GEOGRAPHY

YEARS 7 - 9
TEACHERS RESOURCE

NATIONAL SPORTS MUSEUM

Bank of Melbourne
Education Program Partner

INTRODUCTION

The National Sports Museum (NSM) is located at the Melbourne Cricket Ground and houses a collection of sporting heritage artefacts and information with many interactive displays. A visit to the NSM provides many opportunities for secondary students to investigate and apply geographical concepts.

AusVELS Geography curriculum

The AusVELS Geography curriculum outlines seven concepts which help students to develop a geographical understanding. These are Space, Place, Interconnection, Change, Environment, Scale and Sustainability. By applying these concepts, students learn to think geographically. These worksheets are appropriate for students applying the concepts at Levels 7, 8 and 9.

In addition, students have the opportunity to investigate Key Geographical Knowledge and Understanding and Key Inquiry and Skills in the Level 7 and Level 9 curriculum as follows:

Level	Topic	Key Geographical Knowledge and Understanding	Key Inquiry and Skills
7	Place and liveability	The factors that influence the decisions people make about where to live and their perceptions of the liveability of places (ACHGK043)	Evaluate sources for their reliability and usefulness and collect, relevant geographical data and information, using ethical protocols, from appropriate primary and secondary sources, for example fieldwork, maps, plans, photographs, satellite images, statistical sources and reports (ACHGS048)
		The influence of accessibility to services and facilities on the liveability of places (ACHGK044)	Select, record and represent data in a range of appropriate forms, for example, climate graphs, compound column graphs, population pyramids, tables, field sketches and annotated diagrams, with and without the use of digital and spatial technologies (ACHGS049)
		The influence of social connectedness and community identity on the liveability of places (ACHGK046)	Analyse geographical maps, data and other information using qualitative and quantitative methods, and digital and spatial technologies as appropriate, to identify, describe and propose explanations for spatial distributions, patterns and trends and infer relationships (ACHGS051)
			Apply geographical concepts to draw conclusions based on the analysis of the data and information collected (ACHGS052)
9	Geographies of interconnection	The perceptions people have of place, and how this influences their connections to different places (ACHGK065)	Evaluate sources for their reliability, bias and usefulness and collect relevant geographical data and information, using ethical protocols, from a range of appropriate primary and secondary sources, for example, fieldwork, maps, plans, photographs, satellite images, statistical sources and reports (ACHGS064)

		The way transportation and information and communication technologies are used to connect people to services, information and people in other places (ACHGK066)	Select, record, organise and represent multi-variable data in a range of appropriate forms, for example, scatter plots, tables, and annotated diagrams, with and without the use of digital and spatial technologies (ACHGS065)
		The ways that places and people are interconnected with other places through trade in goods and services, at all scales (ACHGK067)	Represent the spatial distribution of geographical phenomena by constructing special purpose maps that conform to cartographic conventions, using spatial technologies as appropriate (ACHGS066)
		The effects of people's travel, recreational, cultural or leisure choices on places, and the implications for the future of these places (ACHGK069)	Apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking into account alternative points of view (ACHGS068)
			Present findings, arguments and explanations in a range of appropriate communication forms, selected for their effectiveness and to suit audience and purpose; using relevant geographical terminology, and digital technologies as appropriate (ACHGS070)

Student activities

Ten worksheets have been designed for students to complete. Five of these should be completed before a visit to the NSM, four worksheets relate directly to the NSM and displayed artefacts although most have elements to be completed on return to class and one worksheet is designed to be completed after the museum visit.

Teachers are encouraged to choose which worksheets best suit their students and year level. When at the NSM, it is suggested that teachers allocate one or two activities to pairs or small groups of students to complete. This allows students to share in the gathering of information that can be discussed and shared back at school. It also allows students time to visit other exhibits during their visit.

Each of the worksheets is designed to focus on one or two geographical concepts. These are summarised below.

