S3

Edumap

Learning from home program

# Humans shape places

Students get a taste for town-planning in this term-long program, which has a strong focus on geography. Students will virtually explore and research a parkland, bushland, bush corridor or wetland in their area. They will work with teachers and local councils to identify and reflect on ways their chosen area can be better used, protected or developed. Following a design-thinking process, students will apply their knowledge and skills to create an improved redesign of the natural site. They will come up with a series of ideas to evaluate through research, validation and testing. By the end, students will present their best idea to their class peers, teacher and local council.

Year/s – 5 and 6

Duration – 1 term

Key learning areas – English, mathematics, geography and creative arts

## decorativeEdumap

### About this resource

This resource has been developed by the teachers-in-residence on the Edumap project. The lessons and materials have been adapted from our applied learning programs to assist teachers and families with students who are learning from home during the COVID-19 pandemic.

Note for use – The texts and materials used in this program should be changed to suit the resources available to the school. Teachers may wish to record themselves reading a text, to send to students via a learning platform, email or on a USB stick.

Each lesson starts with a teaching component followed by various student activities. Teachers can select which are most relevant for their students and customise to suit the needs of the students and their class. The lessons have been adapted significantly from standard classroom practice. This program is written with the assumption that ongoing teacher feedback and adjustment will not occur as frequently as in the physical classroom.

We hope you enjoy using these teaching and learning resources with your students. If you have feedback or would like to find out more about Edumap, please contact us at edumap.support@det.nsw.edu.au.

Post your work and show us what you’re up to! We’d love to share your projects with our community of home learners. Use these hashtags on your preferred social media platform **#Edumap** **#learningfromhome** and/or mention us on Twitter **@CatalystLabNSW**.

### About Edumap

Edumap is a pedagogical model and digital platform that promotes deep student engagement and understanding. The Edumap digital platform allows teachers to search, customise, create and share high-quality, applied learning teaching programs for primary school students. It is a teacher-led initiative and all programs are co-designed with teachers.

Edumap is being developed by NSW Department of Education teachers in the Catalyst Lab Innovation Program.

### About the Catalyst Lab Innovation Program

The Catalyst Lab Innovation Program supports teachers in developing solutions to education challenges that will improve outcomes for students and schools.

We support the department in other ways as well, visit the [Catalyst Lab Innovation Program website](http://www.education.nsw.gov.au/catalyst-lab) for more about what we do.

## Resources

|  |  |  |
| --- | --- | --- |
| Physical resources | Stationery | Technology and digital resources |
| **Picture books*** “Windows” by Jeannie Baker
* “Belonging” by Jeannie Baker

Optional* “City: A Story of Roman Planning and Construction” by David Macaulay
* “Underground” by David Macaulay
* “Westlandia” by Paul Fleischman
* “The Rainbow Serpent” by Dick Roughsey
* “The Sound of Silence” by Katrina Goldsaito
* “Ida, Always” by Caron Levis
* “ABC: The Alphabet from the Sky” by Benedikt Gross and Joey Lee
* “City Green” by DyAnne DiSalvo-Ryan
* “A City Through Time” by Phillip Steele
* “How Cities Work” James Gulliver and Jen Feroze
 | * black marker
* cardboard
* glue
* paint
* paper
* pencils
* scissors
* sticky tape
* watercolours
* wood
* workbook
 | Devices* tablet (if available)
* laptop (if available)
* desktop computer (if available)

Platforms * Seesaw
* Adobe Connect
* Google
* online learning apps
* Paint 3D
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## Syllabus outcomes

English

**EN3-1A** – communicates effectively for a variety of audiences and purposes using increasingly challenging topics, ideas, issues and language forms and features

**EN3-2A** – composes, edits and presents well-structured and coherent texts

**EN3-3A** – uses an integrated range of skills, strategies and knowledge to read, view and comprehend a wide range of texts in different media and technologies

**EN3-4A** – draws on appropriate strategies to accurately spell familiar and unfamiliar words when composing texts

**EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts

**EN3-8D** – identifies and considers how different viewpoints of their world, including aspects of culture, are represented in texts

**EN3-9E** – recognises, reflects on and assesses their strengths as a learner

Mathematics

**MA3-1WM** – describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions

**MA3-17MG** – locates and describes position on maps using a grid-reference system

**MA3-18SP** – uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables

**MA3-10MG** – selects and uses the appropriate unit to calculate areas, including areas of squares, rectangles and triangles

