



THEME	ENGINEERING GRAPHICS AND DESIGN			
SCHOOL:	DATE	Day	Month	Year

CYCLE / WEEK	1	2	3	4	5	6	7	8	9	10	TERM	1	2	3	4
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THEME	DRAWING PRINCIPLES – SOLID GEOMETRY, CIVIL/ELECTRICAL														
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INTEGRATION WITH OTHER SUBJECTS

Business Studies	Manufacturing	✓	Human Science	Mathematics
Commerce Studies	Engineering	✓	Social Science	Computers
Management Studies	Technology	✓	Arts and Culture	Physical Sciences
Service Studies	Languages		Agricultural Sciences	Life Sciences

CONTEXT	CRITICAL OUTCOMES (CO's)	DEVELOPMENTAL OUTCOMES (DO's)
Civil	✓ 1. Problem solving 2. Teamwork	1. Learn more effectively 2. Responsible citizens
Mechanical	✓ 3. Self-management 4. Research and critical analysis	3. Culturally & aesthetically sensitive 4. Explore education & career opportunities
Electrical	✓ 5. Effective communication 6. Science and technology 7. The world as a set of related systems	5. Entrepreneurship
	Skills	Knowledge
		Values including Attitudes

NCS PRINCIPLES	ASSESSMENT					
	LTSM (resources used in teaching & learning)	TEACHING & LEARNING STRATEGIES (Learning Activities)	ASSESSMENT ACTIVITIES (Assessment Activities / Tasks)	TOOLS	METHODS	
Social Transformation	Observation	✓	Show & Demonstrate	✓	Rating Scales	Self Assessment
Outcomes-based Education	Environment		Explain the Technology	✓	Observation Sheets	Peer Assessment
Higher knowledge & Skill	Models	✓	Explain the Terminology	✓	Checklists	Group Assessment
Integration & Applied competence	CAD – Software		Producing free hand drawings		Task Lists	✓ Teacher Assessm.
Progression	Audio Visual	✓	Self made Models		Memo/Mask	✓ External Assessm.
Articulation & Portability	Worksheets	✓	Design		Rubrics / Grids	✓
Human rights, Inclusivity, Environmental & Social justice	Drawing Instruments	✓	Class discussion		EVIDENCE COLLECTION	
Valuing Indigenous Knowledge Systems	Transparencies / OHP	✓	Group discussion		Observation	
	Chalkboard / Posters	✓	Group work		Test - based	✓
Credibility, Quality & Efficiency	Other (specify)		Individual work	✓	Task based	✓

CONTENT: LEARNING OUTCOMES(LO's) AND ASSESSMENT STANDARDS(AS's)

LO1	LO2	LO3	LO4
11.1.1 Relationship environment	11.2.1 Identify Problems	11.3.1 Code of Practice	11.4.1 Interpretation Drawing
11.1.2 Human Right Issues	11.2.1 Research	11.3.2 Projects multi/pict.	11.4.2 Drawing Principles
11.1.3 HIV/AIDS	11.2.3 Final Solution	11.3.3 CAD Drawings	11.4.3 Multi & single view
11.1.4 Communication	11.2.4 Present solution	11.3.4 Basic design	11.4.4 Pictorial Drawings
11.1.5 Entrepreneurship	11.2.5 Evaluation	11.3.5 Drawing Techniques	11.4.5 Sectioning multiview
11.1.6 Electronic impact on Comm.		11.3.6 Sectional Views	11.4.6 Design Process
		11.3.7 Graphic Comm.	11.4.7 CAD
		11.3.8 Loci	11.4.8 Loci

