

Ideas for Developing Each Concept

Year R-2: Place, Space, Environment (*Interconnection Yr2*)

Year 3-7: Place, Space, Environment, Interconnection, Scale, Change, Sustainability

PLACE

- Use a concept web/map graphic organiser. Students write 'What is a home/place? In the centre and record their ideas in the spaces around the outside. Annotate responses for younger students.
- Mapping of a classroom, journey home, local area, bedroom, special place. Go for a walk around the school and discuss the school's special features. Students then draw maps and label the key features on their map. They explain why the place is special to them.
- Students draw their 'special place' and explain why that particular place is special to them. Consider videoing students responses to share with the class or another class at the school. Students respond to the question 'How can you care for your special place?' orally or written.
- Conduct a class survey/migration survey (record responses, represent and discuss the data), compare your data with another class in the school (e.g. 'Which places do we come from?' 'Which places do our families come from?').
- Investigate key places/locations around the world using a range of maps, globes and internet sites, such as google earth. Discuss what makes these places similar and different. Discuss the differences in representations of place using a 2D map, globe and internet site. Consider using a Venn diagram to make these comparisons.
- Use Google maps, a 3D globe and a 2D map to find where Australia, South Australia and Adelaide are. Find the suburb. Discuss the geographical features that you can see on a map (e.g. the ocean, land, continents, North and South Poles, rivers, mountains, etc.).
- Label a map of the world identifying key features such as The Equator, The Tropic of Capricorn, The Tropic of Cancer, the North and South Poles and Continents of the World.
- Label a map of Australia identifying key features such as states and territories, cities, rivers and key/significant landmarks. Investigate cartographic conventions of mapping, such as legend, title, north point, etc. Extension: Students design their own map of a continent/ island/ place using a list of cartographic conventions.
- Investigate natural, managed and constructed features of a local place of significance or at the school site. Consider allowing students to take iPads or cameras to take photos of different features. Print photos and sort into the three different categories. Students record a sentence or two explaining why they places photos in each of the categories. They compare their photos and discuss their explanations. Examples of features (natural- trees, birds; managed- , garden bed, lawn; constructed- playground, park bench, bins, shelter). Students could also record how they can care for this place.
- Conduct an investigation of the local shopping centre. Collect data such as the types of shops, the services they provide, how many times their family visits each shop over a week period. Collate class data and ask students to answer questions about the data, such as 'which shops were visited the most/least? Why do you think this is? Which types of shops could be added to the shopping centre, why? Consider asking students to become 'shopping centre planners' where they design a new local shopping centre. What types of shops did you include, why? Which shops didn't you have, why?. Students could use a Venn diagram to compare their actual local shopping centre to their own shopping centre design.
- View a range of photos of places (primary data) - for example student photos from a holiday, photos from texts and the internet. Use photos from a range of sources to engage students in an inquiry topic: *Where is this place? What is this photo telling us about place? Why? How do you know? Would you want to live/visit there? Why? Why not?*
- View and discuss photos that demonstrate places of significance, such as social/cultural sites, historic sites, environmental features (e.g. *parks, gardens, sport facilities*), economic activity, political centres, and technological features. Discuss the importance, purpose and significance of these places.
- Compare the climate (rainfall and temperature) of different neighbouring countries. What would it be like to live in these places? Provide students with a list of guided questions for comparing the climate of places. Students could investigate two different countries, then compare their data to Australia's climate using a graphic organiser, such as a Venn diagram. Extension: Students design their own questions to investigate (e.g. *population, key features, languages, name of cities, animals, natural disasters, etc.*). Students compare their investigations and draw conclusions about their data (e.g. *If you could live in any of the country's investigated, where would you choose to live and why?*).
- Students conduct an investigation about a place of interest. Students design geographical inquiry questions,

research their place of interest and then communicate their findings. Students should be encouraged to use a range of sources to gather their information.