History

**HT3-2** – describes and explains different experiences of people living in Australia over time

Geography

**GE3-1** – describes the diverse features and characteristics of places and environments

**GE3-2** – explains interactions and connections between people, places and environments

**GE3-3** – compares and contrasts influences on the management of places and environments

**GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry

Creative arts

**VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world

**VAS3.2** – makes artworks for different audiences assembling materials in a variety of ways

## Assessment overview

For – teacher questioning, feedback based on learning intention and success criteria (LISC)

As – student questioning, student reflections

Of – student speech, work samples, teacher observations and discussions

## Program overview

|  |  |  |  |
| --- | --- | --- | --- |
| Geography | Mathematics | English | Creative arts |
| Introduction to the programWhat is a local natural open space site?Key inquiry questions |  | Discovery journal reflectionsIntroduce ‘Window’ by Jeannie Baker |  |
| Building knowledgeWhat is urban development?Virtual site visit – (explore) Identify the area chosen and the uses of the site that can be seen? Collect photos for information report areas | Topographical map – part 1Identify site and surrounding areas | Information report – part 1Optional – voice recording of a tour (find a tour example) |  |
| Building knowledgeHow do urban areas change? | Topographical map – part 2Identify area of change through current Sydney maps compared to 1943 aerial photos. | Information report on local open site – part 2Optional – complete a voice recording on the information report |  |
| Building knowledgeVirtual site visitExploring and data collection | Grid sketch – site ecosystem understandingScale drawingData collection | Information reportAdditional time – add pictures | Field sketching – part 1Photography with tablets |
|  |  | Learning about design thinkingWhat is design thinking?Provide students with an overview on what design thinking is. Outline the areas that we will cover, including discover, define, develop and deliver. | Field sketch – part 2Investigate the artist Eugene Von Guerard and field sketches from 1850sUpdate field sketch to add detailFinished work – add charcoal, shading or colour |
| DiscoverDiscovery – students identify issues that they found at the local natural siteDesign thinking activityWhy is there a need to change, develop or protect this site? | Identify possible uses of the siteInterview questions – phone, video calling applicationUse data from survey to guide | Interview questions – site ideas | Prototype model design – part 1Minecraft if availablePaper modelFoil, cardboard, empty containers. |
| DefineDesign-thinking activityStudents decide one design for the local site thinking of redesign and future uses | Collate data findings – choose oneDo the data findings support our design for the local site? | Development justificationWhy you have chosen to redevelop the site in the way you have. Use data and site visit information | Prototype model design – part 2Decide what the model will look like once redeveloped or used differently |
| Develop Portfolio developmentPortfolio assessment based on a range of themes |  | Persuasive text or discussion – part 1 | Portfolio showcase – part 1Finish model using Minecraft or other resources. Ensure all details are added. |
| DeliverPortfolio showcase – showcase solution to the problem that you identifiedEvidence – end reports, persuasive texts and models for redesign or redevelopment | End report finalisationPresent and use data in end report | Persuasive text or discussion – part 2Optional activityRecord as a speech to submit | Showcase model |

## Lesson sequence 1

|  |  |  |
| --- | --- | --- |
| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-1** – describes the diverse features and characteristics of places and environments **GE3-2** – explains interactions and connections between people, places and environments **EN3-1A** – communicates effectively for a variety of audiences and purposes using increasingly challenging topics, ideas, issues and language forms and features **EN3-3A** – uses an integrated range of skills, strategies and knowledge to read, view and comprehend a wide range of texts in different media and technologies |  |
| Learning intention | We are learning to understand what key inquiry questions are. We are learning how people influence places and the spaces within them. |  |
| Success criteria | We can:* identify main aspects of the key inquiry questions.
* brainstorm different natural open spaces in the local environment.
* reflect on the images in the book ‘Window’ by Jeannie Baker to make personal connections to the changes in our area.
 |  |
| Teaching component | Introduction to the programWelcome students to the program and let them know how you will be interacting with them over the coming weeks. Explain how they will gain access to resources (including technology access), as well as how they will be able to submit work.  |  |
| Student activity | What is a natural open space?Students are introduced to the concept of a local natural open space by the teacher. Students are presented with the key inquiry questions for this program.Key inquiry questions:* How do people and environments influence one another?
* How do people influence places and the management of the spaces within them?

