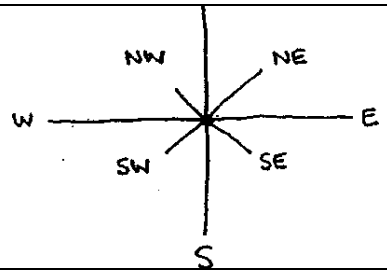
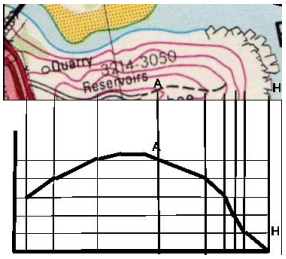
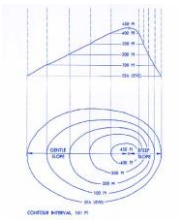
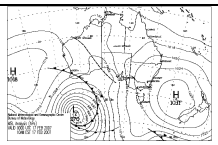
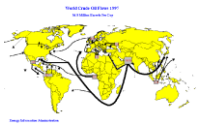
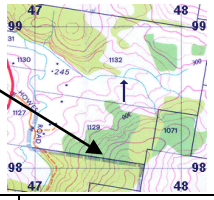
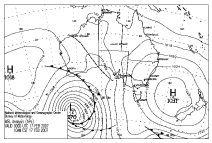
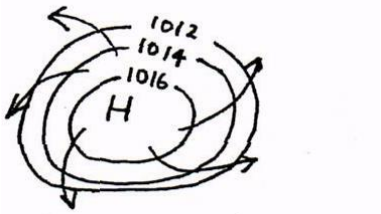
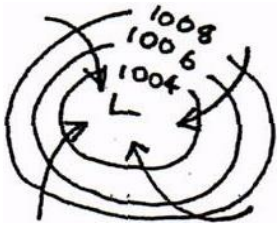
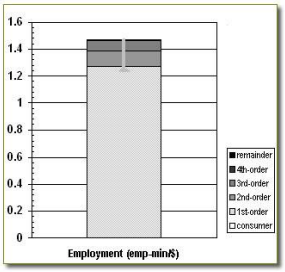
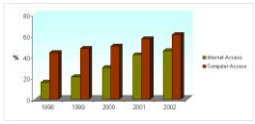
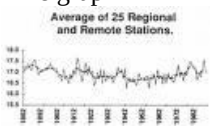
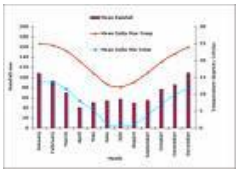
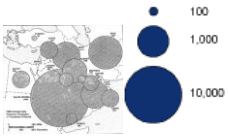
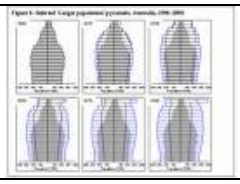
School Certificate Geography Skills - Summary List

1. Draw a direction compass. use the points of a compass to determine direction	
2. What is a topographic map?	• 2D large-scale detailed map **uses contours**
3. How can scale be expressed?	Representative fraction: lcm= 1000km; 1/1000; ratio 1 : 1000. Written: one centre meter to one thousand kilometers linear 0 ——————— 5 km
4. measure distances on a map using a linear scale	Use a ruler, paper or string to measure distances in accordance with the provided scale
5. What is a small scale?	• 1 : 2 not 1 : 1000.
6. What is relief? identify and interpret relief using shading, spot heights, colour and contour lines	• shows height; 3D – **Difference between two heights**
7. calculate local relief	Highest point – lowest point nearby
8. What are contour lines?	• lines joining places of equal height
9. What is a spot height?	• Point showing height
10. What is a cross-section? 11. Remember how to draw a cross-section.	• A side view or profile of a landscape e.g.  
12. What are bearings? measure bearings on a map	Number of degrees in a clockwise direction from North North = 0 bearing : east is a bearing of 90 - use a **protractor**
13. What are lines of latitude?	• Imaginary lines running flat around earth's surface, e.g. equator.
14. What are lines of longitude?	• Imaginary lines running NS e.g. International Date line.
15. What is Vertical exaggeration? VE	• Where the relief (heights) of landforms are exaggerated. Compared to horizontal scale
16. How do we know which way rivers run?	• They run DOWN HILL towards other water eg ocean, lakes - arrows on a river point **upstream**
17. Remember how you use scale to calculate area,	• measure sides of the object using rulers etc.,
18. State the direction of Darwin from Sydney.	• NW
19. Why does Australia have a wide range of climates?	• Its shape, size and its location
20. What is aspect	• It is the direction in which a slope faces (e.g. easterly aspect)

