



# Sustainability at Sydney Opera House

## Teacher Resources

Years K-6



# Welcome

Sydney Opera House is one of the indisputable masterpieces of human creativity and has long been a place for learning and sharing knowledge.

The land on which Sydney Opera House stands was known to its traditional custodians, the Gadigal people of the Eora Nation, as Tubowgule, meaning “where the knowledge waters meet.”

A stream carried fresh water down from what is now Pitt Street to the cove near Tubowgule, a rock promontory that at high tide became an island. The mixing of fresh and salt waters formed a perfect fishing ground. Middens of shells were a testament to Tubowgule’s long history as a place where the Gadigal gathered, feasted, sung, danced and told stories.

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## In this Resource

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- 2. The Creative Learning Journey: these Resources
- 4. Sydney Opera House Creativity Framework
- 5. About The Event
- 6. Early Stage 1 Worksheets
- 10. Stage 1 Worksheets
- 18. Stage 2 and 3 Worksheets
- 36. Curriculum Links

### Did You Know...?

Sydney Opera House is home to eight flagship Australian performing arts companies which bring art to life every day beneath the famous shells. We are proud to partner with the Australian Chamber Orchestra, Bangarra Dance Theatre, Bell Shakespeare, Opera Australia, Sydney Theatre Company, The Australian Ballet, the Sydney Symphony Orchestra and the Sydney Philharmonia Choirs.

130,000 people attend performances at the Sydney Opera House, for young audiences annually. Since 2014, one furry guest has caught the attention of locals and international visitors alike. The northern VIP steps of the Opera House, otherwise unoccupied for the majority of the year, is the favourite sunbathing spot of a wild long-nosed fur seal, affectionately called 'Benny' (named after Bennelong Point).

You can now experience the Opera House, as never before, on Google's digital museum platform with 1270 digital artefacts and 50 interactive online exhibits; the Sydney Opera House's presence on the Google Cultural Institute allows people everywhere to experience the symbol of modern Australia.

# The Creative Learning Journey

## Before the Event

### Begin your Creative Learning Journey

Have your students think about the themes of the talk with information and activities in these Creative Learning Teachers Resources. Check out the video and links page to initiative topics of discussion and dive into the recommended reading list written by experts in these areas.

## During the Event

### Engage with the Event (live & interactive)

This event is 45 minutes in duration and designed to inspire your classroom activities.

During the event you will listen and interact with the workshop facilitators who will explain the concepts and demonstrate the activities.

You will need room to move around in this workshop.

You will need a camera and microphone to partake in this activity.

## After the Event

### Continue the Creative Exploration

Follow up the event with the Post event activities and continue the conversation and learning with your students. What did they think were the biggest learnings from the session? Can you develop any projects out of the learnings?

### Sign up for another Free Event

We offer an annual program of performances, workshops and talks to further extend the learning journey of your students. Free for all Australian Schools and offered throughout the year.

### Listen and Watch

Explore the other resources and activities on our website that could support your classroom learning program. See here:

[www.sydneyoperahouse.com/learn/schools/resources.html](http://www.sydneyoperahouse.com/learn/schools/resources.html)

# About the Resources

**These Creative Learning Resources have been prepared to help you get the most out of the Sustainability at Sydney Opera House Tour.**

You should use and adapt these Resources to suit the student age and stage of your class and the curriculum foci and outcomes used in your school. These resources are written as a creative document for you to bring to life. If you have questions about exercises or provocations please feel free to make contact to talk it through. We are always open to feedback, comments and working with you to assist and learn from you. Contact details are on the back page.

Sydney Opera House has a bank of Creative Learning Resources for you to access and use. Please have a look around our website for other resources and activities that could support your classroom learning program.

## **Acknowledgements**

Grateful thanks are extended to all the artists and educators who have generously allowed their resources to be included in this document.

# Sydney Opera House Creativity Framework

These Creative Learning Resources have been written using the Sydney Opera House Creativity Framework as the pedagogy. The Framework aims to define the creative process in a way that educators can use to teach and be inspired by.

At a glance this Creativity Framework is:

## Prepare

### Tools and Pathways

Preparing mind, body, space, materials and time

## Buy in

### Presence and Enthusiasm

Convincing students that they want to be there

## Imagine

### The Fertile Unknown

Exploring a subject through arts practice. Using form to uncover content. Allowing uncensored expression to reveal new ways of seeing a subject

## Question

### Analysis, investigation and revelation

Creating new understanding by analysing what just happened when honing the imagination

## Make

### Forging form from content

Putting shape to content and moving towards a project; scripts, composition, choreography, project design

## Show

### Commit, frame, judgement

Performing and presenting the work

## Reflect

### Remembering, Processing, Exiting

Creating understanding and healthy memories from the creative process and product.

Whilst written as a sequence, the Sydney Opera House Creativity Framework is not a method or system but a way of articulating the creative process. As the Framework is applied it becomes apparent the sequence dissolves and many of the specific sections live in one exercise. These resources have been written with this in mind.

This Framework underpins the Sydney Opera House Creative Leadership in Learning program that sees schools partner with the House for three years of teacher professional learning, student projects and performances. For more information please see the Sydney Opera House website.

# Sustainability at Sydney Opera House

Discover the Sydney Opera House like never before! Embark on an enlightening journey that goes beyond the iconic architecture, to look at some of our most innovative sustainability practices. Join us on a captivating tour that will leave your students inspired and empowered to embrace a greener future and let the Opera House's commitment to sustainability ignite a passion for living more responsibly among our young adventurers.

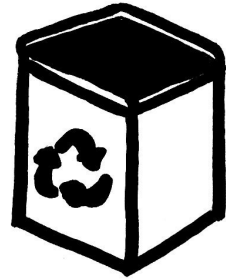
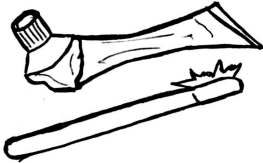
# Sydney Opera House Sustainability Tour

## Work Sheets For Early Stage 1 (Kindergarten)

Trace the letters below:

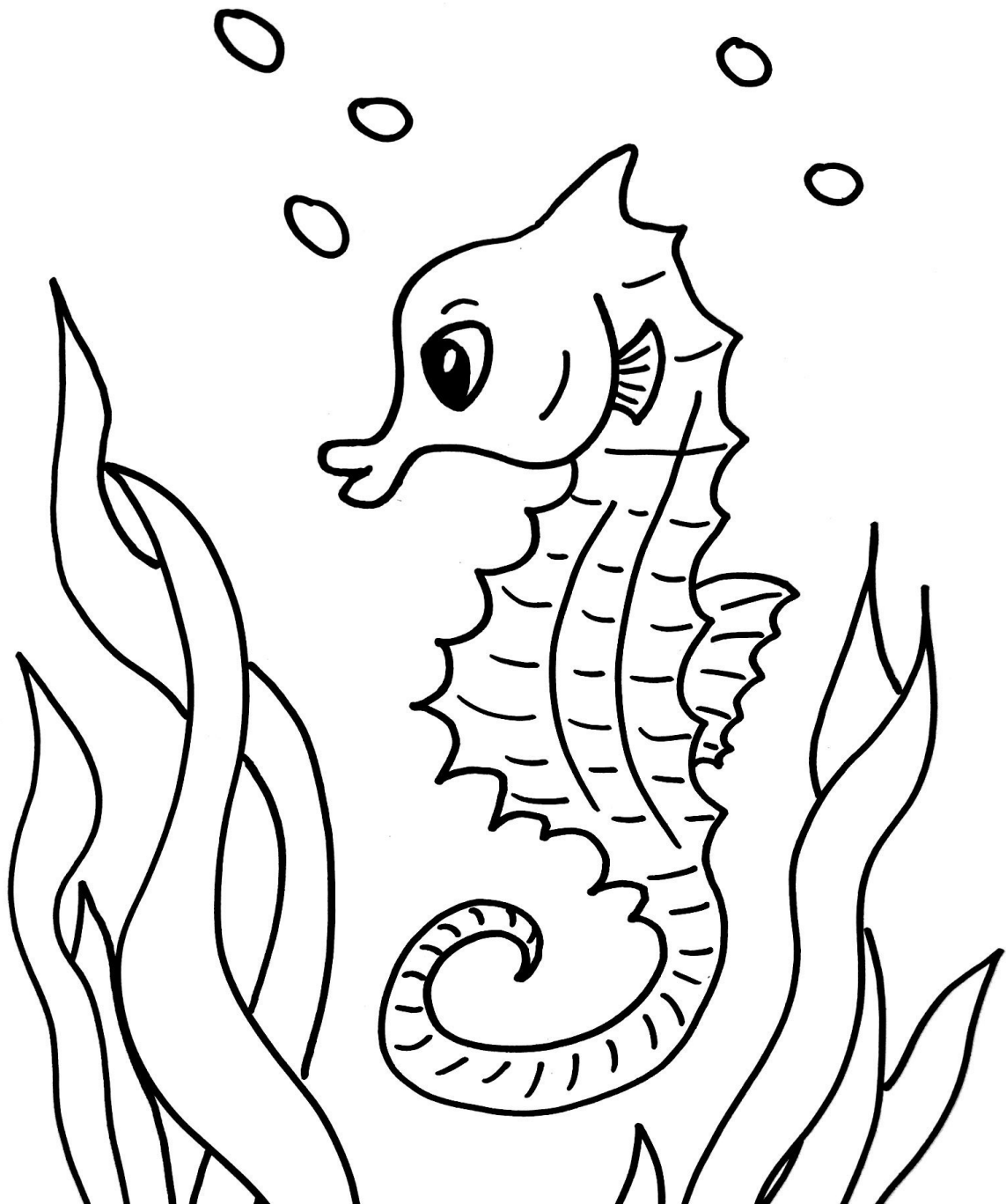
We went to Sydney  
Opera House. We  
learnt about how we  
can take care of our  
planet.

Draw a line from each piece of rubbish to its best bin:

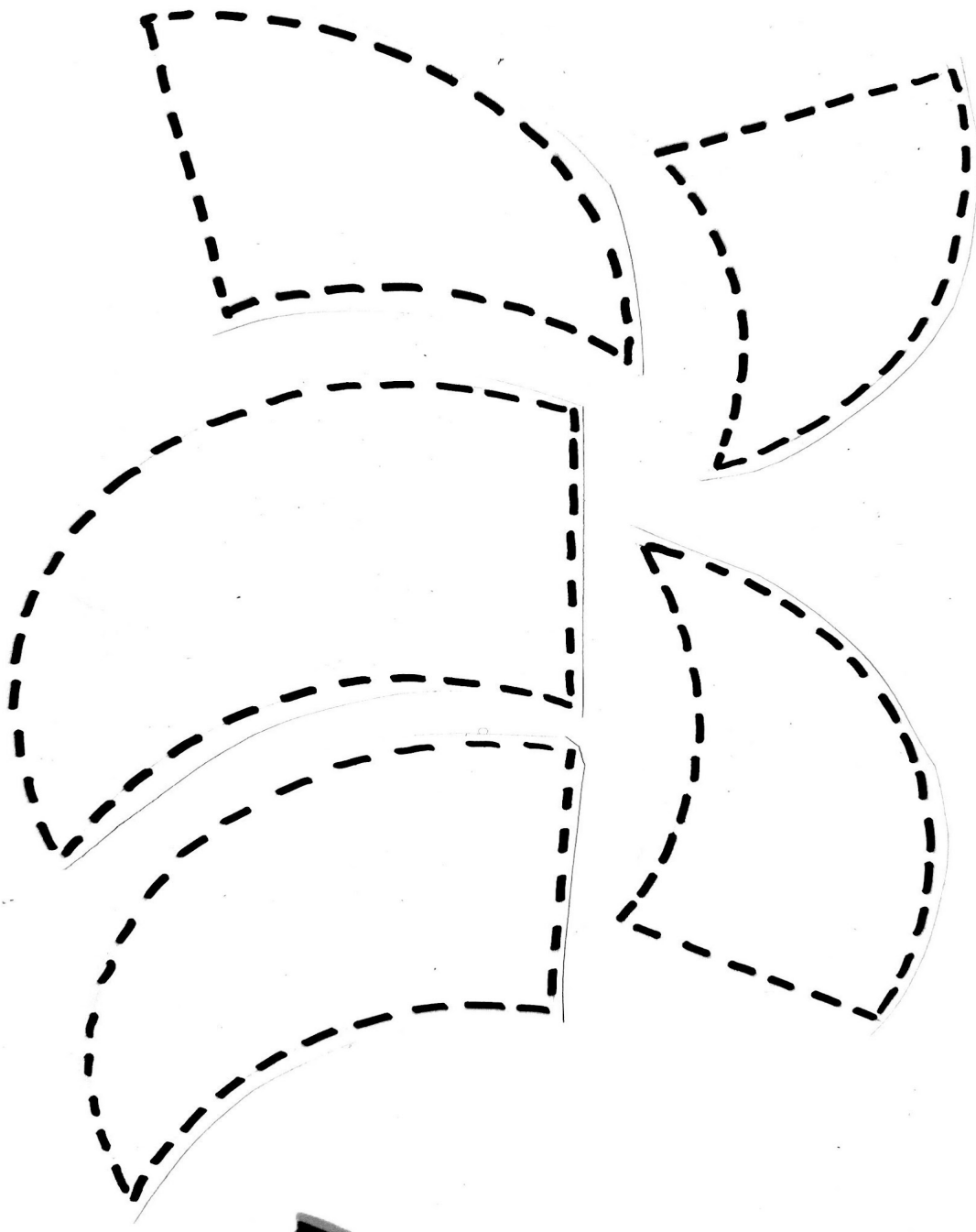




The White Seahorse has come home to Sydney Opera House once again! What colours will your seahorse be?