Discuss what they might mean in a group chat. The focus of the discussion is on developing an understanding of any technical terms for example, natural site, bush corridor, urban development.  | [Key inquiry questions worksheet](https://docs.google.com/document/d/1sIeHx3hmQdo9zDOs8aOzetPnnhARV9vgf0G-MGgeNig/template/preview)[Campbelltown Council Open Space Strategic Plan 2018 (PDF 588KB)](https://drive.google.com/open?id=1IYiQqTadlSAMrOglWCgBP8LEfGvQyt-T) |
| Student activity | Key inquiry questions – pre-learning activityStudents use the key inquiry questions introduced by the teacher to help research their local area and brainstorm the different types of natural open spaces. They will choose one local natural site such as parkland, bushland, bush corridor or wetland to research and apply their learning over several weeks. They identify how the site may be better used, protected or developed and submit their design-thinking task to the teacher or local council as part of their open space strategic plan. With the location chosen, students then complete the pre-learning activity.In the pre-learning activity, students complete a section of a page that allows them to record any prior knowledge of the local natural site. From the pre-test exercise, students share their prior knowledge.  | [Pre-learning activity worksheet](https://docs.google.com/document/d/1n3v-uVugtp135PRfuWVjZ_lI8zePDgmNBexLCrKXeQ8/template/preview)  |
| Student activity | Discovery journal reflectionsStudents set up their learning and discovery journal. Their first task is to read or watch a video on the story ‘Window’ by Jeannie Baker.Students reflect on what the book is about and how this might relate to the task of better use, protection or development of the site that they have chosen. Reflect on: * How does the book make them feel?
* How does the book not having any words impact on the message of the book?
* Have you seen this happen in your area, can you make any connections?
 | JournalRecording of teacher reading the book[Video of ‘Window’ by Jeannie Baker](https://www.youtube.com/watch?v=4JLVneJa1Is) |
| Assessment | Pre-test.Journal entry and brainstorm map.Reflection from Jeannie Baker book. |  |
| Reflection  | Reflect on how the book ‘Window’ by Jeannie Baker made you feel. Did this change the way you viewed the sites you looked at? Did the book help you make connections on how you have seen your area change?In your pre-learning activity, how did you show that you adjusted your thinking? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 2

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| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-1** – describes the diverse features and characteristics of places and environments **GE3- 2** – explains interactions and connections between people, places and environments **MA3-17MG** – locates and describes position on maps using a grid-reference system **EN3-2A** – composes, edits and presents well-structured and coherent texts **EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts |  |
| Learning intention | We are learning about our local area by researching a chosen open space site. |  |
| Success criteria | We can:* identify features and functional uses of the open space site.
* create a topographical map of the local open space site.
* plan a detailed information report on the chosen site.
 |  |
| Teaching component | In this lesson, students explore what urban development is. They identify and visit the local open space site (virtually). They will look at maps and compare how over time cities and towns have grown and changed. Students will research and begin to plan the information report around their chosen local open space site. | Satellite view of city growth – [200 Years of Chicagoland Nature](https://habitat2030.org/blog/200-years-of-chicagoland-nature/)[Satellite view of city growth, in GIFS](https://www.citylab.com/life/2012/07/satellite-view-city-change-gifs/2716/) [Google Earth](https://earth.google.com/web/)  |
| Student activity | Site visit – first visitStudents find the site they have chosen on Google Earth and identify its aerial features.Students explore the site virtually through street view.As students are exploring the site, they take notes of features and functions, which they will use when thinking about future designs for the area. In journals, students write about their experience and the features and functions they found.Some features and functions may include:* recreation and low-key informal play, running around space
* green spaces in the built environment, spaces for trees and other vegetation
* relaxation, contemplation, enjoying the outdoors, getting close to nature
* meeting point for nearby residents
* visual or environmental amenity, buffer between different land uses.
 | Journal[Google Earth](https://earth.google.com/web/) |
| Student activity | Topographical map – part 1Using the beginning site, work on creating their own layered topographical map of their chosen site. Identify what a topographical map is and what it does. Locate the site using the online resource NSW Six Maps. Look at the ‘Basemaps’ tab in the top right corner to switch between satellite view and topographical view. This will define the size and length of the chosen area. Along with the natural site, students will also locate:* their houses (residential)
* the school (business)
* any main roads or transport hubs
* other key natural sites or waterways.