21. identify and use elements of a map	BOLTSS - Border, orientation (direction), legend, , title, scale, Source
22. use various types of maps and flow charts	  
23. locate features using degrees and minutes of latitude and longitude	eg Lat; Long 30^0 S; 150^0E
24. area and grid references	eg 4798 is the main box shown 475982 is a point in this box eg 
25. identify physical and cultural features on a map	Physical e.g.: Land form- hills mountains lakes etc Cultural e.g.: towns roads, power lines, irrigation , bridges etc
26. calculate the density of a feature	e.g.: The number of houses in a set area
27. calculate the gradient of a slope	Gradient = Height /distance Ratio
28. construct a sketch map	A map drawn in the field with labels on the features
29. construct a transect	Transect - a line drawn between points and then used to investigate changes in surface features along that line.
30. construct a land-use map	a map in which different colours are used to denote land-use classifications, such as farmland, hardwood forests, or urban areas. 
31. describe and explain relationships on maps	e.g. it will be more likely to rain in Perth than in Alice Springs because of the weather pattern and distance from the coast 
32. **read** and **interpret** synoptic charts	Know the meanings and symbols for: • isobars • cold front • warm front • trough • wind speed + direction • rainfall • high pressure systems • low pressure systems
33. wind direction and speed,	Read the wind line moving towards the dot (town) and see the legend/Key for the speed (e.g. tail strokes and size) Remember: the end of the wind line with the tail strokes points in the opposite direction to the wind flow.

34. pressure patterns,	anticlockwise and outwards  stable and dry  Clockwise and inwards Unstable and wind /rain
35. fronts and rainfall	Cold fronts normally bring rain and a change in wind direction and speed Cold front = unstable conditions Warm front = stable conditions
36. use geographical instruments, including:	
– a compass to determine direction	Magnetic north true north
– clinometers and tape	
– weather instruments, ○ a Beaufort wind scale and ○ cloud identification charts	○ Beaufort wind scale is a description of wind intensity ranging from 'calm' to 'hurricane' ○ Cloud identification charts help to match up visuals of clouds in the sky and a description of the various types of clouds (e.g.: nimbus)
– vegetation identification charts	
• develop a research action plan	***An action plan for real issues SEE CASE 1 (Geographical Issues)*** **P**urpose **f**ocuses **p**rimary & **s**econdary **t**ools in **c**ollecting **p**rocessing **c**ommunicating & **r**esponding to ***real issues***
• use fieldwork techniques to collect primary and secondary data	
• collect and record data in the field, including:	
– design and conduct interviews – construct and implement surveys – field sketch, diagram	
• identify and calculate maximum, minimum, total, range, rank and average	

<table>
<tr><td rowspan="2">• construct and interpret bar,
• column,
• line,
• climatic and
• proportional graphs</td><td>Bar graphs for the indicator Employment
  </td><td>Column Graph
Household computer and internet access
  </td><td>Line graph
  </td></tr>
<tr><td></td><td>Climatic graph
  </td><td>proportional graphs
  </td></tr>
<tr><td>• construct and interpret population pyramids</td><td colspan="2">  </td><td>Note: Australia's ageing population changes the pyramid shape</td></tr>
<tr><td>• construct and interpret divided bar and column graphs, and composite line graphs</td><td colspan="3">See above examples</td></tr>
<tr><td>• recognise and account for change using statistical data</td><td colspan="3">Use previously attained knowledge in order to explain changes shown by statistical data. E.g.:
• Australia's population growth rate is declining due to....
• The temperature drops in June/July because....</td></tr>
<tr><td>• draw a line drawing</td><td colspan="3">A sketch from a photo on which you label the main features / notes</td></tr>
<tr><td>• distinguish between oblique, aerial, ground-level photographs and satellite imagery</td><td colspan="3">Oblique – at an angle to the subject – from the air
Aerial – vertical to the subject
Ground level – normal
Satellite – at vertical to subject but much greater distance away</td></tr>
<tr><td>• interpret satellite images</td><td colspan="3">Use previously attained knowledge to identify different aspects of the human and non-human environment. Use this information to construct a line sketch, land use map, etc.</td></tr>
<tr><td>• collect and interpret photographic images</td><td colspan="3">May be used for collecting data for Research Acton Plans and presentations.</td></tr>
<tr><td></td><td colspan="3"></td></tr>
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Adapted by T Churcher from this document:
http://www.korffsway.com/Geography/TopicSummaries/Skillssummaries/SkillSummaryList.doc
[accessed 4 Nov 2009]