Secondary Years 7 – 9

Worksheet Number	Title	Concept/s
	Before the visit	
Worksheet 1	Connecting with the MCG and the NSM	Interconnection Space
Worksheet 2	Where have the Olympic Games been staged?	Place
Worksheet 3	Where are the NSM and the MCG located?	Place Space

Worksheet 4	The changing MCG environment	Change Environment
Worksheet 5	The MCG and its environment	Environment Sustainability
	During the visit	
Worksheet 6	Sporting connections	Interconnection Scale
Worksheet 7	The people's ground	Change
Worksheet 8	How does the NSM connect with women?	Interconnection Scale
Worksheet 9	NSM Treasure Hunt	Space
	After the visit	
Worksheet 10	Fieldwork report	Space Place Interconnection Change Environment Sustainability Scale

Teacher notes

The following provides specific teacher notes for each worksheet.

BEFORE THE VISIT

CONNECTING WITH THE MCG AND THE NSM

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Interconnection: The ways that the places and features are connected with each other, and the consequences of these interconnections.

Space: Where things are located and distributed on the Earth's surface.

Aim

This activity asks students to investigate and identify the fastest, shortest and most cost-effective route from their home to the NSM/MCG.

Activities

1. Produce a series of maps to identify student transport options when going to the MCG or NSM.
2. Identify each student's quickest and cheapest transport option.
    i. This is an individual task.
    ii. Google maps will allow students to produce and save digitally maps of car and foot. Students will need to consider a bike route, which may be the same as by car but also may include shortcuts or bike paths that are not available to cars.
    iii. Once students have produced their maps for Activity 1 to complete their table the following web site www.racv.com.au/wps/wcm/connect/royalauto/home/motoring/information-advice/general-information/how-much-does-it-cost-to-own-a-car-royalauto-racv will allow them to identify the cost per KM for their family car.
    iv. Complete the table by investigating public transport options using http://ptv.vic.gov.au/timetables/
    v. Answers to questions 3–5 will depend on the table completed by each student.
    vi. Answers to questions 6–10 should be discussed as a class so that students gain some understanding of the variety of possible answers. Proximity of a station/tram/bus stop to their home or school, cost of fares, availability of a car or bike, time available or speed of travel, safety of local streets, night or day access etc. are all possible factors which might impact on individual student's answers.
    vii. Answers to question 10 should also include linkages through the media or TV that allow connection with a place that you may not have physically visited. Is it the ease of transport access that is responsible for the interconnectivity between the MCG and its patrons or is it the place that the MCG holds in the sporting environment or heritage of Melbourne or Australia? Is the interconnection with the MCG due to a love of cricket or football or both? Is it because their family meets there for special occasions or to support a common AFL club?
    viii. The map produced for question 11 should at least include access by foot, tram, train and taxi. It could also include the hire bikes, river taxi and or skateboard as possible transport links. Suggest that students colour code their map and use simple annotations to explain the possible interconnections.

Resources

1. Google maps
2. The identify the cost per KM to drive in Victoria www.racv.com.au/wps/wcm/connect/royalauto/home/motoring/information-advice/general-information/how-much-does-it-cost-to-own-a-car-royalauto-racv
3. Tram and train timetables http://ptv.vic.gov.au/timetables/

WHERE HAVE THE OLYMPIC GAMES BEEN STAGED?

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Place : an area on the Earth's surface which is identified by, and has meaning for, people.

Aim

For students to identify some of the geographical similarities and differences between the places that have hosted or will host summer Olympic Games.

Activities

1. This is an individual task.

    i. Drawing this map may be a good time for your class to revise Hemispheres and seasons. Mark in the Equator and Meridians and perhaps shade the southern hemisphere. It may be interesting to look at the date/s that the Olympic Games were held when they were in the southern hemisphere to allow for discussion of the seasonal issues as summer in the southern hemisphere is not in the same months as summer in the northern hemisphere.

    ii. Major cities such as New York, Mumbai, Sao Paulo, Delhi, Buenos Aires, Jakarta, Cairo, Lagos and Istanbul have not hosted the summer Olympics. Cities such as these are the ones that students should consider when answering question 7.

2. How many times has the host city been a place in the Southern Hemisphere? **3**

3. How many times has the host city been a place in the Northern Hemisphere? **26**

4. How many times has each populated continent hosted the Olympic games?

Europe **16**	North America **6**	South America **1**
Australia **2**	Africa **0**	Asia **4**

5. Which cities have hosted the summer Olympics at least twice?

Athens, London, Los Angeles, Paris

6. Which of the Olympic host cities has the greatest current population and which has the smallest current population? **Largest Tokyo smallest Antwerp**

7. When Mexico City hosted the summer games in 1968, the location was expected to be difficult for the health of some athletes. Use information from map/s to identify and explain what this issue may have been.

