

IN SEARCH OF GEOGRAPHY

Geographical skills and techniques across the FET band

The table below illustrates skills and techniques across the FET Band in the development of mapwork skills.

However, the teaching of geographical skills and techniques should be spread across all four terms and linked to specific topics in each grade.

Grade 10	Grade 11	Grade 12
Mapwork skills <ul style="list-style-type: none"> Locating exact position – degrees, minutes and seconds Scale – word, ratio, and line scale Direction – true and magnetic bearing 	Mapwork skills <ul style="list-style-type: none"> Locating exact position – degrees, minutes and seconds (revision) Relative position – direction and magnetic bearing (revision) Distance – measuring distances and converting to ground distance, straight line and curved (practice) Calculating area 	Mapwork skills <ul style="list-style-type: none"> Consolidation of map skills from Grades 10, 11 and 12 Map and photo interpretation – includes reading and analysis of physical and constructed feature Applying map-reading skills to maps and photos
Topographic maps <ul style="list-style-type: none"> South African 1:50 000 map referencing system 1:50 000 maps – conventional signs and symbols (revision) Navigating position using compass directions (16 points) Direction and true bearing Land forms and contours Simple cross-sections 	Topographic maps <ul style="list-style-type: none"> Contours and landforms Cross-sections on 1:50 000 maps Vertical exaggeration Intervisibility Gradient 	Topographic maps <ul style="list-style-type: none"> Applying map skills and techniques – scale, contours, cross-sections, intervisibility Direction – magnetic north, true north and magnetic declination Gradient Grid Referencing
Aerial photographs and orthophoto maps <ul style="list-style-type: none"> Photographs of landscapes Oblique and vertical aerial photos Orthophoto maps to be used in conjunction with 1:50 000 maps and aerial photos 	Aerial photographs and orthophoto maps <ul style="list-style-type: none"> Oblique and vertical aerial photographs – identifying landforms and features Use of tone, texture, shadow in the interpretation of photos Orthophoto maps – identifying features Orienting aerial photographs and orthophoto maps with another map 	Aerial photographs and orthophoto maps <ul style="list-style-type: none"> Interpreting vertical aerial photographs Orthophoto maps – identifying features Comparing orthophoto map with a topographic map
Geographical Information Systems <ul style="list-style-type: none"> Reasons for the development of GIS How remote sensing works GIS concepts: spatial objects, lines, points, nodes, scales 	Geographical Information Systems <ul style="list-style-type: none"> Spatially referenced data Spatial and spectral resolution Different types of data – line, point, area, attribute Raster and vector data Application of GIS to all relevant topics in the grade Capturing different types of data from existing maps, photographs, fieldwork or other records on tracing paper 	Geographical Information Systems <ul style="list-style-type: none"> GIS concepts – remote sensing; resolution Spatial and attribute data; vector and raster data Data standardisation, sharing a data security Data manipulation – data integration, buffering, querying & statistical analysis Application of GIS by government and the private

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sector

- Relate to all topics in Grade 12
- Develop a “paper GIS” from existing maps, photographs or other records on layers of tracing paper