Make your own Sydney Opera House! Cut out the shapes and glue them onto a piece of paper that you have painted or coloured blue. Maybe you'd like to add some sunshine or rain clouds.



# Sydney Opera House Sustainability Tour

Work Sheets For Stage 1 (Years 1 & 2)

Trace the letters below:

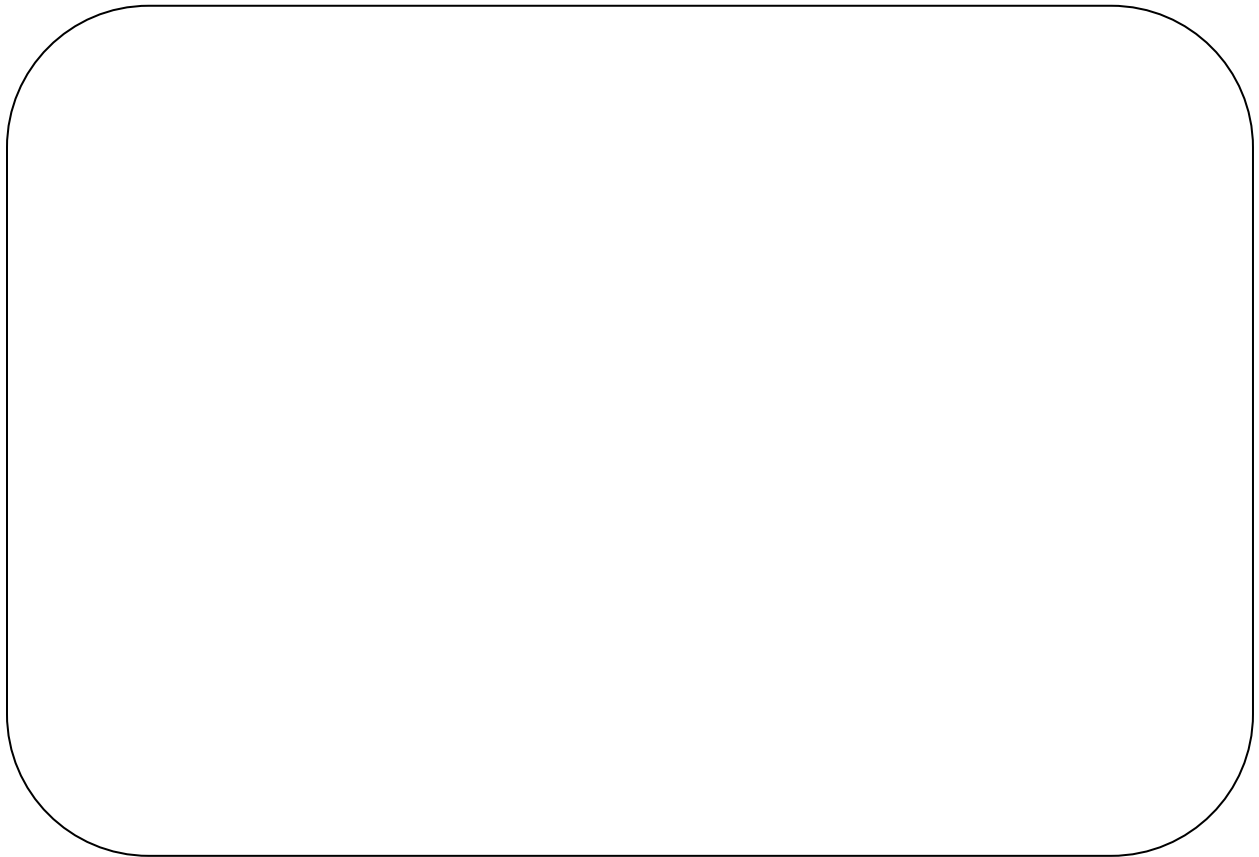
*We did a tour of Sydney  
Opera House and learnt  
about sustainability.*

*Sustainability is about  
looking after our future  
and our planet.*

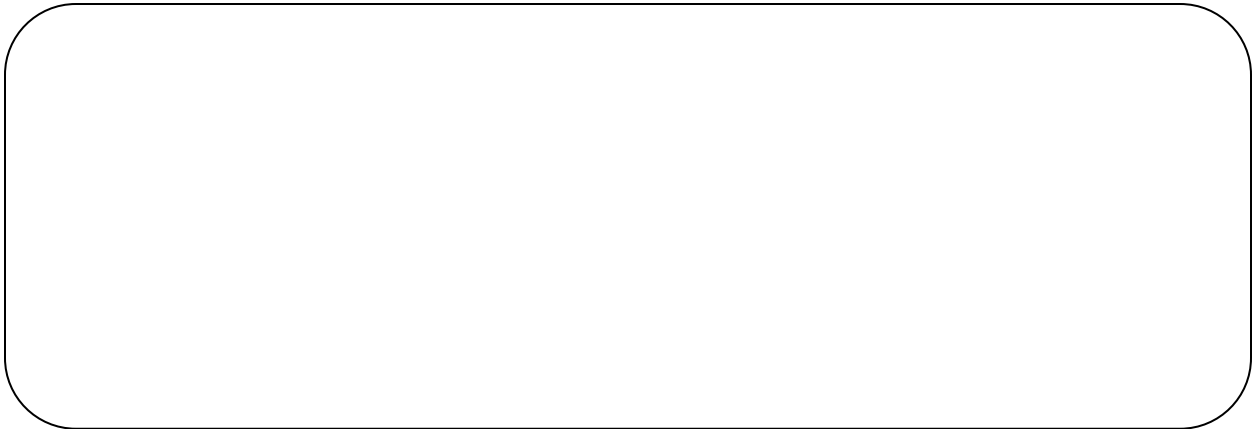
# TAKING ACTION!

Think of what you've learned about how Sydney Opera House practices sustainability.