SPACE

- Use photos of the classroom as a stimulus for discussing how space can be rearranged to suit different purposes (*e.g. if we were conducting science experiments, working in small and large groups, more/less floor space*).
- Draw the current layout of your favourite room in your house then draw how you could rearrange this space.
- Investigate local events where spaces are rearranged for different purposes (*e.g. Clipsal 500, Fringe Festival, local weekend markets*).
- Use a map of Australia to label important features. Look at human and natural characteristics. Locate state and territory boundaries and draw major cities, roads, rivers, deserts, forests, etc. and discuss why these features are important. Ask students to use colours and labels on their maps. For older students discuss features of maps such as border, orientation, legend, title, scale, and source. Discuss the key features of maps: Where are the key features located? Why? (*E.g. why are capital cities located where they are? Was this random or well thought out?*)
- Investigate the differences between different types of settlements (city, suburb, regional areas). View photos of the city, local suburb and regional areas. What are the main features of each place? How is the space used? How is this similar of different? How are people connected to these places? Investigate which features are important. Ask students to become city planners and design a new place. How would the space be used? What features are necessary? How will people keep connected?
- Research a local issue/decision within the community relating to how a particular space is being used or a proposal for the use of a space (*e.g. the impact of a new fast-food chain in a local area; the redevelopment of a space for housing*). Explore the impact at a local, national and global scale. Students write a letter in response to the issue in the style of an exposition, and provide alternative solutions or suggestions.

ENVIRONMENT

- Investigate: How we can care for local/school environmental feature? How can we do the right thing for our environment? (*e.g. our local park, our local beach, a school garden area*). Brainstorm student ideas and pose as inquiry questions (*e.g. what would it be like if we didn't have a park to play in? What could happen if...*)
- What is currently being done at a personal, local, national, global scale to care for our environment? (*e.g. our local council collects rubbish every week, we have recycling bins and green-waste bins- what happens to this waste? How does this help our environment?*)
- Use a shared text, such as *The Lorax* by Dr. Seuss to investigate the impact of human activity on the environment. Students could write a letter to address the key issues and concerns in the text. Students are asked to propose an alternative solution in response to the text.
- Students investigate their personal impact on the environment in relation to the amount of waste they produce during a week at school. Students are given a waste management recording sheet to track their data (*e.g. including amount of rubbish, types of rubbish, was it landfill/recycled/reused/composted? etc.*) Students identify what they could do to reduce the amount of rubbish produced. Students compare their data and suggest ways to reduce this as a class. Students might complete a PMI chart to review the wastage data of the class. Students could be asked to complete a reflection about their investigation, including a personal action plan for the future.
- Investigate Australia's climate and use a map of Australia to demonstrate the climate types. Use a key to identify each climate type. Ask students to describe what it would be like to live in each climate area.
- Use Google maps to develop students' geographical skills and knowledge using digital tools. Identify the location of a local issue to be explored using Google maps (there are tutorials for using Google maps on You Tube). Use Google maps as a way of recording and tracking a local excursion. Have students take photos along the way which could be used to plot against a Google map image. Compare and contrast the characteristics of features seen along the way against those represented on Google Maps (*e.g. using street view*).
- Design an interactive 'holiday' using Google maps. Discuss where students could go and what type of environment they are interested in seeing (*e.g. snow, desert, rainforest, major river, beach for swimming*). Students create a Google map journey, identifying the key natural and human features of their trip. Students generate and answer inquiry questions relating to their trip (*e.g. How is the Nile River being cared for? Why is the Nile River important? How can the people who access the Nile River ensure its sustainability for the future?*).
- Investigate the natural habitat and environment of a particular country (*e.g. African animals – native/ introduced/ endangered*, explore the natural habitats and migration patterns of animals and map their journey using Google maps.

