



# education

Department of  
Education  
FREE STATE PROVINCE

## **PRACTICAL TASK *PRAKTIESE TAAK***

**GRADE/GRAAD 10**

## **TECHNICAL SCIENCES *TEGNIIESE WETENSKAPPE***

**MEMORANDUM**

**JUNE/JUNIE 2017**

**TIME/TYD: 30 MINUTES/30MINUTE**

**MARKS/PUNTE: 15**

This memorandum consists of **THREE** page.  
*Hierdie memorandum bestaan uit DRIE bladsye.*

**QUESTION 1/VRAAG 1**

1.1

Criteria	Mark
An investigative question asked	✓
Both dependent and independent variables stated	✓

Example: What is the relationship between main current and current in each of the parallel branches?

Kriteria	Punt
'n Ondersoekende vraag word gevra.	✓
Afhanklike en onafhanklike veranderlikes word gegee.	✓

Voorbeeld: Wat is die verwantskap tussen die hoofstroom en stroom in elke parallelle tak?

(2)

1.2

Criteria	
Refers to relevant dependent and independent variables	✓
Statement that can be proven right or wrong	✓

Example: Sum of the current in each of the parallel branches equals the main current.

OR

Sum of branch currents is equal to main current.

Kriteria	
Verwys na relevante afhanklike en onafhanklike veranderlikes.	✓
Stelling wat as reg of verkeerd bewys kan word.	✓

Voorbeeld: Som van die takstrome is gelyk aan die hoofstroom.

(2)

2.  $A_1$  ✓

(1)

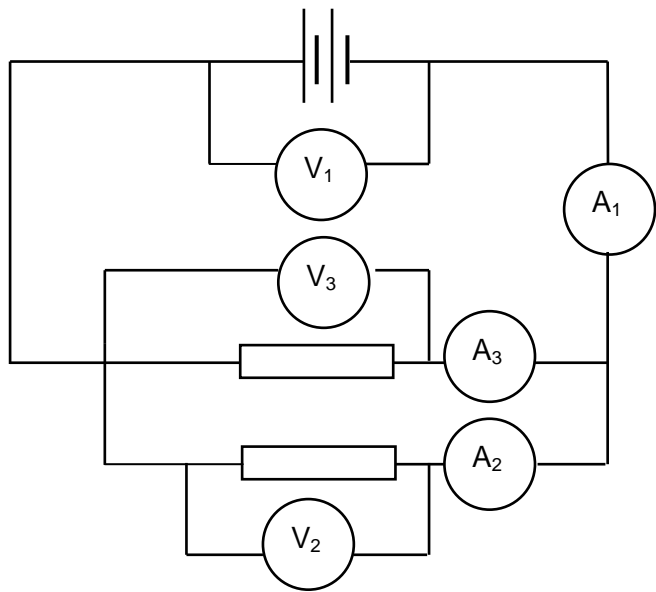
3.1 Voltmeter ✓

(1)

3.2 In parallel ✓

(1)

3.3



Correct symbol for voltmeter. <i>Korrekte simbool vir voltmeter.</i>	✓
All voltmeters in parallel. <i>Alle voltmeters in parallel.</i>	✓
Whole diagram correct. <i>Hele diagram korrek.</i>	✓
One voltmeter across the battery and one across each of the resistors. <i>Een voltmeter oor battery en een oor elke resistor.</i>	✓

(4)

4.1 Current/Stroom: A ✓  
Potential difference/Potensiaalverskil: V ✓

(2)

4.2 ... dividers/-verdelers ✓  
potential difference/potensiaalverskil ✓

(2)

**GRAND TOTAL/GROOTTOTAAL: 15**