

GEOGRAPHY TIPS

UNPACKING AS 91010 (1.4) - GEOGRAPHIC SKILLS

**WHAT IS THIS ASSESSMENT ABOUT?**

Students are provided with a resource booklet of unfamiliar material based around an

environment. This environment may be based in New Zealand or overseas. They are then expected to use their general geographic understanding to interpret these resources drawing on different basic geographic skills and applying concepts.

**WHAT IS THE DIFFERENCE BETWEEN THE LEVELS?**

It is useful to consider how the skills and concepts at this level fit into the framework of those at all levels. This is shown in the table below:

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|  | **LEVEL 1** | **LEVEL 2** | **LEVEL 3** |
| **Skills** | Basic only | Basic and Advanced Skills | Selection and application of Basic and Advanced |
| **Concepts** | Given with simple meaning | Given with more complex meaning | Either provided with complex meaning or student selects appropriate one |
| **Resources** | Simple resources only – one resource provided per question | Resources more complex – use of more than one resource per question | Complex resources with students utilizing several resources per question |
| **Literacy Level** | Small amount of written information provided at Level 1 literacy | More written resources provided at Level 2 literacy | Resources more complex so student needs to sift through information provided at Level 3 literacy. |
| **Questions** | Questions straightforward | Intermediate | Questions need more interpretation |

**WHAT IS INVOLVED**

If you break down the criteria into the different grades you will see there are two main aspects involved:

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|  | ACHIEVE-MENT | MERIT | EXCELLENCE |
| Using basic skills and geographic conventions in the presentation and/or interpretation of information |  |  |  |
| Showing an understanding of geography concepts |  |  |  |

**USING BASIC SKILLS**

Basic skills refer to the skills that students should come out of a course of geography being able to use. A full list of the skills required is outlined in the geography skills list that can be accessed at:

<http://seniorsecondary.tki.org.nz/Social-sciences/Geography/Skills-and-concepts>

These fall into the following categories:

1. **MAPPING**

At this level most maps are supplied to students to interpret. It is expected that a topographic map is supplied as one of these maps so it is important student have the correct skills to interpret this. If a précis map is included then students would be provided with an outline and be expected to complete it only.

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| **GENERAL** | * What every map needs (Frame, North arrow, appropriate colours, a key or labels, title, scale) * Advantage of maps as a visual tool |
| **DIRECTION** | * Be able to identify the direction of one feature from another by the use of the 8 point compass (16 point can be taught for higher grades) * Recognition of cardinal and inter-cardinal points * Be able to give the bearings of a feature |
| **DISTANCE** | * Use a linear scale for measuring direct distance * Use a linear scale to measure non direct distance (ie along a road, river or coastline) * Have an understanding of approximate distances |
| **SCALE** | * Recognition of different ways of showing scale on a map * What a ratio scale means * Recognition of different scales – which is large and which small. What happens to detail as scale changes. |
| **GRID REFERENCES** | * What the terms eastings and northings mean * Difference between 4 and 6 grid references * How to find a feature at a given grid reference * Giving a grid reference for a named feature |
| **LATITUDE AND LONGITUDE** | * Recognise the difference between latitude and longitude * Name important lines of longitude (prime meridian and international date line) and latitude (Equator, tropics and Polar circles) * Identify places from a given latitude and longitude * Give the latitude and longitude (degrees and minutes only) for a given feature |
| **AREA** | * Being able to give an approximate area of a given feature |
| **NATURAL AND CULTURAL FEATURES** | * Being able to name and distinguish between natural and cultural features on a map |
| **HEIGHT/ RELIEF** | * Being able to use a colour key to identify height * Being able to use spot heights to identify height * Being able to interpret height using contour lines * Being able to interpret the shape of an environment using contour lines |
| **CROSS SECTIONS** | * Being able to match a given cross section to a landscape * Being able to draw or complete a simple cross section using a given frame |
| **USE OF A KEY** | * Being able to identify features using a key * Know basic map key symbols and colours |
| **PRECIS MAPS** | * Being able to complete a précis map where some outline is provided |
| **DIFFERENT TYPE OF MAPS** | * Being able to recognize the difference between a topographic map, a political map, a tourist map and a physical map. * Being able to interpret basic weather maps (isobars, High and low areas of pressure and fronts) * Being able to interpret a choropleth map |
| **WORLD MAPS** | * Recognising the main continents and seas of the world * Identifying important countries in the world * Identifying some important natural and cultural features of the world * Being able to interpret a cartogram. |
| **MAP DESCRIPTIONS** | * Being able to complete a map with given descriptions using appropriate symbols * Interpreting characteristics of an environment from a map * Interpreting relationships shown in a map between features ie roads and relief * Apply concepts to a map |

1. **VISUAL INTERPRETATION**

The photographs supplied at this level are simple to interpret. Complex satellite photographs are not used at this level.