    The altitude of Mexico City (2250 meters) with possible altitude sickness was the issue. Students could research why altitude is an advantage or a disadvantage for Olympic athletes and spectators. Air pollution may also be a concern as it was for Bejing in 2008.

Resources

1. List of past and future summer Olympic Games host cities. www.olympic.org/olympic-games
2. Blank outline world map
3. Atlas (online or other).

WHERE ARE THE NSM AND THE MCG LOCATED?

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Place: an area on the Earth's surface which is identified by, and has meaning for, people.

Space: where things are located and distributed on the Earth's surface.

Aim

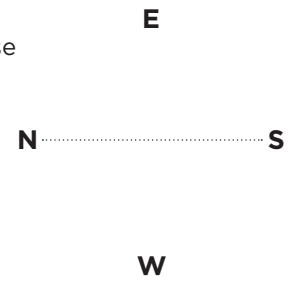
For students to be able to identify the location of the MCG within its region.

Activities

1. To orient a series of images of the MCG to identify the direction in which the image is oriented.
2. Place the location of the entrance to the NSM on each image (even if it is not yet built).
    i. This is an individual task that might be useful as a homework task or to revise direction.
    ii. A 4-point compass rose is just north, south, east and west. To increase the complexity of the task an 8 or 16-point compass could be used.

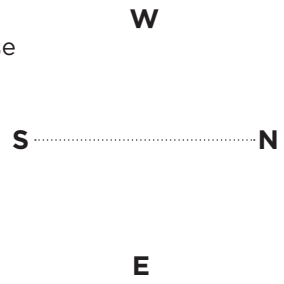
Legend:

Compass rose



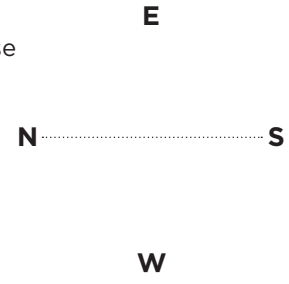
Legend:

Compass rose



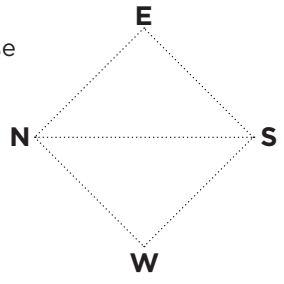
Legend:

Compass rose



Legend:

Compass rose



WHERE ARE THE NSM AND THE MCG LOCATED?

Student Tasks:

1. On the pictures included in worksheet.

2. Teachers check accuracy of student annotations.

3. Annotate each image to show the direction from the MCG to the Yarra River (**South**), the CBD of Melbourne (**West**) and the Tennis Centre (**South**).

4. What direction is it from Melbourne CBD to the MCG? **East**.

5. What direction is it from Richmond Station (**West**) and from Jolimont Station (**South**) to the MCG?

6. Explain the orientation issue that makes the viewing of a football match from the Great Southern Stand difficult on a sunny winter's afternoon?
   As the Great Southern Stand faces North, spectators look into the sun during the afternoon. The sun is quite low in the sky during winter so it can create a visibility problem.

Resources

1. Google Maps or street directory to identify place and direction in the region around the MCG.

THE CHANGING MCG ENVIRONMENT

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Change: is about investigating how environments and spatial patterns change over time, in the short and long term.

Environment: People rely on, use and change the environment.

Aim

For students to identify land use change over time to the environment surrounding the MCG from 1864 to the present.

Activity

1. This is an individual task.

2. Remind students to use BOLTSS on their maps. (Border, orientation/compass, Legend, Title, Scale and Source).

3. This collection of two maps showing change of land use at the same location at two different points in time, could be created as an overlay. The changed land use for the top layer (1956) can be drawn on to a see through paper such as tracing paper or acetate. It is then possible to highlight the most obvious changes that have occurred to the region surrounding the MCG between 1864 and 1956.

