

Core units: Inquiry and skills Years 9–10

Illustration 2: Skills in Years 9–10 geography

## Exemplar skills and resources – Years 9 and 10

Geographical skills applicable to Years 9 and 10 are listed below. Almost all of them will be used at some stage during each year, but some will be more suited to particular topics within the units of study. Examples and resources to assist in using geographical skills are also provided.

Skill	Exemplar applications in Year 9	Exemplar applications in Year 10	Resources
<b>Map creation and interpretation</b>	<p>Students could:</p> <ul style="list-style-type: none"> <li>create and interpret maps showing the global distribution of the world's biomes</li> <li>create and interpret maps of global climate</li> <li>create a class map showing the country of origin of everyday household goods such as electronic items, foodstuffs, clothing items and sporting goods collected by all students in the class.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>create and interpret maps of environmental degradation across Australia or in their local area</li> <li>interpret choropleth maps showing global differences across a range of economic, social and environmental statistics.</li> </ul>	<p>Illustrations in the support unit <b>ICT in geography</b>, GeogSpace <a href="http://geogspace.edu.au/support-units/ict-in-geography/ig-introduction.html">http://geogspace.edu.au/support-units/ict-in-geography/ig-introduction.html</a> provide relevant information and ideas for creating and interpreting maps.</p> <p>UK Ordnance Survey. <b>Mapzone</b>. This <i>Homework help</i> page provides a variety of mapping resources. Retrieved December 2012, from: <a href="http://mapzone.ordnancesurvey.co.uk/mapzone/Pages/HomeworkHelp/">http://mapzone.ordnancesurvey.co.uk/mapzone/Pages/HomeworkHelp/</a></p>

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<p><b>Graph creation and interpretation</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>• create graphs showing Australia’s agricultural production broken down by state, or compared nationally to other countries around the world</li> <li>• interpret climate graphs from locations in different biomes to compare and contrast climatic conditions throughout the year</li> <li>• create and/or interpret graphs showing Australia’s production and/or consumption of items and compare this to other countries.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>• create and interpret graphs showing a range of statistics that demonstrate varying levels of wellbeing in different less- and more-developed countries</li> <li>• create and interpret graphs showing the amount and type of vegetation in each state of Australia now and in pre-European times.</li> </ul>	<p>Australian Bureau of Statistics. <i>Introduction to statistics</i> shows examples of using scatter plot graphs to interpret information. Retrieved December 2012, from:  <a href="http://www.abs.gov.au/websitedbs/a3121120.nsf/4a256353001af3ed4b2562bb00121564/2c0582df54d791aeca25761700002983!OpenDocument">http://www.abs.gov.au/websitedbs/a3121120.nsf/4a256353001af3ed4b2562bb00121564/2c0582df54d791aeca25761700002983!OpenDocument</a></p> <p>Google Developers. <i>Google chart tools</i>. Retrieved December 2012, from:  <a href="https://developers.google.com/chart/">https://developers.google.com/chart/</a></p> <p>Infogram. <i>Create interactive infographics</i>. A site that allows students to input data and easily create a graph. Retrieved December 2012, from:  <a href="http://infogr.am/">http://infogr.am/</a></p>
<p><b>Representing data visually</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>• create an infographic illustrating how global patterns of production and consumption have been affected by advances in technology.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>• create a conceptual diagram showing land use and environmental processes evident in a familiar catchment</li> <li>• generate an infographic that shows a range of information and statistics on human wellbeing across the world.</li> </ul>	<p>For resources on representing data, refer to <b>Illustration 2: Data visualisation</b> in the support unit <b>ICT in geography</b>, GeogSpace  <a href="http://geogspace.edu.au/support-units/ict-in-geography/ig-illustration2.html">http://geogspace.edu.au/support-units/ict-in-geography/ig-illustration2.html</a></p>

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<p><b>Field sketching</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>create a field sketch as part of fieldwork examining food production on a local scale. This could be a local farm or community garden.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>use a field sketch to highlight examples of environmental degradation or change while on a field trip.</li> </ul>	<p>Royal Geographical Society. <i>Sketching and photography</i>. Retrieved December 2012, from: <a href="http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+techniques/Sketching+and+photography.htm">http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+techniques/Sketching+and+photography.htm</a></p>
<p><b>Survey creation and interpretation</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>use a survey to find out people's attitudes to Australia's consumption of goods and services sourced overseas</li> <li>survey local residents to find out how and why they do or do not use public places in the local area.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>collect and record background information on different indicators of development to reach a better understanding of measures of global development</li> <li>collect information on the causes and impacts of an example of environmental change.</li> </ul>	<p>BBC. GCSE Bitesize <i>Questionnaires</i>. A step-by-step guide for creating surveys in the classroom, from establishing the aims, to the types of questions and sampling that should be done. Retrieved December 2012, from: <a href="http://www.bbc.co.uk/schools/gcsebitesize/dida/using_ict/questionnairesrev1.shtml">http://www.bbc.co.uk/schools/gcsebitesize/dida/using_ict/questionnairesrev1.shtml</a></p> <p>Royal Geographical Society. <i>Investigating options</i>. A guide showing how to create and carry out interview surveys and questionnaires. This information could be given to senior geography students. Retrieved January 2013, from: <a href="http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+techniques/Investigating+opinions.htm">http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+techniques/Investigating+opinions.htm</a></p> <p><i>Survey Monkey</i> is an online tool that allows you to create a survey and send out a link to participants. Retrieved December 2012, from: <a href="http://www.surveymonkey.com/">http://www.surveymonkey.com/</a></p>