- Write a media report or exposition on a local environmental management issue.
- Conduct a class debate on a current or major environmental issue (*e.g. shark drum lines, climate change, marine parks, etc.*) or on a more general topic (*e.g. Australia is a great place to live*). **This activity could also be explicitly linked to substantiality of the environment and liveability of places.*

INTERCONNECTION

- Investigate student connections to Australia. Which places are you connected to and how? Share student maps and possibly create a class connections map.
- Map where students and their families are connected globally. Students brainstorm individually their connections to other countries using a blank world map. Students then share and a class map is generated. Include student holidays and family trips and/or places visited.
- Investigate a local area/ place/ park that is used by the community for different purposes. Plan an excursion to this place for students to conduct fieldwork, such as mapping, taking photos and drawing. Conduct pre-excursion activities for students to think about what they could find out about the park/place prior to the excursion. This becomes the students' inquiry questions for investigation. Students prepare their own data and information in relation to their questions, as well as guided class activities such as mapping.
- Investigate goods and services connections. This will require students recording some information from home (*e.g. Where is your food imported from/made? Where is your furniture/T.V/computer made? Where was your school jumper/t-shirt made? Etc.*). Think about how these connections could be represented on a map (*e.g. yellow lines for goods, red lines for food/drink*). Family links and places visited could also be included to show wider connections. Further investigations/inquiry around importing and exporting goods and services would be appropriate for older students, linking the AC Economics and Business strand of the HASS curriculum for years 5-7. This could include elements of mathematics in relation to time and distance.
- Investigate types of vegetation found in Australia and link to rainfall distribution, temperature, latitude & topography. *Does this have any impact on the types of vegetation/natural features/living things found in these locations? What types of natural and human features are located there? How does the vegetation sustain life that is found there? What threats are there to the environment and living things found there?*
- Compass points activity to explore a particular topic or event (*e.g. natural disasters, climate change, Olympic Games*). N-need to know, E-excited, S-Stance or suggestion for moving forward, W- worrisome). Students share their compasses and design inquiry questions for further research and investigation to determine the outcomes/ solutions/ steps for people affected. At the end of the investigation use an I used to think..., Now I think.... Graphic organiser for reflection.
- Use a compass point or other graphic organiser to explore how peoples' opinions and perceptions are influenced by their connection to place. Investigate a significant event and explore generalisations about people and places (*e.g. Indigenous and Torres Strait Islander people's perspectives- National Sorry Day, Acknowledgement of Country/ Asylum seekers*). *Be aware of stereotypes and generalisations- use these as teaching points as to why people want to flee their home country, etc.*. Ask students to pose questions in relation to each compass point (or headings on another graphic organiser). Possible compass points: N-natural influences, E-economic reasons, S-social reasons, W- who decides? (political reasons).
- Investigate how *changes/advances* in technology have allowed for greater interconnection between places. Brainstorm the ways in which people can keep connected now (*e.g. Skype, Facebook, Twitter, text messaging, Google*). How is this similar and different to the past? (*Compare and contrast*). How has technology changed the lives of people and places?
- Investigate interconnection in relation to a global issue such as global poverty. Brainstorm inquiry questions for investigation. Provide students with a stimulus (*e.g. YouTube clip, images, news story*) to generate discussion and prompt student thinking. Investigate the spatial distribution of poverty and investigate factors that influence poverty (*e.g. location, climate, development, population*) and what is being done globally to aide poverty.
- Investigate migration to Australia. Use a stimulus for brainstorming inquiry questions for the investigation. Ensure that generalisations and misconceptions about migration are discussed as part of the investigation. Students collect data about migration from a range of sources and represent their data using a range of mathematical graphs and charts. Students draw conclusions about their data and why people migrate to Australia. Students present their findings to their peers.
- Students investigate the liveability of places by planning an inquiry about liveability in a local area (*you may choose to extend this to local or regional scale*). Students develop geographical inquiry questions, conduct their research and collect their data, represent and interpret their data and draw conclusions about liveability based on their investigation. This should include suggestions for how to improve liveability.