4. Students will discover that railways and some roads have not changed but that land use and ownership has.

5. Future changes are quite difficult to predict as although there has not really been a significant change to this region in the past 50 years except for updating of the ground and the building of the Tennis Centre next door. The parkland, rail and road infrastructure is similar and housing has not really increased. A roof is a possibility, given that Docklands has one. Transport links may have changed from car and train to other modes. The car park may be underground to preserve the public open space or to allow for more sports fields on the existing car park, although will we still have cars or private transport. Moving walkways, hotels/apartments built into the stands and will Australian football and cricket even still exist in the modern sporting life of Melbourne.

6. Note your worksheet could contain the three images or just links to them for students to use online. Online has the advantage of being able to enlarge the images to see greater detail. Perhaps the Google base map could be provided to students.

Resources

1. East Melbourne Map 1864c http://emhs.org.au/gallery/maps/1864c_east_melbourne_map

2. Sketch of MCG 1864 http://handle.slv.vic.gov.au/10381/144411 (State Library Vic)

3. Aerial view of MCG just prior to the Olympics in 1956 http://handle.slv.vic.gov.au/10381/300420 (State Library Vic)

4. Google Map of the same region today.

THE MCG AND ITS ENVIRONMENT

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Environment: People rely on, use and change the environment.

Sustainability: is using the environment and resources so they can be shared by all people and living creatures now and into the future.

Aim

For students to graph the climate statistics for the MCG, assess aspects of the stadium design relevant to weather and investigate management policies relating to sustainability.

Activities

1. This is an individual task.

2. Use Geogspace resources to teach your students or to refresh their memory about how to draw climate graphs: www.geogspace.edu.au/search-results.html?query=climate%20graphs . This resource provides simple instructions as well as a template on which to draw the climate graph.

3. The third statistic, average number of rainfall days, could be drawn on the same axis as a line graph, but in a different colour to the average temperature graph or on a separate template.

4. Annotate the climate graph to identify the wettest three months and the hottest three months.

   The three wettest months are October November and December the three hottest months are December January and February.

5. Are the months with the highest rainfall also the months with the greatest number of rainy days? Use statistics from your graph to justify your answer.

   The hottest and wettest months have December in common. The wettest months are late spring early summer and the hottest months are in summer. Relevant data from the graph is that October, November and December all receive 48mm of rainfall per month and that the hottest month's temperatures are January and February with 26 °C and December with 25°C.

6. Question 5, the redesign of the MCG could be appropriate as a homework task.

Resources

1. Instructions on how to draw a climograph either online or on paper. Geogspace: www.geogspace.edu.au/search-results.html?query=climate%20graphs

2. Environment Fact Sheet MCG
   www.mcg.org.au/The MCG Stadium/MCG and the Environment/Environment fact sheet.aspx

3. Image of MCG in 2010 for use in questions 4 and 5. www.flickr.com/photos/phillipsandwich/5058865635/

DURING THE VISIT

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Interconnection: The ways that the places and features are connected with each other, and the consequences of these interconnections.

Space: Where things are located and distributed on the Earth's surface.

Aim

For students to compare the way that three sports or sporting events have made connections between the MCG/ NSM and local, national and global communities.

Activities

1. This could be an individual or small group task

2. Once students have collected the information required to compare the three case studies, completing their maps and answering the comparison questions could be completed in class or at home.

3. Students select three major exhibits and investigate their connections with MCG at a range of scales. Students might compare Cricket with Australian football, Olympic Games, Commonwealth Games or special sporting events. They could use a blank world map such as those found at www.freeusandworldmaps.com/html/World_Projections/WorldPrint.html or http://wurstwisdom.com/picsbehd/world-map-outline-printable to identify the global and national reach of each case study and collect the data as suggested on the worksheet.

4. Students are asked to take photos of each of their case studies as part of their data collection. They could either annotate these photos with an app such as 'Evernote' or they could record some audio to attach to each photo to speed up their note taking.

5. If you think that time may be too short to complete all of these tasks students could just compare two events or they could work in a small group and complete one or two case studies each.