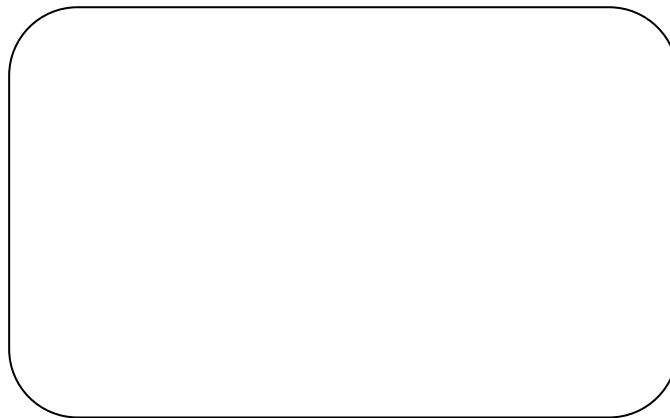
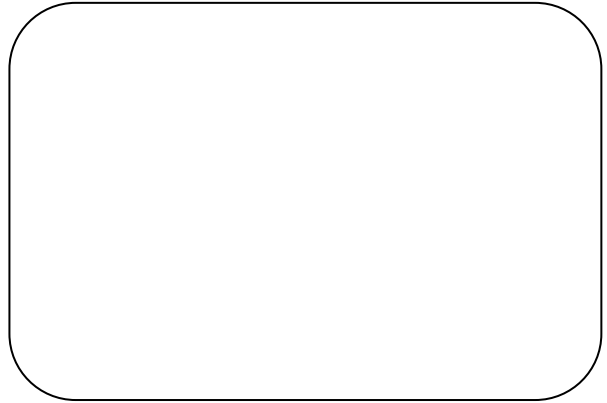
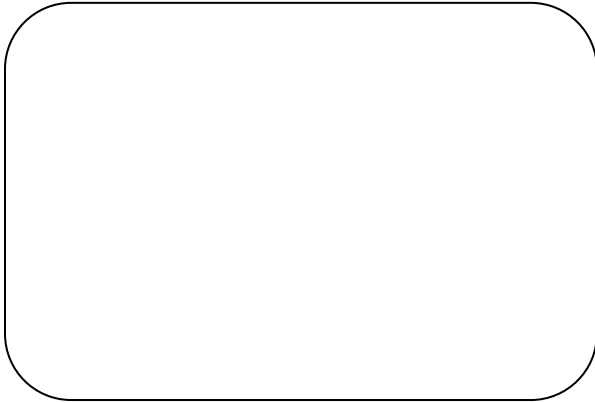
What is **1** thing my school or community could do (or does do) to be sustainable? (Write or draw your idea).

A large, empty rounded rectangle box with a thin black border, intended for a student to write or draw their idea for making their school or community more sustainable.

What are **3** things my home could do (or does do) to be sustainable? (Write or draw your ideas).

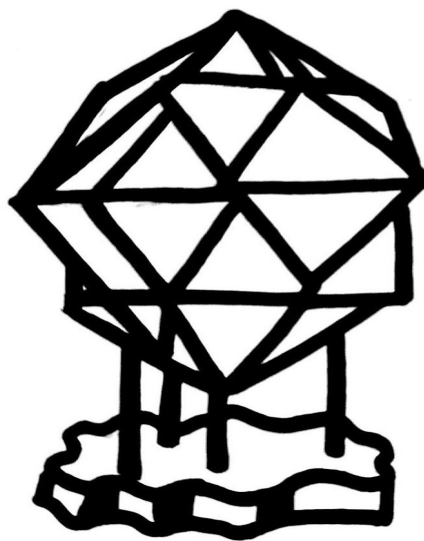


What are **5** small things I can do by myself to be sustainable?  
(Write or draw your ideas).



## UNITED NATIONS Goal Number 14: Life Below the Water

Here is one of the artificial reefs that are installed below the water at Sydney Opera House. When they were new, they were bare. Now lots of plants and animals grow there. Draw what the reef might look like today. Do you remember some of the animals that now live in this habitat?



What is a habitat?

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Why is habitat important to our native plants and animals?

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What is another way to save or create habitat on the land?