- Students investigate water in our world by exploring the types of water, location of water sources, use of water, annual rainfall, etc. around the world. Students begin by brainstorming all the water sources they know of and the uses of each water source. Students map water sources on a world map, using a legend to distinguish between each source. Students draw conclusions about population and spatial distribution of places in relation to water supplies. Students present their findings and research using a PowerPoint, Keynote or Prezi presentation. They present these to their peers.

SUSTAINABILITY (see also *Sustainability as an Australian Curriculum cross curricular priority*)

- Conduct a class debate on a current or major environmental issue (e.g. *shark drum lines, climate change, marine parks, etc.*) or on a more general topic (e.g. *Australia is a great place to live*). Focus on the concept of sustainability (although this idea could also be used to explore the Environmental concept) and what makes a place or places liveable. Students investigate geographical data such as population, birth and death rates, access to schooling, climate, vegetation, goods and services, disease and health care, environmental issues, etc. Once students have collected their information use an explicit debating proforma for students to organise their thinking.
- Investigate a unit of work on sustainably ways to reduce, reuse, and recycle waste. Brainstorm what students already know and design inquiry questions (e.g. *How much electricity do you use? How can you reduce the amount of electricity you use? What is green power? Etc.*).
- Use a consequences chart to explore the impact or consequences of an environmental or social activity/event. This may link to a current local issue or might be about exploring how urban sprawl impacts particular areas of Australia. This could be organised into positive and negative consequences (e.g. *marine parks along the coast of South Australia or drum lining for sharks*). Students could reflect on their learning by suggesting what they would do if they had the power to make or influence decisions.
- Use a range of newspaper articles, web and journal articles, photos or images from the internet as a stimulus for researching sustainability. Allow students creativity in how they might present their findings (e.g. *newspaper article, recorded 'T.V' interview, pamphlet or brochure, personal fictional recount, story/photo board, etc.*)

SCALE

- Investigate the concept of scale using a map of Australia on a globe, compared to a 2D printed map, compared to Google Earth. Discuss the purpose of scale and show different examples of scales found on maps. Use a map of the school, if available, to explore scale or create a scaled map of the classroom. Use the zoom function on Google maps to explore maps at different scales by zooming in and out and to also view the map of the school.
- Investigate a range of maps that represent scale in different ways. Discuss terms such as linear and ratio. Explore scale in real life contexts (e.g. if a scale reads 1:100 what does 1cm represent in real life? How does that compare to 1:1000). Use programs such as *Google Sketchup* or similar app to draw maps using scale.
- Identify issue, impact at local, national and possibly global level (depending on the age of students). Use a PMI chart to brainstorm student's thoughts and ideas. An example topic might be exploring the impact of bushfires at a local and national level.
- Investigate scale in terms of distance: How far is it from... to ...? How long does it take to fly from ... to...?
- Investigate size comparisons of countries in relation to population: What is the population of the United Kingdom in relation to Australia, How does the size of each country compare? Overlay maps of each country to see visually the size difference, record key data on the map.
- Investigate distance between states or countries using TV themes such as 'Amazing Race' or 'Journey around the world in 80 days'.
- Use Google Maps 'create and share' feature to draw routes, mark locations, add descriptions and photos. Read more: <http://www.pcadvisor.co.uk/how-to/internet/3376055/create-share-custom-google-maps/#ixzz2x3cpzQry>

CHANGE

- Use a text or video clip to investigate how children in other places around the world are similar and different. Have students use a t-chart graphic organiser to record their thinking, share and discuss their thoughts. Ask students to design questions that they might want to ask the children that live in a particular area from the text or video clip. Using the text students may be able to answer their questions or predict what the responses could be. (Possible text: *A Life like Mine: How children live around the world, Amanda Rayner (ed) 2006; Children Just Like Me by Anabel & Barnabas Kindersley, 1995*).
- Investigate how a place changes during different seasons in the year. What remains the same and what is different across the seasons. Divide a page into quarters and ask students to record their ideas in each box (one box per

season). Alternatively use a Venn diagram to explore change over all seasons.