Resources

1. Evernote https://evernote.com/download/

2. World map www.freeusandworldmaps.com/html/World_Projections/WorldPrint.html or http://wurstwisdom.com/picsbehd/world-map-outline-printable

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Change: Is about investigating how environments and spatial patterns change over time, in the short and long term.

Aim

For students to identify changes of use and changes to the structure of the MCG through time.

Activity

1. This is a small group task. If it was to be attempted by an individual reduce the number of images to about 15.
2. This task requires students to look at most exhibitions, but they should look most carefully at the 3D model of the MCG.
3. Question 4, the old photo of the MCG is taken during the 1920s.
4. Completing the timeline should be follow up class work or a homework task. A visual timeline can be created by using www.timetoast.com/

Resources

1. Students need to have a mobile phone with camera or a digital camera.
2. Students require instructions about how to construct a timeline using scale, using either their computer and a program such as www.timetoast.com/ or as a poster or paper strip. The dates on a timeline should be drawn to scale or graphed with each period of time being the same size (e.g. 4cm = 20 years), it is then possible to visualise when there are more events or changes within a short period of years and when there are periods of time with few events or changes to the MCG.

HOW DOES THE NSM CONNECT WITH WOMEN?

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Interconnection: The ways that the places and features are connected with each other, and the consequences of these interconnections.

Space: Where things are located and distributed on the Earth's surface.

Aim

For students to assess how female interconnections with the NSM are represented spatially and their achievements celebrated within the exhibits.

Activities

1. This is a group task. To complete it students need to look at the displays in the Olympic Games, Cricket, MCC Museum, Racing and Australian football exhibits and the cabinets highlighting individual sports such as basketball, golf, netball and cycling.

2. Groups must read the whole worksheet before starting their observations so that they can plan what to look out for in each exhibit. Group size should be about 4 to 6 with students working either in pairs or individually to collect data to jigsaw or share with the rest of their group on returning to class. They should pre plan their route around the NSM to make sure that the group covers all of the suggested displays.

3. This task is not really meant to preach just enable students to collect some spatial data and to draw some conclusions related to it.

4. This topic not obviously Geographic but it does cover a number of Geographic skills including a map, data collection, observation and the drawing of conclusions based on information collected in the field.

5. The group will require class time to complete this task.

6. Their findings may be of interest to the curators of the displays at the NSM.

Resources

1. Outline map of the floor plan of the National Sports Museum (inserted into the student worksheet).

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

Space: Where things are located and distributed on the Earth's surface.

Aim

For students to identify and photograph images, the date they were created and their location in the NSM. To briefly explain the importance of each image to the representation of our Nation's Sporting past.

Activities

1. This is a task for individuals or pairs.

2. The sentences describing the importance of each image could be a homework task.

3. An extension task could be to create a timeline which identifies changing use of the MCG by sports participants and spectators since 1864.

4. Question 2a. The odd one out is the Melbourne Cup. All other events happen or have happened at the MCG. Students may, however, have an alternative "odd one" which, if justified, would also be acceptable.

AFTER THE VISIT

FIELDWORK REPORT

Level: Year 7-9

AusVels links

GEOGRAPHY CONCEPTS:

All seven concepts will be applied in this activity

Space, Place, Interconnection, Change, Environment, Sustainability, Scale

Aim

For students to collate data collected on their visit to the NSM/MCG and their related pre visit classwork to identify their connections with the NSM or MCG at a range of scales and to reflect on its future and sustainability.

Activities

1. Depending on the worksheets each student has selected, or that teachers have selected for them, students may have a timeline, annotated photos, analysis questions or plans for future development of the MCG to complete on return to class. If students worked in groups at the NSM they will need time to share the data and to jigsaw their results.

2. The final task is for each student to use the data that they have collected and their analysis of the data in the form of maps, tables, graphs, annotated photos, timelines or text to produce a fieldwork report of their visit.

3. The report will repurpose the data that they have already produced to describe the environment, connections and changes that have happened to the MCG. To comment on the events, people and or popularity of this location. To conclude with what they believe will be the future of the ground and the sustainability of its importance in the life of Melbournians and perhaps the national sports heritage of Australia.

4. Suggested time to complete this task 2–3 periods of class time and a few nights of homework. The quality of the report should be reflected in the time you allow students to complete it.

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