal, if the asset were **ALREADY AT THE AGE AND EXPECTED CONDITION AT THE END OF ITS USEFUL LIFE**

Cost



Residual
value



Depreciable
amount

EXAMPLE 5-RESIDUAL VALUES

- An entity is attempting to calculate the residual value of a building it owns and holds for use. Buildings of a similar age and in a similar condition to what this building will be in at the end of its useful life have sold for R2 million recently. It is estimated that this building will be sold for R4 million at the end of its useful life, which, when discounted to today, is R2,6 million.

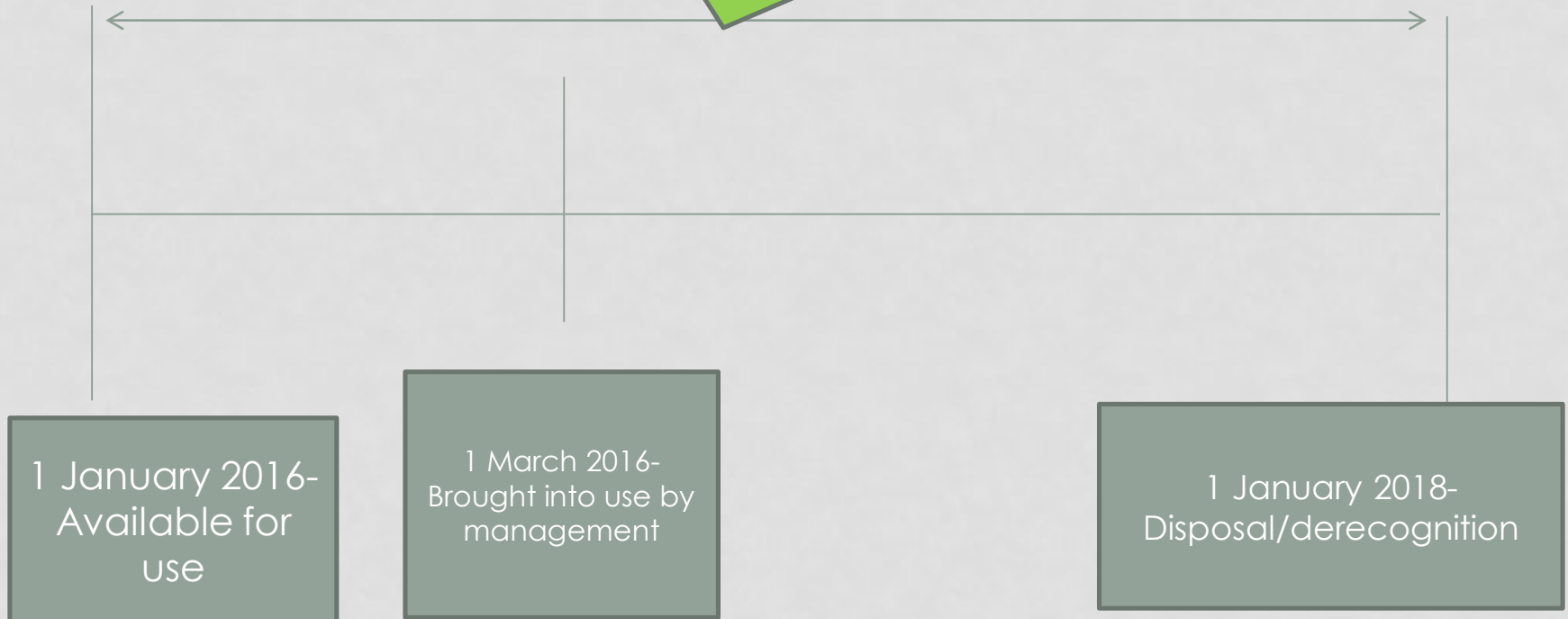
You are required to

A

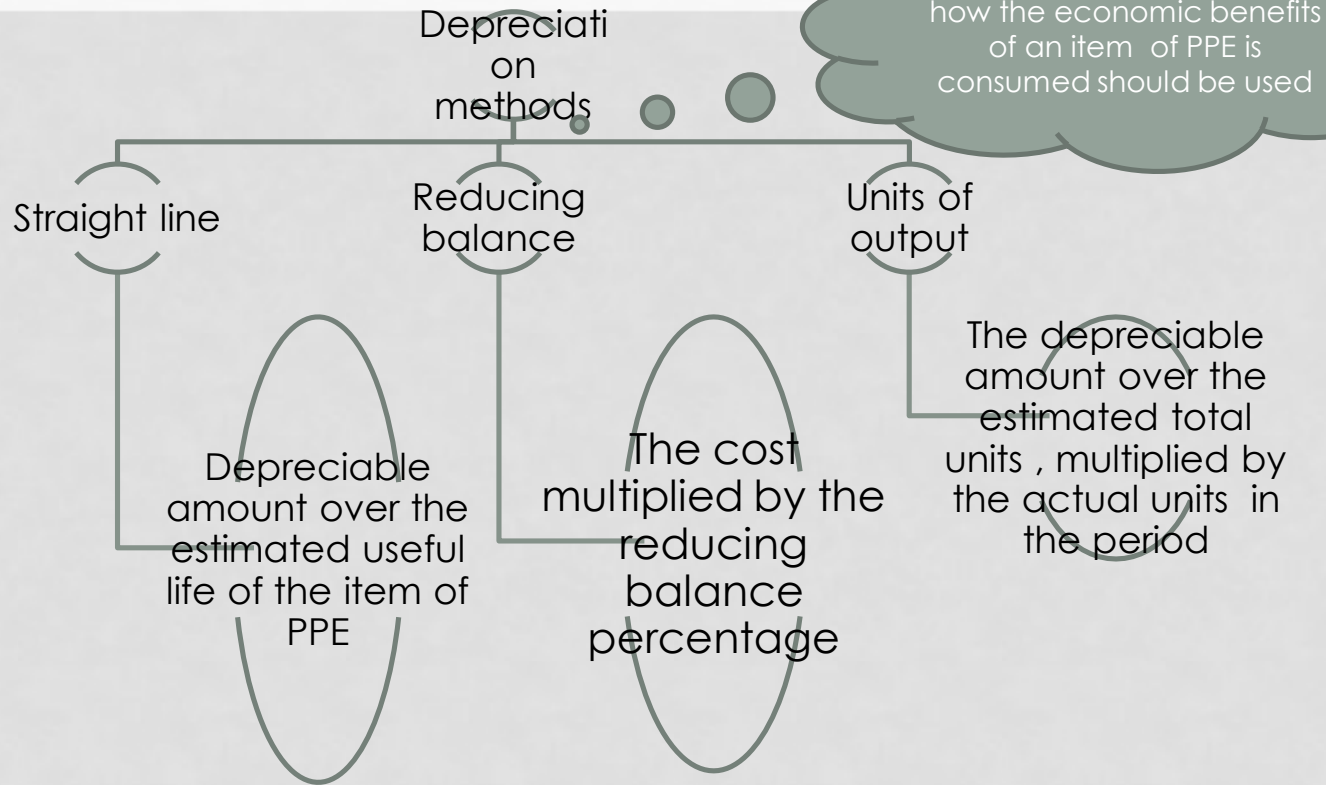
Discuss which figure must be used as the residual value of this building.

