

Sustainable Living Practices

Learning from the past to work towards a more sustainable future

Part A: How sustainable were past living practices?

Activity One – Every object tells a story



What can you find out about an object by looking closely?

Object Analysis – Looking closely at an object

Working as an individual or in small groups, perform **object analysis** on one object from **each category** of living practices (Energy Water Materials Environment).



You require one **Sheet #1** for each object. (Sheet #1: Object analysis)

1. Name the object.
2. Select category (Energy Water Materials Environment).
3. Respond to these questions on the sheet or your own paper:

Physical Features

- a. What is it made of?
- b. Draw a sketch and label as many parts as you can.
- c. Is this a complete object or part of one?

Construction

- a. How was the object made?
- b. Would this have needed special skills or equipment?
- c. Describe the materials it is made from.

Function

- a. What was it made to do?
- b. Does it have a practical function?
- c. Is it a toy? Is it decorative?

Design

- a. Does it do what it should? How well?
- b. Has the design of similar objects changed over time?

History

- a. Who made it? When? Why?

4. Share your findings with your group.

Activity Two – Learning from the past



*How sustainable is the practice of using your object in the past?
What can we learn from past practices?*

Collect data – Sustainability analysis

1. Select one object to study in more detail from the point of view of sustainable practices in the home.
2. There are three **primary goals in sustainable home living**:
 - Lifestyle and health improvement
 - Cost effectiveness
 - Environmental friendliness



Write down what you think each one of these goals mean? Discuss this with your work group.



3. Think about the positives and negatives of each practice for each of the sustainable living objectives.



4. Now enter your responses on the **Sheet#2: Sustainability analysis** for your chosen object.

Lifestyle

- a. *How often would the object be used?*
- b. *How much time would be needed to use it?*
- c. *How easy was it to use?*

Health

- a. *Does this object have a role in health and hygiene? What is it?*
- b. *How important is this role?*

Cost effectiveness

- a. *How expensive would this object be to make and use?*
- b. *Can it be reused or repurposed?*
- c. *Can resources be recovered?*

Environment

- a. *What impact would using and disposing of this object have on the environment?*



Further research – Compare today with yesterday

1. *Identify what objects and practices today are used to perform the same or similar function as the selected object.*
2. *Using another blank copy of Sheet #2, perform a **sustainable practice analysis** on the current method or object, and then evaluate its sustainability. (Sheet #2: Sustainability Analysis)*
3. *Compare the sustainability of today's practice with yesterdays. Decide which practice is more sustainable. Why?*



Conclusions – What have you learned?

Suggest some ways that current practices might be able to adopt some ideas from earlier practices to better achieve sustainability.



Analyse the data – Make some inferences



Consider the positives and negatives of how the selected object was used then decide whether it was a sustainable practice or not. Why do you think this?

Part B: Sustainable home water use



How well do we manage our water compared with days long ago?

What can we learn from the water usage practices of the past?

Can learning from the past help us in the future?

Activity Overview – What you will do

In this activity you are to firstly **estimate some data** on water usage during a typical day in the early 20th Century. To do this you will use information about past domestic practices as well as a water use table for various domestic activities.

In the second part of the activity you will **make predictions** about how water usage might have changed between now and many years ago.

Thirdly, you will **perform a water audit** for modern home living. You will **compare this data** with the early day's data as well as your predictions to find similarities and differences.

Finally, you will **make some conclusions** about what you have learned about water usage in the home. You may have learned some more sustainable ways to manage water.



Early day's data – How much water was used in the early days?

Imagine you are living in a home in the early part of the 20th century. Perform a water audit for your daily activities. Use the information fact sheets to guide your decision making:

- **Water use data sheet in the**
- **Water usage fact sheet**

Some of the listed activities may not have occurred.



Location	Activity	Litres each time (L)	Times per week (T)	Total used (L x T)
Kitchen	Washing dishes			
	Washing food			
	Cooking			
	Drinking water			
	Dishwasher			
Bathroom	Shower			
	Bath			
	Cleaning teeth			
	Washing hands / face			
	Shaving			
	Toilet flush			
	Cleaning			
Laundry	Washing machine			
	Hand washing			
	Cleaning			
Garden & outdoors	Water garden			
	Washing car			
	Washing animals			
	Cleaning			
	Pool top up			
Weekly Water Usage Total				



Making predictions – What do you think?

Use the data table you have just completed and your knowledge of modern living to make predictions about how water usage in the early days compares with today. Place a 1 in one box opposite each activity.

- | | |
|-------------------|--|
| Not occur: | This activity would not have occurred in the early part of the 20 th Century. |
| Use less: | This activity would use less water in the early 20 th Century compared with today. |
| Use more: | This activity would use more water in the early 20 th Century compared with today. |



Location	Activity	Not occur	use less	use more
Kitchen	Washing dishes			
	Washing food			
	Cooking			
	Drinking water			
	Dishwasher			
Bathroom	Shower			
	Bath			
	Cleaning teeth			
	Washing hands / face			
	Shaving			
	Toilet flush			
	Cleaning			
Laundry	Washing machine			
	Hand washing			
	Cleaning			
Garden & outdoors	Water garden			
	Washing car			
	Washing animals			
	Cleaning			
	Pool top up			
Totals				



Justify your decisions – Why do you think this? (Optional)

1. Compare your predictions with another person or group.
 - a. If you disagree with any predictions made by the other person or group try to convince the others to take your point of view.
 - b. Following the discussions, change any predictions that you change your mind about.
2. If you couldn't agree with another person or group, research the topic more to help settle the disagreement. Use the internet to investigate further but remember to use good quality sources of information.