- Conduct a local change over time study. Use old photos and images of the school site or local area and investigate what is similar and different. Use the internet to search for images or ask the local community, via the school newsletter for any copies of past local or school images. For example investigate how Glenelg, S.A has changed over time. *What was at the Beach House site before it was redeveloped? What do your parents/teachers remember about Magic Mountain? How has the shopping precedent and transport changed? Was the Glenelg jetty/ Grand Hotel/ Town hall always there?* Provide students with photos, or allow students to print photos to create a document where they can identify and label the changes to a place over time.
- Investigate how places around the world have changed over time (e.g. *population, landscape, natural & man made features, climate, technology, demographics*) and the impact of changes on place, space and the environment.
- Investigate how an event (e.g. *a natural disaster*) has changed a place? What impact has this change had on place, space and environment? How has this impacted on the liveability of the place? Use before and after images from the internet and Google Earth.
- Investigate how places change each day using the NASA website (www.nasa.gov.au). Images from NASA change daily, allowing comparisons to be made each day. You could choose to focus on one particular place or topic (e.g. *rivers from space, night lights around the world*) in order to make comparisons. Capture the images to insert into a photo board or digital story. Use the questions 'What do you see?' 'What do you think?' 'What do you wonder?' when examining the images. Questions posed by students could be used for further inquiry (e.g. why does Africa have fewer lights than India).
- At the end of a topic or investigation use an 'I used to think..., Now I think...' graphic organiser to reflect change of thoughts or change of mind in relation to the topic. Encourage students to revisit their research and use factual data to support their 'now I think' claims.

Some General Ideas Across the Concepts

Inquiry Learning

- Wonder wall (*before, during, after to pose thoughts and questions*)
- Inquiry matrix (*Who? What? When? Where? Why? How? / Is? Are? Did? Can? Would? Will? Might?*)
- 'I notice', 'I wonder', 'I observed' questions while viewing a stimulus video clip or other text.
- Weekly/fortnightly wonder wall- display photos or images throughout the week/fortnight, students pose questions and record their thinking around the edge by sticking post-it notes with their thoughts.
- Ask groups of students to investigate a single concept with a given topic. Each group poses their own investigative questions and researches their topic to report back to the class. Students take notes of each student's presentations to prepare a summary report.
- iPad Apps for the Inquiry Cycle: Kath Murdoch Inquiry Approach <http://kathmurdoch.com.au/index.php?id=22>
(source: Pinterest March, 2014 <http://librariansonthefly.blogspot.com.au/2013/09/apps-for-inquiry-process.html>)

iPad Apps for the Inquiry Cycle

(based on the research steps of The Inquiry Cycle by Kathy Murdoch)

Tuning In (brainstorming, generate guiding questions)	iThoughts	iBrainstorm	Popplet	Inspiration	DropMind	Magtini	Idea Sketch	MindNode	MindMash
Finding Out (resources, web evaluation)	Destiny	Scribd	Instapaper	LiveBinders	B-school (coming soon)	Access My Library	Qwiki	Quora	Wolfram Alpha
Sorting Out (note-taking, outlining)	Evernote	Dropbox	Mendeley	Penultimate	MY MLA	iAnnotate	QuickCite	Diigo	EasyBib
Going Further (evaluating information against guiding questions)	Mindjet	MindMapper	Pics, Comix	T-Charts Pro&Cons	iMindMap	KWHL	KWHL Chart	Word Collage	Mindomo
Making Conclusions (presenting)	Keynote	Pages	Storyboards	VoiceThread	Prezi	ShowMe	ScreenChomp	ComicLife	EasyStudio
Taking Action (reflection, spreading information)	Explain Everything	Blogger	Drafter	KidBlog	EasyPortfolio	Recordium	Socrative	EduKlogs	Sketch