Students mark these places on their own maps. Maps can be saved as a screenshot and posted into Google Docs with locations pinned. Students may print out, write on the map using sticky notes and upload a picture of their map. Students may wish to rule grid squares to identify and show distance of the chosen site. | [Grid worksheet (PDF 32KB)](https://drive.google.com/file/d/1Cb8lHLgdlFpFoslqoPFyU8pVQ0gXUdns/view) [SIX Maps, an online mapping tool for NSW](https://maps.six.nsw.gov.au/)  |
| Student activity | Information report – part 1Students use their information on their site to plan an information report about their site. Information may come from a range of sources including council websites, local history sites and the virtual site visit. Students collect information from at least three sources to assist in planning. Using their journals or word document they begin to outline and plan information under the headings of landform, climate, flora and fauna and uses of the site. Students are provided with the criteria for the assessment.Criteria for assessing learningStudents will be assessed on their ability to:* produce a well-structured information report
* use sentence structure, grammatical features and punctuation conventions appropriate for an information report
* use strategies to spell familiar and unfamiliar words
* demonstrate basic desktop publishing skills using a computer.
 | [Information report planning template](https://docs.google.com/document/d/1sqOUiL1yHkhcobI1STkz--4bLDvBq9R1vS0HXagPElQ/template/preview) |
| Assessment | Photos or screen capture from site visit.Student site map.Student information report planning template. |  |
| Reflection  | What were some of the most interesting discoveries that the students made:* while viewing the site?
* about the features and functions of the site?
* about themselves and their thoughts on the site?
 |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 3

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| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-1** – describes the diverse features and characteristics of places and environments **GE3-2** – explains interactions and connections between people, places and environments **MA3-1WM** – describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions **MA3-17MG** – locates and describes position on maps using a grid-reference system **EN3-2A** – composes, edits and presents well-structured and coherent texts **EN3-4A** – draws on appropriate strategies to accurately spell familiar and unfamiliar words when composing texts |  |
| Learning intention | We are learning how urban areas change over time. |  |
| Success criteria | I can:* describe how areas around Sydney have changed since 1943.
* identify how changes can be positive and negative for humans and the environment.
* produce a well-structured information report.
 |  |
| Teaching component | In this lesson, students explore how urban areas change over time, some may be natural changes, but often they are made by humans. They will continue to look at maps and compare how over time cities and towns have grown and changed. They will identify what the future of their chosen site may be. |  |
| Student activity | Topographical map – part 2Students continue to work on creating their topographical maps. They will use the 1943 option on NSW Six Maps. Students have to identify at least one significant change to the modern version of the map. Students will look at aerial comparisons of Sydney Harbour or Parramatta to see the massive changes and urban development that has happened between 1943 and now. Students take a screenshot of the area comparing ‘now’ and ‘then’. They will use the images to list some observable changes and discuss and list possible reasons for their identified examples of change. | [SIX Maps, an online mapping tool for NSW](https://maps.six.nsw.gov.au/) |
| Student activity | How do urban areas change?Students use the mapping task completed using NSW Six Maps. They will use their list of observable changes in the chosen area in their learning journal they complete and reflect on the changes they saw:* Why do you think this area has changed?
* Has this helped the local area to develop?
* Do the identified changes make living in the area better? Why?
* What do you think the negative impacts of this change might have been?
* Are there any other thoughts you had comparing the two, time period maps?
 |  |
| Student activity | Information report – part 2Students use their information and plan, created in the planning session, to complete their information report on their site. Using their journals and information report template students will complete their information report under the headings of landform, climate, flora and fauna and uses of the site. Students are provided with the following criteria for assessing learning Criteria for assessing learningStudents will be assessed on their ability to:* produce a well-structured information report
* use sentence structure, grammatical features and punctuation conventions appropriate for an information report
* use strategies to spell familiar and unfamiliar words
* demonstrate basic desktop publishing skills using a computer

This may be completed over several lessons depending on the research, length and presentation of the report. |   |
| Assessment | Students are to complete a map of the site.Comparison activity in journal.Information report. |  |
| Reflection  | Reflect on how knowledge of the way areas change over time can assist us when making future planning and development decisions. Are students solving a problem for the area? Is what students are redesigning needed in the area? Does it match and cater for all the areas talked about including landform, climate, flora and fauna and uses of the site?Are students beginning to build empathy and shared ownership of the site? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 4