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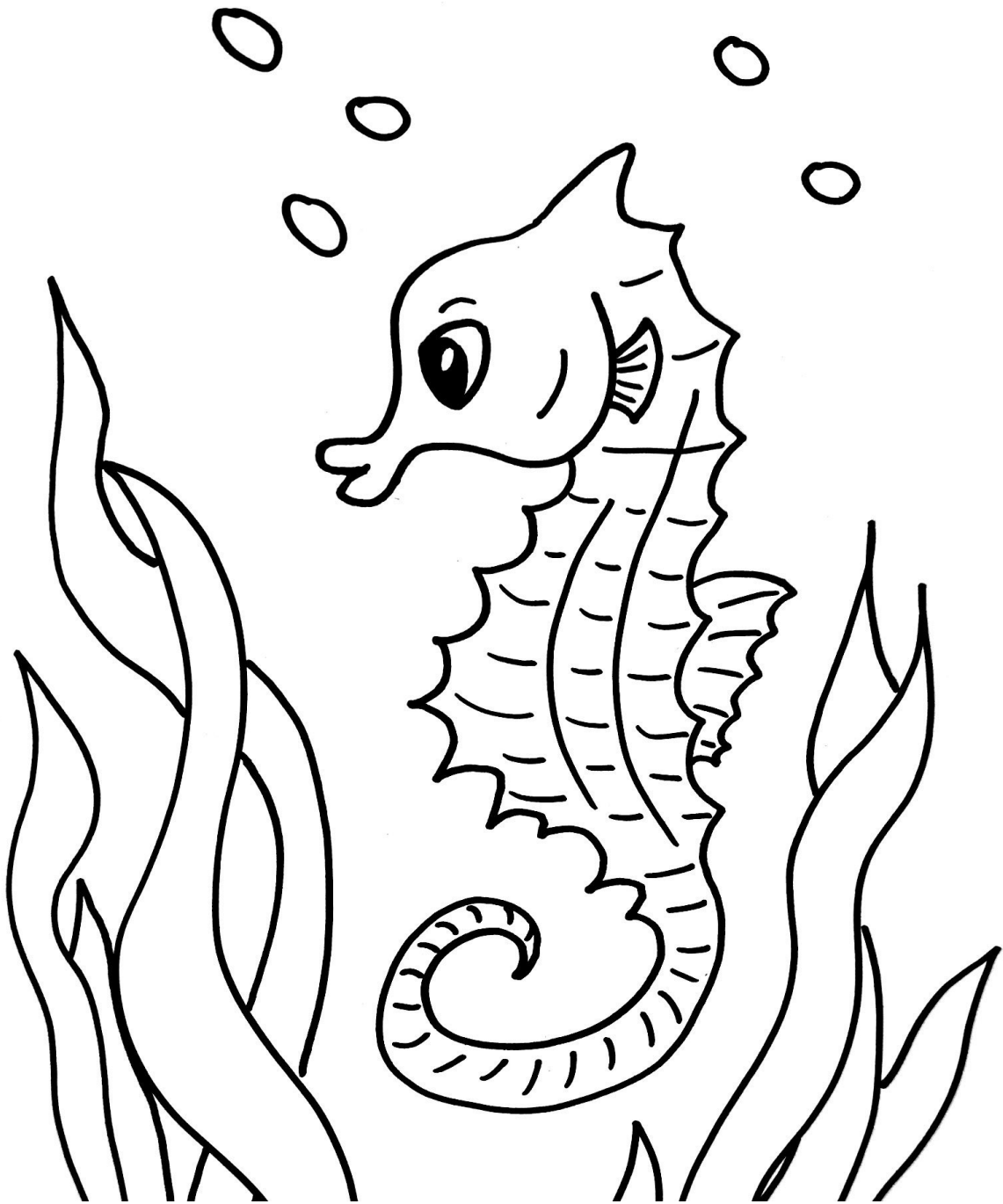
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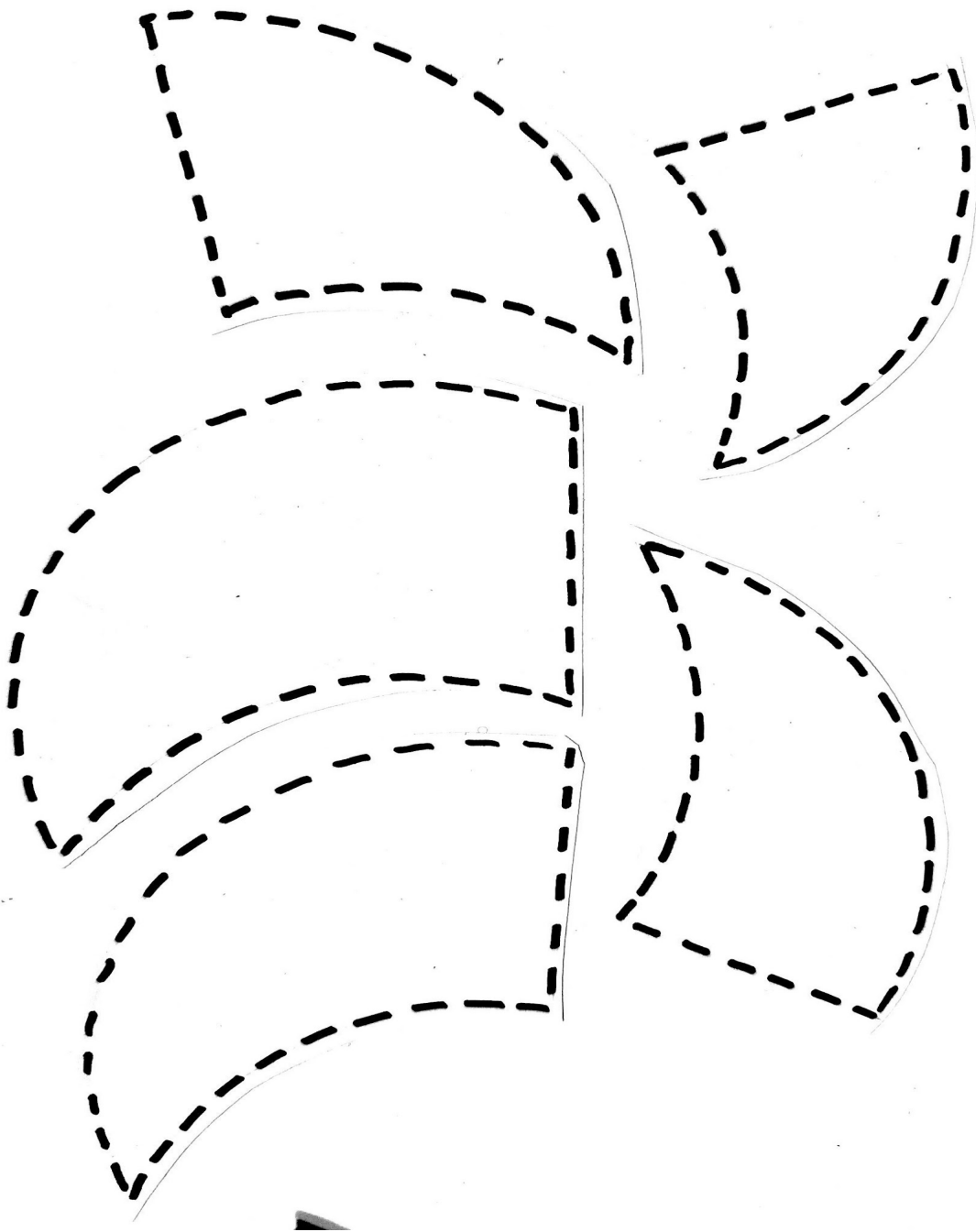
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The White Seahorse has come home to Sydney Opera House once again! What colours will your seahorse be?



Make your own Sydney Opera House! Cut out the shapes and glue them onto a piece of paper that you have painted or coloured blue. Maybe you'd like to add some sunshine or rain clouds.



# **Sydney Opera House Sustainability Tour**

**Work Sheets For Stages 2 & 3 (Years 3-6)**

Today we did a tour of:

S \_ \_ \_ \_ \_ O \_ \_ \_ \_ \_ H \_ \_ \_ \_ \_.

We learnt about:

S \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ y.

It's important to take care of our  
future, our planet and “our own  
backyard”.

# TOUR QUIZ

(This is very serious)

1. What is the name of the point where Sydney Opera House stands? Circle the correct answer.

- A. Billabong Point
- B. Banana Point
- C. Bennelong Point

2. Who are the traditional custodians of the land where Sydney Opera House stands? Circle the correct answer.

- A. The Gadigal
- B. The Sydney Swans
- C. The Opera singers

3. How did the Gadigal live on the land sustainably? Circle all the answers that are correct.

- A. They fished sustainably by checking the middens for what had been recently harvested.
- B. They reused shells and bones to make tools, so that nothing was wasted.
- C. They recycled all their plastic bottles.

4. When you visit Sydney Opera House, what kinds of public transport could you take to get there? Circle all the correct answers.

- A. Trains
- B. Buses
- C. Ferries

- D. Light rail
- E. Horses and cart
- F. Rockets

5. What kind of things might you hear, see or do while visiting Sydney Opera House? Circle all the correct answers.

- A. Music such as opera, symphony, cabaret and rock concerts
- B. Dance such as ballet or hip hop
- C. Eat a delicious meal
- D. Wave to Benny the Seal
- E. See a play in a theatre
- F. Join in a holiday workshop
- G. Do cartwheels on the roof

6. Who designed Sydney Opera House? Circle the correct answer.

- A. Anthony Albanese
- B. Jørn Utzon
- C. Your grandparents

7. How many years is the Opera House designed to last? Circle the correct answer.

- A. 50 years
- B. 250 years
- C. 1,000,000 years

8. How does the roof of Sydney Opera House help in its effort to be sustainable? Circle all the correct answers.

- A. Light colours deflect the sun's hot rays, helping keep the building cooler.
- B. The tiles are made from strong stone and clay so that they last a long time.
- C. Its unusual shape scares away aliens from outer space.
- D. It can be cleaned when it rains, saving on water and cleaning products.