Graphic Organisers & Recording Activities (for brainstorming, organising ideas and thoughts and reflecting) <ul style="list-style-type: none">• Think-Pair-Share• KWL (What I know, What I want to know, What I learnt)• PMI (plus, minus, interesting)• Cause and effect• I used to think..., Now I think...• Venn diagrams• T chart (same, different)• Concept map/ concept wheel• Compass points diagram (N, E, S, W) pose a question/title to represent each letter• Think, See, Wonder (What do I think? What do I see? What do I wonder?)• Fishbone diagram• Consequences chart• Chain of events/cycle of events• Timeline/continuum		
ICT <ul style="list-style-type: none">• Microsoft applications (PowerPoint, Word, Excel)• Apple applications (keynote, pages, numbers)• You Tube• Edublog- create your own class edublog account and connect with students across the world	<ul style="list-style-type: none">• iPad applications such as camera, video, safari browser• Apps such as explain everything, TED, show me, iMovie, Prezi, Popplet, Flash cards, Book creator, Skitch, Show Me, etc. (see also inquiry iPad apps above)• QR (quick response) codes- download free QR reader apps	
Literature Texts <ul style="list-style-type: none">• ‘Why I Love Australia’, Bronwyn Bancroft• Flat Stanley’s World Wide Adventures• ‘The Lorax’, ‘Oh the Place’s You’d Go’ & ‘There’s a Map on my Lap’ by Dr Seuss, plus many other Dr Seuss books• ‘Are We there Yet? A journey around Australia’ Alison Lester, plus other Alison Lester books• ‘Our Australia’ series – Phil Kettle Look for texts that explore a theme, such as: <ul style="list-style-type: none">• ‘10 Things I can do to help my world’ Melanie Walsh, focus on Sustainability• ‘Little Elephants’ & ‘The Waterhole’ Graeme Base, focus on Natural Disasters & Sustainability• ‘If the World were a Village’ David J. Smith, focus on people around the world• ‘Where the Forest Meets the Sea’ Jeannie Baker, focus on sustainability• ‘My Place’ Nadia Wheatley, focus on sustainability and change	<ul style="list-style-type: none">• Use a range of fiction and non-fiction texts.• The Links Plus resources by Fran Knight provide lists of fiction texts to support themes across R-7 and to support the Australian Curriculum implementation.• Themes covered in ‘<i>Fiction Themes K-7: Recommended books by subject</i>’ include: Aboriginal Peoples, Adventure, Animals, Antarctica, Asia, Children in War, Disasters, Environment, Food, Grandparents, Health, Holidays, Journeys, Multiculturalism, Real life issues, Refugees, Sea, Transport, War, Zoos• Themes covered in ‘<i>Literature to Support the Australian Curriculum: Annotated lists of fiction and poetry</i>’ include: Asian themes, Indigenous themes, sustainability, poetry, suggestions for class texts and read alouds.• <i>Literature to support Australian Curriculum: History and Literature to support the Australian Curriculum: General Capabilities is also available.</i>• <i>Literature to support Australian Curriculum: Geography (available after June 2014)</i> https://www.pledgerconsulting.com/products/books	
Google Web Sites <ul style="list-style-type: none">• Google Maps: a web mapping service application• Google Earth: a virtual globe, map and geographical information program. It maps the Earth by the superimposition of images obtained from satellite imagery, aerial photography and geographic information system (GIS) 3D globe.• Google images: allows users to search the Web for image content.		
Sources <ul style="list-style-type: none">• Australian Curriculum v6.0: Geography for Foundation–10, www.australiancurriculum.edu.au/Geography/Curriculum/F-10• ACARA: Australian Curriculum v6.0: Geography for Foundation–10 Work Sample portfolios (accessed February, 2014)• <i>Connecting with Geography: Strategies for an Inquiry Classroom</i>, Marianne Ward, 2014, Curriculum Press, Education Services Australia• Links Plus https://www.pledgerconsulting.com/products/books		

Karly Hefferan, 2014