Lesson / Period Breakdown per Topic

Prior Knowledge: Grade 10 EGD

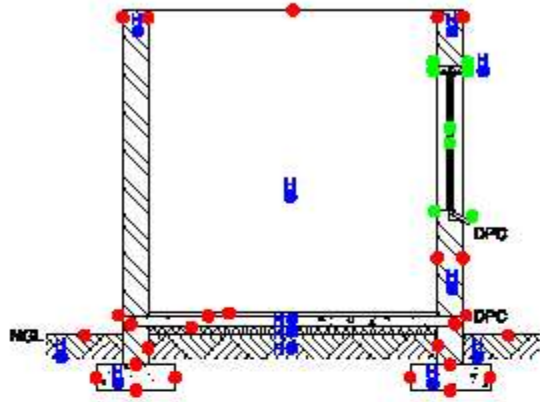
Teacher Activities	Learner Activities	Evidence	Time	Date Comp.
<p>Topic: Revision</p> <ul style="list-style-type: none"> Discuss the concepts of 1st angle and 3rd angle. Discuss the use and care of instruments. Practice and the use of the basic hand movements needed to reproduce proportional free hand drawings. 	<p>Listen, practice Freehand & instrument drawings 1st & third angle Single & multi-view drawings</p>			
<p>Topic: Solid Geometry</p> <ul style="list-style-type: none"> Combinations of the right regular geometrical solids covered in Gr 10 with the axis of the solids still either perpendicular, parallel or inclined to one plane. eg. Cylinder penetrating Pyramid etc. 	<p>Draw in 3rd angle non-sectional and sectional views of the following right geometrical solids:</p> <ul style="list-style-type: none"> Combinations of the right regular geometrical solids covered in Gr 10 with the axis of the solids still either perpendicular, parallel or inclined to one plane. <p>The true shapes of the sectioned planes.</p>	<p>Test-based Presentation drawing</p>	16	
<p>Topic: Civil / Floor plans</p>	<p><i>Draw according to the SANS guidelines:</i></p> <ul style="list-style-type: none"> Floor plans and elevations. Sectional elevations showing detail and labelling of FOUNDATION TO CEILING. Insert annotation, dimensioning and scale and include the following features on all relevant views: carports, windows, doors, hatching and fixtures such as WC, bath, sink, shower and cupboards. Calculations of perimeter and floor areas. <p>Apply hatching (colour coding) to new additions</p>	<p>Test-based Presentation drawing</p>	16	
<p>Topic: Electrical drawings</p>	<p>Draw parallel and series circuit diagrams that are relevant to; electrical appliances and house wiring. Include notes where appropriate and draw system diagrams.</p>	<p>Presentation drawing</p>	4	

Intervention Strategy

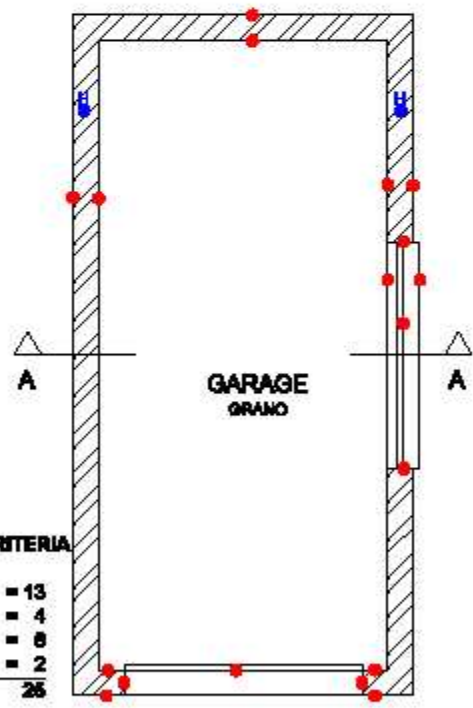
Enrichment:

Remedial:

**DATE
TOPIC /
THEME
COMPLETED**



SECTIONAL ELEVATION ON A-A



PLAN
SCALE 1: 50

= hatch

ASSESSMENT CRITERIA	
ELEVATION	
OUTLINE	= 13
WINDOW	= 4
HATCHING	= 8
LABELS	= 2
<hr/>	
	28
PLAN	
OUTLINE	= 7
WINDOW+DOOR	= 3
HATCHING	= 1
LABELS	= 2
CUTTING PLANE	= 2
<hr/>	
	16

QUESTION 3 PAPER 1
GRADE 11 EXEMPLAR 2007
MEMORANDUM

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