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| **PHOTOGRAPHS** | * Interpret a photograph * Complete a précis sketch using a photograph * Recognise where a photograph was taken in relation to a topographic map * Recognise the direction a photograph is facing |
| **CARTOONS** | * Identify the characters/features in a cartoon * Identify the main idea in a cartoon * Apply a concept to a cartoon |
| **MODELS** | * Interpret important geographic models such as the migration model and a wind rose * Be able to interpret an Age-Sex pyramid |
| **CONTINUUMS** | * Interpret a continuum * Be able to place a viewpoint /value on a continuum |

1. **GRAPHING**

At this level the axes are supplied for a graph so that students have an outline.

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| **GRAPHING RULES** | * Advantage of graphs over tables * What every graph needs even scale, labeled axes, accurately plotted points, neatness such as use of a ruler and shading and a title) |
| **CONSTRUCTING GRAPHS** | * Bar Graph and multiple bar * Line Graph and multiple line * % Bar graph and pie graph * Scattergraph * Pictogram * Climate Graph * Dot distribution |
| **INTERPRETING GRAPHS** | * Recognising a trend or pattern |

1. **STATISTICAL**

Students are told the calculations they are to do but will not be told the formula for these (ie how to work out a %). Numbers given are generally easy to do this as a calculator is optional for students and not expected to be brought unless indicated.

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| **TABLES** | * Recognising patterns * Categorising raw data |
| **CALCULATIONS** | * Working out totals * Working out the mode, median and range * Converting numbers to % |

1. **VALUES**

The continuum is supplied with an example of how to complete this.

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| **VALUES AND VIEWPOINTS** | * Being able to see a resource from different perspectives * Recognising the different groups or values involved in an issue |

**DIFFERENCE BETWEEN THE GRADES**

The difference between Achievement, Merit and Excellence is based on the accuracy and precision of the skills used. This refers to such aspects as the use of conventions (Maps need a frame, direction, colour, key or labels, scale and title) and graphs (even scale, labeled axes, accurately plotted points, neatness such as use of a ruler and shading and a title).

Skills are also differentiated into those that are the basic only and those that are more complex. Some skills may cover both but require greater accuracy for higher levels. For example if a student can locate a named feature on a précis map there may be a greater limit for Achievement and a smaller more accurate limit for higher grades.

**Achievement** requires a certain number of the basic skills used to be completed using basic conventions.

**Merit** requires more complex skills to be used with more precision for some of these.

**Excellence** requires a greater number of complex skills to be completed both using all conventions and precision.

**UNDERSTANDING OF GEOGRAPHIC CONCEPTS**

This section of the standard goes up to excellence. The concepts to be applied are the Key Concepts identified in the Teaching and Learning guidelines unless signaled otherwise in the assessment specifications (for example Maori concepts may apply).

Key concepts can be found at:

<http://seniorsecondary.tki.org.nz/Social-sciences/Geography/Key-concepts>

Maori concepts can be found at:

<http://seniorsecondary.tki.org.nz/Social-sciences/Geography/Pedagogy/Social-inquiry/Glossary>

In most cases the students will be provided with a definition of the concept at this level. Students should read this definition carefully and refer to it in an answer. The concept must be applied to the environment given.

**WHAT THE PAPER WILL LOOK LIKE**

The paper is marked using the grade score marking principle. The assessment consists of 3 questions with each broken down into parts. Within each question are a range of skills and concepts to be completed. The skills are divided into basic (B) and complex (C). Concepts are broken down into those answered partially (Ep) and those answered in detail (Ed). Marks out of 8 are then awarded as to how many are answered at each level for each question.

**HOW TO TEACH SKILLS AND CONCEPTS**

Some skills will require specific teaching while others can easily be taught as appropriate in units.

Most teachers start a course of geography by looking at essential mapping skills including use of an atlas and how to interpret topographic maps. These then form the basis of good geography skills and can be readdressed at the start of other units. For example you may want to use a topographic map of your ENE environment so students can extract useful characteristics from it.

Skills such as graphs can be taught as part of the research assessment and continuums as part of the contemporary geographic issue. The interpretation of photographs, cartoons, diagrams and maps and the use of concepts form part of any geography unit. When looking at the population in the 1.2 assessment a useful start is to supply numerous photographs and maps and see what students can identify from them.

Many skills can form part of a geography game or quiz and it is useful to set time aside (good for last period Friday) and be used to address the competitive spirit that especially engages male students! Putting in place a simple orienteering exercise around school based on direction and distance will help to engage students.

In terms of the concepts refer to these throughout your course to get students use to the language. Start the year with a power point of the key concepts and get students to design posters on these to put on the classroom wall. If you have time then use a film at the start of the year and ask students to apply different concepts to it (like the old work of fiction unit standard). Apply concepts to any current geographic issue as they arise or show interesting photographs and see what concepts they observe.

Skills and concepts should form the basis of all teaching and take the majority of the time during a year.

Jane Evans

Previous Northland/Auckland/Central North Geography facilitator

Margaret Leamy

Previous Lower North Island/South Island Geography facilitator