9. How else is the Opera House working towards its sustainability goals? Circle all the correct answers.

- A. Sorting rubbish into recycling, compost, and non-recyclable (and recycling as much as possible)
- B. Saving water by water-recycling and efficient cleaning
- C. Using harbour water to cool air-conditioning pipes

- D. Eliminating single-use plastic packaging and cutlery from all restaurants and eating areas
- E. Reducing paper use by 50%
- F. Encouraging everyone to use public transport when visiting

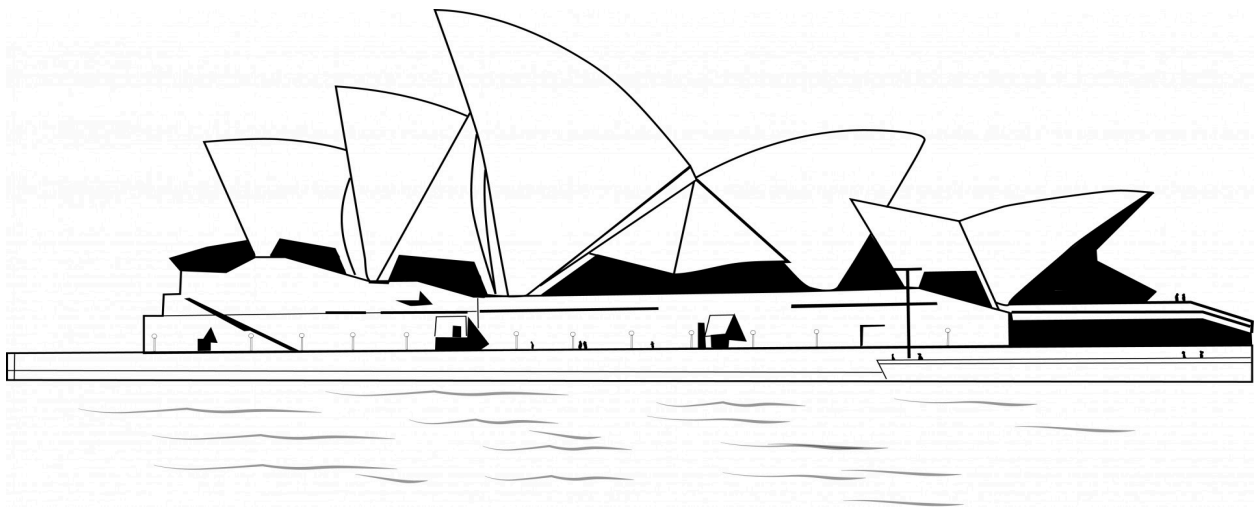
10. Why is the year 2030 important to Sydney Opera House?  
Circle the correct answers.

- A. It's the year we are aiming to achieve the United Nations Global Goals that we are working towards.
- B. Our reef might be home to even more endangered species.
- C. We might see you!

11. Why is YOUR voice so important? Circle all the correct answers.

- A. My voice can raise awareness about our planet
- B. My voice can support important issues
- C. My voice can help other people find their voice too
- D. My voice sounds really good singing in the shower
- E. My voice can make a difference

On the Sydney Opera House shells, write  
or draw a message to the world:





## UNITED NATIONS Goal

### Number 14: Life Below the Water

Here is one of the artificial reefs that are installed below the water at Sydney Opera House. When they were new, they were bare. Now lots of plants and animals grow there. Draw what the reef might look like today. Do you remember some of the animals that have made their home here?



What is habitat?

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Why is it important to our native plants and animals?

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What is another way to save or create habitat on the land?

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How many sustainability words can you see? There are lots to find - horizontally, vertically and diagonally. Put a circle around them and cross them off below.

A	M	H	G	A	D	I	G	A	L	C	Y	O	U	C
G	I	A	R	F	U	T	U	R	E	O	S	E	A	E
L	D	R	E	D	G	U	M	S	R	M	E	F	U	N
O	D	B	C	B	E	T	T	E	R	P	A	M	N	T
O	E	O	Y	O	B	N	F	U	N	O	H	Q	I	R
M	N	U	C	T	N	R	E	E	F	S	O	W	T	A
Y	S	R	L	T	B	D	V	R	I	T	R	P	E	L
O	S	H	E	L	L	S	I	Q	G	L	S	L	D	P
C	W	A	T	E	R	W	E	T	L	Y	E	A	N	A
T	E	A	M	R	Q	V	A	H	I	V	P	S	A	S
O	Y	S	T	E	R	S	T	E	G	O	M	T	T	S
P	L	A	N	F	I	S	H	A	H	I	N	C	I	A
U	N	P	V	I	V	I	D	T	T	C	Y	I	O	G
S	A	V	E	L	I	F	E	R	S	E	M	M	N	E
H	O	P	E	L	T	X	X	E	G	O	A	L	S	G
P	U	B	L	I	C	T	R	A	N	S	P	O	R	T

Gloomy Octopus

Gadigal

Lights

Energy

Water

Bottle Refill

Life

Hope

Better

Public Transport

Tiles

Reef

Future

Save

Shell

Theatre

Voice

Trees

Air conditioning

Midden

Harbour

Oysters

Plastic

Compost

Red Gums

United Nations

Sea

Seahorse

Goals

Vivid

Recycle

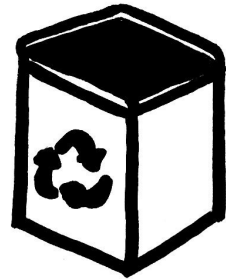
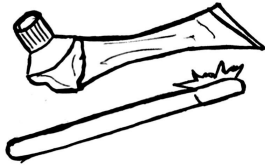
Central Passage

Team

Fish

Plan

Draw a line from each piece of rubbish to its best bin:



# My 2030 Vision

In 2030, I will be                      years old.

In 2030 I would like the world to be . . .