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| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-3** – compares and contrasts influences on the management of places and environments **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **MA3-18SP** – uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables **VAS3.1** –investigates subject matter in an attempt to represent likenesses of things in the world |  |
| Learning intention | We are learning about our local area by visiting a chosen open space site in closer detail. |  |
| Success criteria | We can:* identify the flora and fauna located at the site through data checklists and grid work study.
* create a basic fieldwork site sketch.
 |  |
| Teaching component | In this lesson, students will explore the local open space site (virtually). They will increase their knowledge of the site including features and flora and fauna. |  |
| Student activity | Site visit – data collectionStudents explore the site virtually through maps or street view. As students are exploring the site, they take notes and collect a range of data on the following:* function and use of the space
* flora and fauna seen
* location and size of the space
* facilities located there.

Students present the data in a graph detailing their findings. These findings will help guide us on what is there already and give us solid evidence on the open space in its current form. | [Grid for graphing (PDF 32KB)](https://drive.google.com/file/d/1tU8k4RUdHSHqmRIUj2jcA6qRJnxZG4vp/view?usp=sharing) |
| Student activity | Grid sketch – site ecosystem understandingWhen on-site, students measure out a 3x3 metre area map. If a site visit is not possible, students can use the school playground, backyard or another local area. They can use cones, sticks or rocks to help mark this outStudents create a map of a small area. Once an area has been selected, students complete a grid using metre rulers or tape measures. They then sketch everything that they see in the grid, including both natural and man-made onto a sheet. To build empathy and connection to the site, we are showing students that people will walk past and not notice the small details of a location. This activity gives students time to detail the flora and fauna located in the open site and develop a deeper understanding of the ecosystem (or lack of) of the site.Students will complete the details on return from the site. |  [3x3 grid sketch worksheet](https://docs.google.com/document/d/1F-WDsbge-pM4--w588z8VaDNC7bqATeDEZ3xj0ULkj0/template/preview)Pencils1 metre ruler or tape measure Markers – cones, sticks, rocks |
| Student activity | Field SketchingStudents will explore what an on-site sketch looks like. Attached is the site sketch from the NSW State LibraryThe works by Eugene von Guerard show how field sketches can evolve from basic on-site quick sketches to gallery artworks. Attached is a field sketch example. Students should complete a quick sketch, around 10 minutes timeframe, students will add more details from photos that are taken in later art lessons.In the sketch, ensure that key features of the site are captured in basic detail only. We are not working on the fine details in this lesson. Remember to take a screen capture of the view so we can complete later. | Site sketch example from the [NSW State Library](https://www.sl.nsw.gov.au/collection-items/volume-05-sketchbook-xxvi-no-8-australian-australia-mar-apr-1857-sep-oct-1859) [Field sketch example (PDF 813 KB)](https://drive.google.com/file/d/1s-dOrXsTivIkpSaXkRDSqTwa2P_HydKa/view?usp=sharing) [Site location sketch worksheet](https://docs.google.com/document/d/1eq1klBNQ2dNlM4xPsnoNSvE7ytrG0kanI57YFL5DZ9c/template/preview)Pencils  |
| Assessment | Grid sketch on flora and fauna of the site.On-site field sketch. |  |
| Reflection  | How did you ensure you observed the location accurately?What interactions did you notice with the site?Did you discover anything new or gained any evidence for your information report? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 5

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| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-3** – compares and contrasts influences on the management of places and environments **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts **EN3-8D** – identifies and considers how different viewpoints of their world, including aspects of culture, are represented in texts **EN3-9E** – recognises, reflects on and assesses their strengths as a learner **VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world |  |
| Learning intention | We are learning about design thinking and how we can look at solving problems in different ways. |  |
| Success criteria | We can:* be open to discover new ideas.
* use data and expert opinions to help form decisions.
* refine our field sketch to complete a finished artwork.
 |  |
| Teaching component | Double diamond – better designingIn this lesson, teachers will introduce the concept of design thinking to students. They will show how the design thinking process can be used for creative problem solving. The teacher will introduce the concept of the double diamond, questioning knowledge acquired to help us define and attempt to solve the problem within our chosen local open site.Teacher to outline the four key components of the double diamond. | [Design thinking double diamond worksheet](https://docs.google.com/document/d/1jk7Z-0Q_FScG2solTpJj-wsKIx4wLdnpPcYPZMyqbUo/template/preview) Design thinking article – [What is the framework for innovation? Design Council's evolved Double Diamond](https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond) |
| Student activity | Double diamond activitiesStudents are to look into the four stages of the double diamond of discover, define, develop and deliver and discuss how different activities could be conducted at each stage. How might these activities look like when conducted at home?Discover* questionnaires
* interviews
* student's observations from site visits and research

