



Teaching Notes

Exploring and defining the task

Reading the overview of task requirements will assist students to understand that they are creating a proposal to communicate design ideas.

Tasks

1. Analyse the design task

Analyse the task

- Students *need to save* the downloaded *design task* document before they can define the terms.
- A sample definition is displayed when the first highlighted term is clicked.
- Some definitions can be found in the glossary.

Define learning spaces

- Click on the full-screen toggle button and match pairs of features.
- Initiate a class discussion on features of a good learning space.

Energy and sustainability

- Investigate the website links.
- Download, save and complete the school energy interactive PDF document using information learned from the websites.

2. Investigate your school

School safari

- Clipboards, digital cameras and sound recording equipment will assist in documenting the safari. Many mobile devices can perform all of these tasks.
- The collage can be created online using Kizoa. The collage can be animated – optional.
- Students who are familiar with Adobe Photoshop Elements can use the layers feature of this software to create their collage. Start with a background image and add each new photo to its own layer above the background. These photos can be moved, rotated and resized to suit the collage. This video demonstrates the use of layers in Adobe Photoshop Elements: <http://adobe.ly/wJm2NY>.
- Students need to download, save and print 3 copies of the sketching template. Ensure the table of features and equipment is completed.

Site map

- Teachers can show students the YouTube video tutorials about using Google MyMaps: <https://www.youtube.com/watch?v=Bz2Ohi16ED8>
- A teacher demonstration will assist students to get started.
- Students are required to create a login to scribble maps.
- Students need to record the ID of their map to enable future editing.
- This task can also be completed manually by tracing over a printed Google Maps image.

3. Consider your environment

Australian house design

- To complete the extension activity, students need to search for images online. Open each image in a graphics program such as Adobe Photoshop Elements. Use the text tool to add annotations to the image. A graphics bubble behind the text will help readability.

Energy wise spaces

- Students use the links provided and their own research to investigate passive solar design.
- Using information from their research, students write suggestions about using passive solar design to improve their chosen learning environment.



Curriculum links

Curriculum focus: Science and Technology Years K-6 Syllabus

Focus Outcomes:

Built Environments – A student:

- ST3-14BE - describes systems in built environments and how social and environmental factors influence their design
- ST3-5WT - plans and implements a design process, selecting a range of tools, equipment, materials and techniques to produce solutions that address the design criteria and identified constraints

Material World – A student:

- ST3-13MW - describes how the properties of materials determine their use for specific purposes
- ST3-4WS - investigates by posing questions, including testable questions, making predictions, and gathering data to draw evidence-based conclusions and to develop explanations

Physical World – A student:

- ST3-6PW - describes how scientific understanding about sources, transfer and transformation of electricity is related to making decisions about its use.