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<p><b>Gathering information</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>gather background information on global patterns of production and consumption of various goods such as electronic items, clothing items, food, cars and other motor vehicles, sporting goods and make-up items</li> <li>record information.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>examine and interpret aerial or satellite imagery of their local area to identify evidence of changes to the natural environment.</li> </ul>	<p>Aussie Educator. <i>Study skills</i>. Resources from a number of sources are provided to support study and learning. Retrieved January 2013, from: <a href="http://www.aussieeducator.org.au/resources/studyskills.html">http://www.aussieeducator.org.au/resources/studyskills.html</a></p> <p>University of Melbourne. <i>Academic skills</i>. Provides a variety of resources for teachers and students. Retrieved January 2013, from: <a href="http://services.unimelb.edu.au/academicskills">http://services.unimelb.edu.au/academicskills</a></p>
<p><b>Interpreting aerial and satellite imagery</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>examine a global satellite image to identify different biomes</li> <li>examine a satellite image of their local area to identify natural features, agricultural production and human features as part of a study into place and space locally.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>write a report with the findings of their research into an issue of environmental change</li> <li>use presentation software to present to their class.</li> </ul>	<p>BBC. GCSE Bitesize Geography. <i>Photos in geography</i>. A guide for students on how to analyse and interpret photos. Retrieved December 2012, from: <a href="http://www.bbc.co.uk/schools/gcsebitesize/geography/geographical_skills/photos_rev1.shtml">http://www.bbc.co.uk/schools/gcsebitesize/geography/geographical_skills/photos_rev1.shtml</a></p> <p>U.S. Geological Survey (USGS). <i>Aerial photographs and satellite images</i>. Gives an overview of different types of aerial photos and satellite images and provides a fairly simple explanation for teachers. Retrieved January 2013, from: <a href="http://egsc.usgs.gov/isb/pubs/booklets/aerial/aerial.html">http://egsc.usgs.gov/isb/pubs/booklets/aerial/aerial.html</a></p>

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<p><b>Writing and communicating findings</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>write a report on a common consumer item that considers the economic, social and environmental issues associated with its production and consumption</li> <li>write short responses that summarise their analysis or information gleaned from a stimulus items, data, information and observations related to biomes and food security or interconnections.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>analyse tables of development data to categorise countries according to their level of development.</li> </ul>	<p>Aussie Educator. <i>Study skills</i>. Provides resources from a number of sources are provided to support study and learning. Retrieved January 2013, from: <a href="http://www.aussieeducator.org.au/resources/studyskills.html">http://www.aussieeducator.org.au/resources/studyskills.html</a></p> <p>University of New South Wales (UNSW). <i>Online academic skills resources</i>. Provides a variety of academic writing resources. Retrieved December 2012, from: <a href="http://www.lc.unsw.edu.au/olib.html">http://www.lc.unsw.edu.au/olib.html</a></p> <p>University of Melbourne. <i>Academic skills</i>. Provides a variety of writing resources. Retrieved December 2012, from: <a href="http://services.unimelb.edu.au/academicsskills/writing">http://services.unimelb.edu.au/academicsskills/writing</a></p>

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<p><b>Analysis of written, visual, tabular and other information</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>examine the social, economic and environmental impacts of consumption of different goods and services on those places and people that consume the product and those places that produce the product</li> <li>interpret a range of graphical, visual, spatial, text and tabular data to draw conclusions on the performance of Australia’s tourism industry and its contribution to Australia’s economy.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>use a weighted decision-making matrix to decide on the most suitable strategy to use in regards to environmental change</li> <li>decide on the most appropriate strategy to improve wellbeing in a country identified by the teacher.</li> </ul>	<p>ITC Publications. <i>Templates</i>. Provides free analysis and information gathering tools and resources. Retrieved January 2013, from: <a href="http://www.itcpublications.com/free_resources#templates">http://www.itcpublications.com/free_resources#templates</a></p>
<p><b>Decision-making</b></p>	<p>Students could:</p> <ul style="list-style-type: none"> <li>use a decision-making matrix to decide if Australia is managing a specific natural resource appropriately (for example, coal seam gas or uranium)</li> <li>decide on the best way to use a vacant piece of public land in their local area given a list of options.</li> </ul>	<p>Students could:</p> <ul style="list-style-type: none"> <li>use a field sketch to highlight examples of environmental degradation or change while on a field trip.</li> </ul>	<p>ASQ. <i>Decision matrix</i>. Explains how and when to use this matrix that evaluates and prioritises a list of options to make a decision. Retrieved December 2012, from: <a href="http://asq.org/learn-about-quality/decision-making-tools/overview/decision-matrix.html">http://asq.org/learn-about-quality/decision-making-tools/overview/decision-matrix.html</a></p>