Define* interpret findings
* identify common themes
* narrow to one design
* set design challenge

Develop* brainstorm ideas
* design
* experiment

Deliver* making
* prototype
* pitch
* get feedback

Submit to teacher with notes on how we could do all or some of these from our homes. |  |
| Student activity | From sketches to finished artworkLook at ‘Eugene Von Guerard’s work’ at the Art Gallery of NSW and how he created field sketches. Use the sketches to create comprehensive artworks.Students use their field sketch, completed from their virtual site visit last week. They will look at how to expand and add detail to their drawing taking care of details.Once detail has been added. Students choose how they would like to finish depending on the resources available:* Charcoal, watercolour and ink, coloured pencils.
* Colouring, shading, details.

Students take a picture and share with peers and/or the teacher. Add a title of the site name.  | Eugene Von Guerard field sketches – [State Library of New South Wales](https://www.sl.nsw.gov.au/collection-items/volume-05-sketchbook-xxvi-no-8-australian-australia-mar-apr-1857-sep-oct-1859) Eugene Von Guerard’s work – [Art Gallery of NSW](https://www.artgallery.nsw.gov.au/collection/artists/von-guerard-eugene/?tab=works)Device with cameraCharcoalWatercolourInkPencils  |
| Assessment | Double diamond questions.Finished artwork with detail added. |  |
| Reflection  | Why do you think it’s important to follow the double-diamond process?Why is it important to understand someone’s point of view or experience?How did you show appreciation for your peers’ work? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 6

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| --- | --- | --- |
| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-1** – describes the diverse features and characteristics of places and environments **GE3-2** – explains interactions and connections between people, places and environments **GE3-3** – compares and contrasts influences on the management of places and environments **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **MA3-1WM** – describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions **MA3-18SP** – uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables **EN3-3A** – uses an integrated range of skills, strategies and knowledge to read, view and comprehend a wide range of texts in different media and technologies **VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world**VAS3.2** – makes artworks for different audiences assembling materials in a variety of ways |  |
| Learning intention | We are learning to look at a range of problems and potential solutions. |  |
| Success criteria | We can:* map out a base for our prototype model.
 |  |
| Teaching component | DiscoverIn this sequence of lessons, students use the research they have done and site visits to discover the problems that are currently at their chosen site. The next step will be the re-design. Students will think broadly and identify potential better uses. Teacher will explain the importance of involving community members (users) in the re-development of a potential site. |  |
| Student activity | Identifying possible uses of the siteUsing the data, sketches and visual identification done during site visits, students list at least five issues with the current site (log in learning journals).Students will take on the role of a local town planner. What does a town planner do?Does the current site best meet the needs of the local community? List at least four possible uses and ways that we could change or redevelop the chosen site to better meet the needs of the community. Students account for environmental considerations such as the areas flora and fauna, range of users, and feasibility.If a parent works for a local council, they may be able to do a live stream and discuss some expert advice on the issues surrounding changing a site. | [Potential uses of the chosen site worksheet](https://docs.google.com/document/d/1-XOPAkL9lAqeJ1fRilW_9iIOHF0hNcu-EFNZSR5gNmE/template/preview)Local council staff member  |
| Student activity | Interview questions – site ideasStudents use the information they have completed in the ‘potential uses of the chosen site’ activity to create a set of data, to support their redevelopment idea.How can we be sure that what we have planned will be the best for the community and meet their needs? How can we find out this information? Survey people.Students create a questionnaire. The questionnaire must include at least five questions.Examples may include:* Have you used the current site? How?
* Do you think it could be used better?
* I have listed some ideas on the re-development of the site, which one do you think is best?
* Would you use the site if it was made into this?
* Do you think the costs would justify the changes? Why or why not.
* Do you think the changes would be good for the environment and the local flora and fauna?
* Do you have any other suggestions?