DEPRECIATION PERIOD S17.20

The depreciation period, represented by this line commences when an item of PPE is available for use up until the date of disposal or Derecognition. Depreciation does not cease if the asset is idle within this period



DEPRECIATION METHODS S17.22-S17.23



EXAMPLE 6- DEPRECIATION METHODS

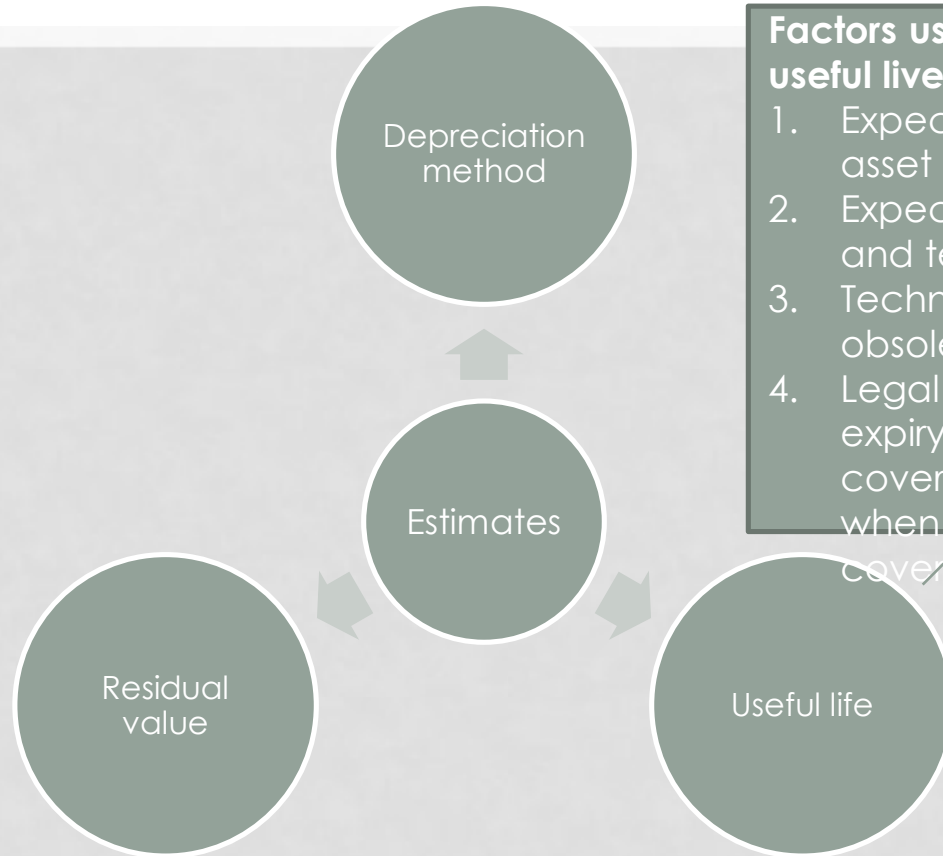
Calculate the depreciation p.a. for a vehicle with a cost of R500 000 as per the following:

- A) Using the straight line method with a useful life of 5 years
- B) Using the reducing balance method with a rate of 20%
- C) Using the units of production method assuming the vehicle did 25 000 kms in the current year and has a total estimated mileage capacity of 300 000 kms.