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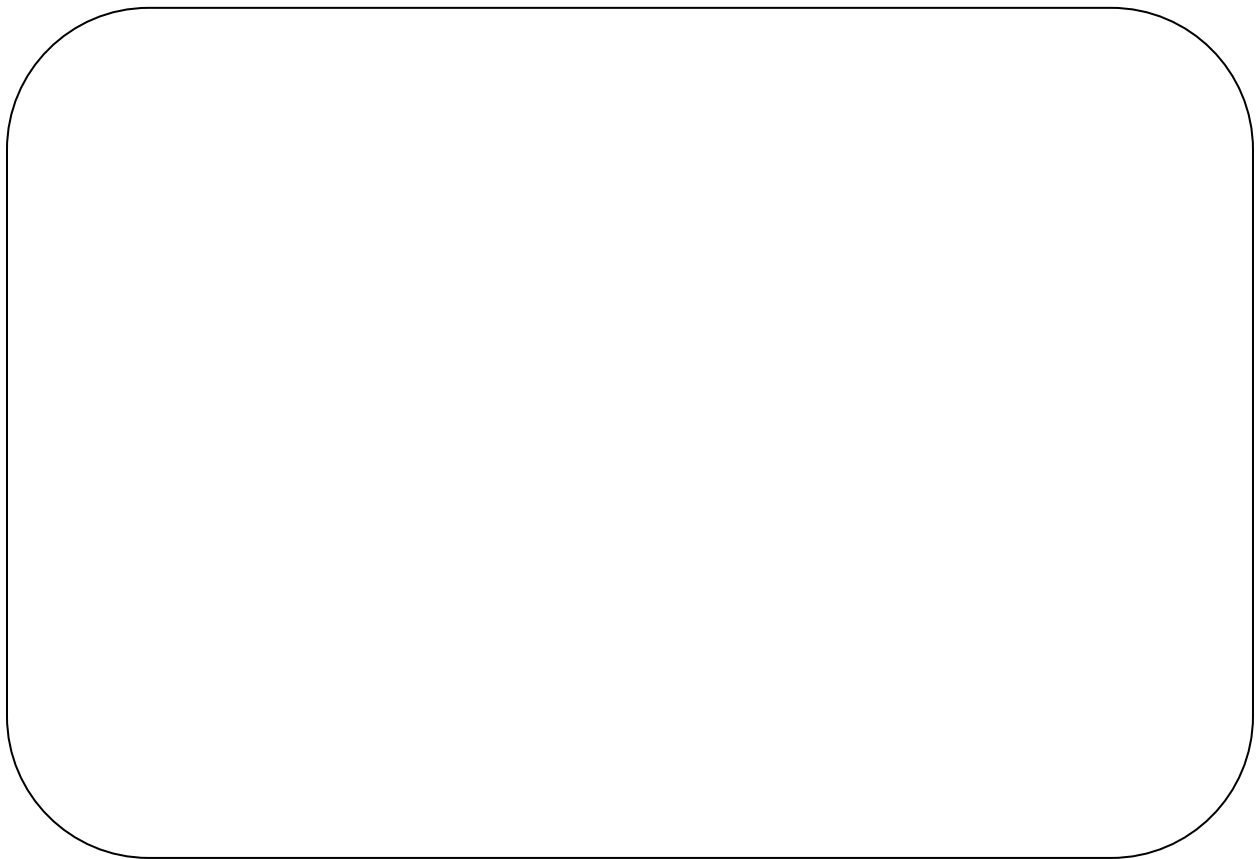
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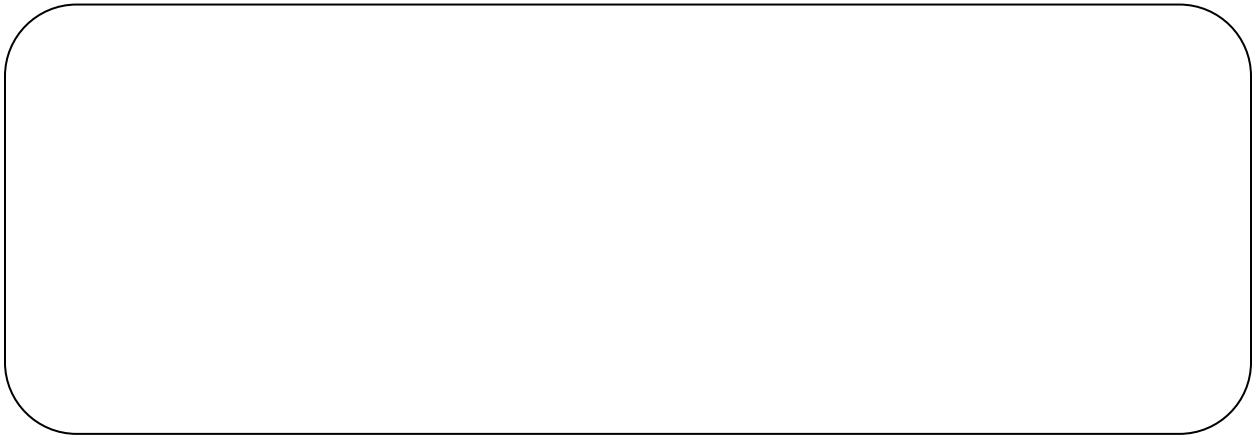
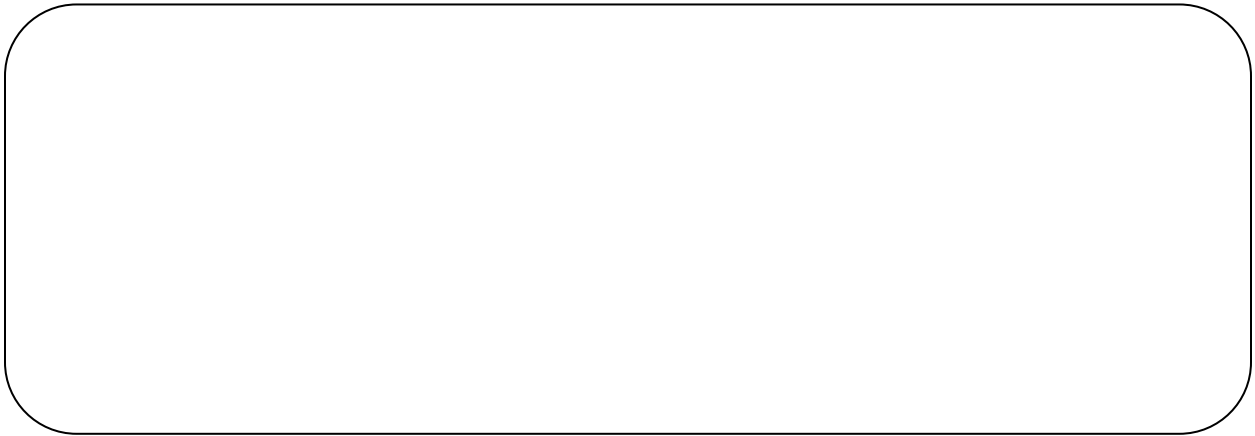
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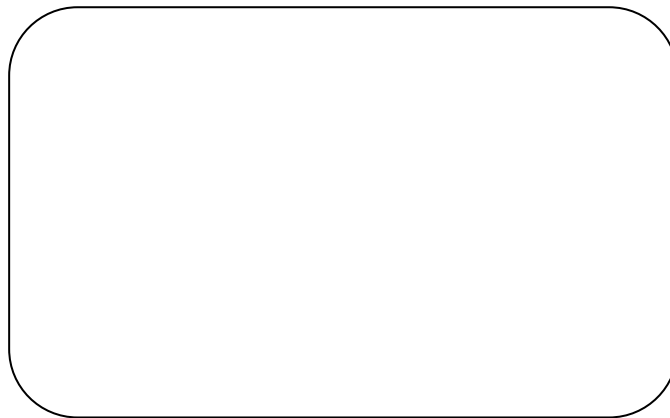
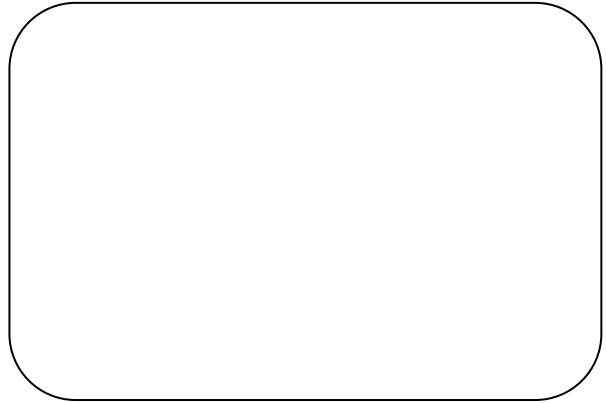
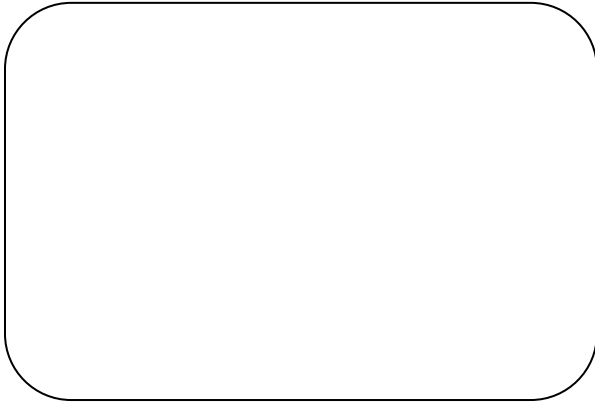
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What are **5** small things I can do by myself to be sustainable?  
(Write or draw your ideas).