Students are to ask family members, local peers and families, through a phone or video calling application. Collate the results to show which site may be the most popular.If possible, the teacher organises an interview with a local council planner to review the data and discuss the feasibility of the ideas. | [Interview questions for site ideas](https://docs.google.com/document/d/1fvzcvdseMHU5s0KDKH0bLuNapE4sxxhkYLERgaPtgZA/template/preview)Local town planner |
| Student activity | Prototype model designStudents decide what medium they will choose for their model. Using their previous work on maps of the site, students will work out the shape and area that their model will be. If available students will design their area using Minecraft: Education Edition or Paint 3D, alternatively they may wish to make a traditional scale model using wood, cardboard and items found around the house. Use link to download Minecraft: Education Edition.At this stage in our design, we have not finalised the exact use of our site so students will just be outlining the area and organising the tools to complete the task. Students may wish to refer to the topography map and site visit sketches to add features such as hills, grass, trees, and waterways. The detailed redevelopment will be done in the following lessons. | [Minecraft: Education Edition](https://education.minecraft.net/) CardboardWoodGlueSticky tapeMarkersScissorsPaintPaint 3D |
| Assessment | Potential uses of the chosen site – idea list.Interview questions – complete sets of data.Initial model design. |  |
| Reflection  | Did the feedback you receive match your initial thoughts for the use of the site? Why or why not?Do you feel that the solutions and re-development match real-world situations or problems? Were there any other suggestions that have made you change your mind or think differently? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 7

|  |  |  |
| --- | --- | --- |
| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-1** – describes the diverse features and characteristics of places and environments **GE3-2** – explains interactions and connections between people, places and environments **GE3-3** – compares and contrasts influences on the management of places and environments **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **MA3-17MG** – locates and describes position on maps using a grid-reference system **MA3-18SP** – uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables **MA3-10MG** – selects and uses the appropriate unit to calculate areas, including areas of squares, rectangles and triangles **EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts **VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world**VAS3.2** – makes artworks for different audiences assembling materials in a variety of ways  |  |
| Learning intention | We are learning about focusing on one solution for our chosen open space site. |  |
| Success criteria | We can:* define our chosen course and justify it to others.
* provide data to validate our idea.
* develop a detailed re-design prototype model.
 |  |
| Teaching component | DefineIn this sequence of lessons, students use data, site visit information and research conducted on their chosen site to narrow their wide range of potential re-design choices to a final decision.They continue to build their prototype model of the re-design and start adding detail to match their chosen purpose. Discuss the importance of building development applications to show how you have thought about a range of issues and concerns around the local community. |  |
| Student activity | Collate data findings – choose oneStudents collate data, interview responses and research. They justify why they are redeveloping their site giving evidence from their sources about why they have chosen to go ahead with one of the ideas.Identify the way that construction and building will influence the area. Students are to complete the data findings and outline the re-development they will undertake. | Data from previous lessons |
| Student activity | Prototype model design – part 2Students continue to use the Minecraft: Education Edition program to work on their site design. Students use work completed in their data findings and justification and will begin to re-develop the site to match their chosen purpose.Students add details to their site including features around:* location size
* facilities such as toilets, rubbish and recycling bins
* shade trees and other vegetation
* taps and water fountains
* play equipment
* upgrade or maintenance of river or creek banks
* seating and picnic areas
* grassed areas
* fitness equipment
* bush tracks
* wildlife shelters.

Students will also consider in their designs any services that may be needed such as car parks, roads or pathways if more people are to access.Students may need extra time to complete the prototype model design. They may spend lessons over several days working on the design to include all the relevant features of their redevelopment. | [Minecraft: Education Edition](https://education.minecraft.net/)CardboardWoodGlueStick tapeMarkersScissorsPaintPaint 3D |
| Assessment | Site justification study.Prototype model. |  |
| Reflection  | How did you prioritise your findings to create one design?How did your design consider the thinking from your discovery phase?How did you maintain focus while creating your design on Minecraft?When did you realise you had come up with the best solution for your re-design? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 8

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| --- | --- | --- |
| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-3** – compares and contrasts influences on the management of places and environments **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **MA3-10MG** – selects and uses the appropriate unit to calculate areas, including areas of squares, rectangles and triangles **EN3-2A** – composes, edits and presents well-structured and coherent texts **EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts **VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world**VAS3.2** – makes artworks for different audiences assembling materials in a variety of ways |  |
| Learning intention | We are learning about developing a portfolio and how to best showcase our work. |  |
| Success criteria | We can:* persuade others why our re-design is a good feature for the local community.
* develop a portfolio to present the published research, data and prototype to the teacher and council members.
 |  |
| Teaching component | DevelopIn this sequence of lessons, students develop a solution to their chosen site development. They plan a piece of writing (persuasive or discussion) detailing and convincing others of the need to choose their re-development ideas.Students collate the resources, data and prototype work into one key folder to present in the future to the teacher or local council members. |  |
| Student activity | Persuasive text – part 1PlanningStudents research, plan, draft and write a piece (persuasive or discussion) to convince and explain why their re-development of the site should go ahead. Students include:* Introduction – defining topic and giving background on their chosen site
* Body – several paragraphs with reasons supporting and detailing your planned re-development
* Conclusion – giving summary and recommended proceedings