SOLUTION

- A. $(500\,000/5) = 100\,000$
- B. $500\,000 * 20\% = 100\,000$
- C. $500\,000 * (25\,000/300\,000) = 41.667$

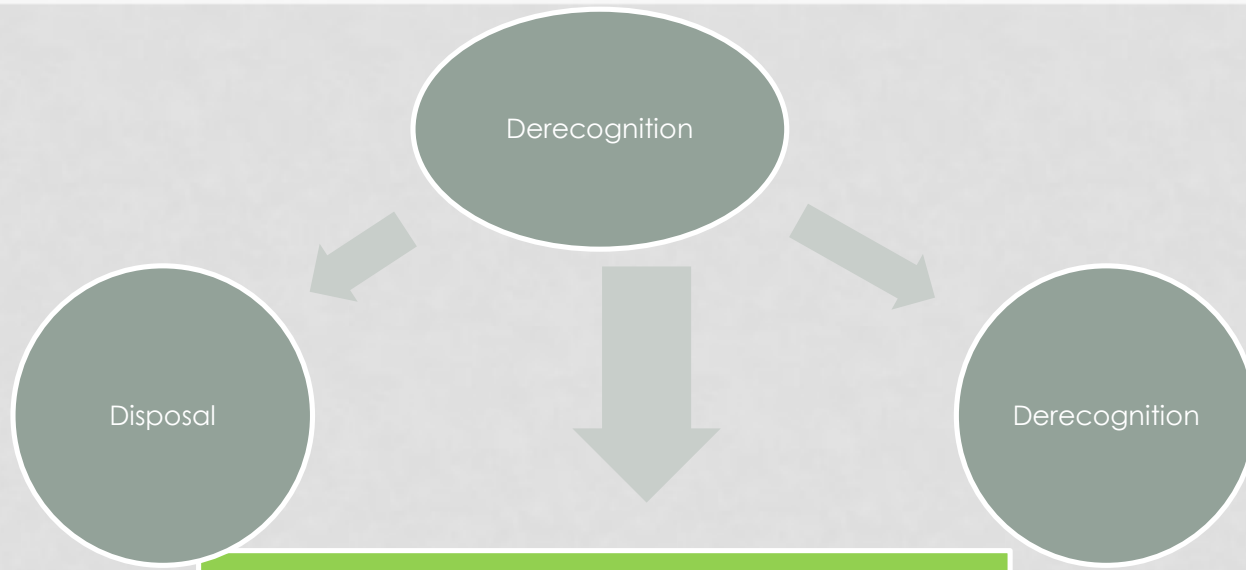
DEPRECIATION ESTIMATES



Factors used to determine useful lives

1. Expected usage of the asset
2. Expected physical wear and tear of the asset
3. Technical or commercial obsolescence
4. Legal limits such as lease expiry dates (will be covered in more detail when leases are covered).

DERECOGNITION



The gain/loss from Derecognition shall be recognised in P&L.
The gain/loss calculated is the difference between the
proceeds on disposal and the carrying amount of the item of
PPE

PRESENTATION AND DISCLOSURE

An entity shall disclose the following for each class of property, plant and equipment determined in accordance with paragraph 4.11 (a) and separately for investment property carried at cost less accumulated depreciation and impairment:

PRESENTATION AND DISCLOSURE (NOTE INFORMATION)

- (a) the **measurement** bases used for determining the gross carrying amount;
- (b) the depreciation methods used;
- (c) the useful lives or the depreciation rates used;
- *These are usually shown in the accounting policy*

PRESENTATION AND DISCLOSURE (RECON INFORMATION)

- (d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the reporting period; and
- (e) a reconciliation of the carrying amount at the beginning and end of the reporting period showing separately:
 - (i) additions;
 - (ii) disposals;
 - (iii) acquisitions through **business combinations**;
 - (iv) increases or decreases resulting from revaluations under paragraphs 17.15B–17.15D and from impairment losses recognised or reversed in other comprehensive income in accordance with Section 27;
 - (v) transfers to and from investment property carried at fair value through profit or loss (see paragraph 16.8);
 - (vi) impairment losses recognised or reversed in profit or loss in accordance with Section 27;
 - (vii) depreciation; and
 - (viii) other changes.
- This reconciliation need not be presented for prior periods.

PRESENTATION AND DISCLOSURE (REVALUATION INFORMATION)

- If items of property, plant and equipment are stated at revalued amounts, an entity shall disclose the following:
 - (a) the effective date of the revaluation;
 - (b) whether an independent valuer was involved;
 - (c) the methods and significant assumptions applied in estimating the items' fair values;
 - (d) for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and
 - (e) the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.