# TEACHER'S QUIZ ANSWERS

(We have ~~crossed out~~ incorrect/less serious answers)

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# Curriculum Links

KLA	Stage 3	Stage 4	Stage 4
Visual Arts	<p>VAS3.1 Investigates subject matter in an attempt to represent likenesses of things in the world</p> <p>VAS3.4 Communicates about the ways in which subject matter is represented in artworks.</p>	<p>4.1 uses a range of strategies to explore different artmaking conventions and procedures to make artworks</p> <p>4.2 explores the function of and relationships between artist – artwork – world – audience</p> <p>4.3 makes artworks that involve some understanding of the frames</p> <p>4.4 recognises and uses aspects of the world as a source of ideas, concepts and subject matter in the visual arts</p> <p>4.5 investigates ways to develop meaning in their artworks</p> <p>4.6 selects different materials and techniques to make artworks</p>	<p>5.1 develops range and autonomy in selecting and applying visual arts conventions and procedures to make artworks</p> <p>5.2 makes artworks informed by their understanding of the function of and relationships between artist – artwork – world – audience</p> <p>5.3 makes artworks informed by an understanding of how the frames affect meaning</p> <p>5.4 investigates the world as a source of ideas, concepts and subject matter in the visual arts</p> <p>5.5 makes informed choices to develop and extend concepts and different meanings in their artworks</p> <p>5.6 demonstrates developing technical accomplishment and refinement in making artworks</p>

# Curriculum Links

KLA	Stage 3	Stage 4	Stage 4
Visual Arts	<p>VAS3.1 Investigates subject matter in an attempt to represent likenesses of things in the world</p> <p>VAS3.4 Communicates about the ways in which subject matter is represented in artworks.</p>	<p>4.1 uses a range of strategies to explore different artmaking conventions and procedures to make artworks</p> <p>4.2 explores the function of and relationships between artist – artwork – world – audience</p> <p>4.3 makes artworks that involve some understanding of the frames</p> <p>4.4 recognises and uses aspects of the world as a source of ideas, concepts and subject matter in the visual arts</p> <p>4.5 investigates ways to develop meaning in their artworks</p> <p>4.6 selects different materials and techniques to make artworks</p>	<p>5.1 develops range and autonomy in selecting and applying visual arts conventions and procedures to make artworks</p> <p>5.2 makes artworks informed by their understanding of the function of and relationships between artist – artwork – world – audience</p> <p>5.3 makes artworks informed by an understanding of how the frames affect meaning</p> <p>5.4 investigates the world as a source of ideas, concepts and subject matter in the visual arts</p> <p>5.5 makes informed choices to develop and extend concepts and different meanings in their artworks</p> <p>5.6 demonstrates developing technical accomplishment and refinement in making artworks</p>

# Curriculum Links

KLA	Early Stage 1	Stage 1	Stage 2	Stage 3
<b>English</b>	ENe-1A Communicates with peers and known adults in informal and guided activities demonstrating emerging skills of group interaction	EN1-1A Communicates with a range of people in informal and guided activities demonstrating interaction skills and considers how own communication is adjusted in different situations	EN2-1A Communicates in a range of informal and formal contexts by adopting a range of roles in group, classroom, school and community contexts	
<b>History</b>		HT1-2 Identifies and describes significant people, events, places and sites in the local community over time  HT1-3 Describes the effects of changing technology on people's lives over time	HT2-2 Describes and explains how significant individuals, groups and events contributed to changes in the local community over time  HT2-3 Describes people, events and actions related to world exploration and its effects	

# Curriculum Links

KLA	Early Stage 1	Stage 1	Stage 2	Stage 3
<b>Geography</b>	<p>GEe-1 Identifies places and develops an understanding of the importance of places to people</p>	<p>GE1-1 Describes features of places and the connections people have with places</p>	<p>GE2-1 Examines features and characteristics of places and environments</p> <p>GE2-2 Describes the ways people, places and environments interact</p>	<p>GE3-1 Describes the diverse features and characteristics of places and environments</p> <p>GE3-2 Explains interactions and connections between people, places and environments</p>
<b>Science and Technology</b>	<p>STe-2DP-T develops solutions to an identified need</p> <p>STe-4MW-ST Identifies that objects are made of materials that have observable properties</p> <p>STe-6ES-S Identifies how daily and seasonal changes in the environment affect humans and other living things</p>	<p>ST1-4LW-S describes observable features of living things and their environments</p> <p>ST1-7MW-T Describes how the properties of materials determine their use</p> <p>ST1-10ES-S recognises observable changes occurring in the sky and on the land and identifies Earth's resources</p>	<p>ST2-7MW-T investigates the suitability of natural and processed materials for a range of purposes</p> <p>ST2-8PW-ST describes the characteristics and effects of common forms of energy, such as light and heat</p> <p>ST2-11DI-T Describes how digital systems represent and transmit data</p> <p>ST2-4LW-S Compares features and characteristics of living and non-living things</p>	<p>ST3-3DP-T defines problems, and designs, modifies and follows algorithms to develop solutions</p> <p>ST3-4LW-S examines how the environment affects the growth, survival and adaptation of living things</p> <p>ST3-11DI-T Explains how digital systems represent data, connect together to form networks and transmit data</p>