Students produce a draft in their journals, and then publish a final version using a computer to submit to the teacher. Examples of persuasive writing are attached.Criteria for assessing learningStudents will be assessed on their ability to:* draft, revise and publish a written text
* justify a point of view with supporting evidence
* use appropriate language features and conventions for a discussion text
* demonstrate basic desktop publishing skills.
 | [Persuasive Writing Text Example 1 (PDF 348KB)](https://drive.google.com/file/d/1l3NxA1PXUq7yOyR4g_w2cGqyOfcYX_vm/view?usp=sharing) [Persuasive Writing Text Example 2 (PDF 106KB)](https://drive.google.com/file/d/19tpa_u8taI3v0Wd617bXq8ZLe5Du0wzy/view?usp=sharing) |
| Student activity | Portfolio showcase – part 1Students begin to present published versions of their work into one showcase portfolio of work. This portfolio of work will be presented to the teacher and/or a local council member detailing the re-development of their local open space. Portfolio assessment is based on the following themes:* presentation
* site study
* detailed plan or map
* evidence of data
* photographs of visit
* written piece
* prototype of re-developed site.
 |  |
| Assessment | Persuasive/discussion writing – plan.Portfolio outline. |  |
| Reflection  | How did you express your redevelopment ideas through your written text?How did you prepare for your persuasive portfolio?What strategies did you use to feel confident whilst presenting your portfolio? |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

## Lesson sequence 9

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| --- | --- | --- |
| Lesson sequence | Teaching and learning | Resources |
| Syllabus outcomes | **GE3-4** – acquires, processes and communicates geographical information using geographical tools for inquiry **MA3-18SP** – uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables **EN3-2A** – composes, edits and presents well-structured and coherent texts **EN3-4A** – draws on appropriate strategies to accurately spell familiar and unfamiliar words when composing texts**EN3-7C** – thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts **VAS3.1** – investigates subject matter in an attempt to represent likenesses of things in the world**VAS3.2** – makes artworks for different audiences assembling materials in a variety of ways |  |
| Learning intention | We are learning to deliver, present and reflect on the redevelopment potential of our chosen open space site. |  |
| Success criteria | We can:* clearly explain the process we completed to get to our final prototype and portfolio.
* submit to teacher or local council completed published portfolio.
* feel proud of our portfolio of work.
 |  |
| Teaching component | DeliverIn this sequence of lessons, students complete their persuasive writing or discussion piece. It will then form part of the end portfolio. The portfolio will provide a detailed showcase of their journey including their end prototype model.Teacher will assist in the final presentation of their work to be submitted to their local council open space development team. |  |
| Student activity | Persuasive text or discussion – part 2Writing and publishing.Students use their plan from the previous lesson to write a text (persuasive or discussion) to convince and explain why the re-development of their chosen site should go ahead. They produce a draft in their journals, and then a final draft is published using a computer and submitted to the teacher. This will form part of their portfolio of work on the re-design of their chosen area.Criteria for assessing learningStudents will be assessed on their ability to:* draft, revise and publish a written text
* justify a point of view with supporting evidence
* use appropriate language features and conventions for a discussion text
* demonstrate basic desktop publishing skills.
 |  |
| Student activity | ShowcaseStudents showcase their portfolio of work including their prototype design. They will showcase the solution to the problems that they identified within their chosen open space site. Students outline the evidence that led them to the development of their end prototype product.Portfolios of work will be submitted to the class teacher and council open space development team. | Portfolio |
| Assessment | Persuasive/discussion published version.Showcase of portfolio. |  |
| Reflection  | What was the one piece of work that I was most proud of?Could I teach this problem-solving process to anyone else? Why or why not?How did my workaround re-developing a site in my local area change my connection and feeling to that place?  |  |

Class-specific adjustments and extensions

Teacher reflection and annotation

Program evaluation

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