Today's data – How much water is used today?

Imagine you are living in a home in modern times. Perform a water audit for your daily activities. Use the **Water usage fact sheet** to guide your decision making. Some of the listed activities may not occur.



Location	Activity	Litres each time (L)	Times per week (T)	Total used (L x T)
Kitchen	Washing dishes			
	Washing food			
	Cooking			
	Drinking water			
	Dishwasher			
Bathroom	Shower			
	Bath			
	Cleaning teeth			
	Washing hands / face			
	Shaving			
	Toilet flush			
	Cleaning			
Laundry	Washing machine			
	Hand washing			
	Cleaning			
Garden & outdoors	Water garden			
	Washing car			
	Washing animals			
	Cleaning			
	Pool top up			
Weekly Water Usage Total				



Collation of data – Organise your data for easy viewing

1. Design a spreadsheet to enter your data into tables.
2. Use the spreadsheet functions to calculate the **totals** including the **total use** column.
3. Apply the *Chart Wizard* to display your data graphically. You will create a graph for each table of data.
 - a. Select data to display
 - b. Choose a suitable display format.
 - c. Add all labels and titles.
 - d. Check that all data is easy to view.



Wash basin and jug



Cooking billy



Chamber pot



Analysis of data – Compare today with yesterday

1. Compare the **totals** for each home in each time period.
 - a. What do you notice is similar?
 - b. What do you notice is different?
 - c. Try to suggest some reasons for any similarities and differences.
2. Compare your **predictions** with the data in Today's table.
 - a. What do you notice is similar?
 - b. What do you notice is different?
 - c. Try to suggest some reasons for any similarities and differences.



Conclusions – What have you learned?

1. What did you find out that was interesting?
2. How well do modern practices for using water compare with the past?
3. What can we learn from the past to help us better manage our water usage today and into the future?



Pegs

Part C: Sustainable living challenge



How sustainable are your current living practices?

What can you do to make your living practices more sustainable?

Activity Overview – What you will do

In this activity you will look closely at the domestic practices in your place of living then make suggestions for improvements that will lead to a more sustainable future.

Your suggestions should seek to improve any or all of the following areas:

- Lifestyle
- Health
- Cost
- Environmental impact

Collect data – How sustainable is the practice of using your object?



1. Choose one object from each of the following use areas:

- a. Energy e.g. Light bulb
- b. Water e.g. Hose nozzle
- c. Environment... e.g. Spray can
- d. Materials ... e.g. Plastic packaging

2. Rate each of the objects for its impact in each of the following areas:

- Lifestyle
- Health
- Cost
- Environment



Enter your data into Sheet #3: Sustainability impacts.

Use this scale for rating:

-2	is a very bad impact
-1	is a bad impact
0	is no impact
+1	is a good impact
+2	is a very good impact

3. Share your data with other groups and enter their data to complete your Sheet #3.

Look closely – What can you change?



1. Choose one object that has a bad or very bad impact in one area.
2. Brainstorm some ideas in your group that might improve this object's rating.

3. Choose the best ideas and be prepared to share this with other groups.



Publish your findings in a suitable medium or format to help educate the public about how to work towards a more sustainable future by changing domestic practices (objects).



Incandescent bulb



Hose



Spray can



Plastic packaging

Ideas for insect control



Part D: How sustainable are you?



*What do people **know** about sustainable practices?
How much do people **act** in a sustainable way?*

Activity Overview – What you will do

In this activity you will complete a survey that will ask you about:

1. What you know about sustainable practices and
2. What you do about it.



Making predictions - What do you think?

1. *How much do you think you **know** about sustainable living practices ... a lot ... a little? Why do you think this?*
2. *How much do you **act** in a sustainable way ... a lot ... a little? Why do you think this?*



Collecting data – Complete the survey

The survey is available online for you at <http://www.surveymonkey.com> at the following links:

1. [What you know](#)
2. [What you do](#)

Alternatively, the surveys are available in pdf format on the Sustainability Resources kit CD or they can be downloaded from the [Museum Magnet Schools](#) website.



Analysing the data – What does it mean?

Scoring:

You will first need to score your responses so that you can compare what you know with others. Scoring is done by comparing your responses with the responses of an expert on sustainable living. (Survey_know_expert.pdf)

For each match between your responses and the expert's, give yourself one point. Many questions have multiple answers so you get a point for each match.

However, if you have an extra response for the question that doesn't match then deduct one point.

Find the total score for each section and record your result:

What you know

Section	my score	expert score
Intro		
Energy		
Water		
Materials		
Environmental Impact		



What you do

Section	my score	expert score
Intro		
Energy		
Water		
Materials		
Environmental Impact		



Comparing:

1. How much do you know about sustainable living compared to an expert?
2. How much do you act in a sustainable way?
3. How much does the survey score match what you thought at the start (the predictions)?



Conclusions – What have you learned?



Is there a difference between what you know and how you act? Why?



More research – What do others think?

1. Repeat the process you have just completed on yourself to find out about what others think.
2. You could collect the data from the whole class and work out the average score.
3. Enter this data into similar tables as above.
4. Now compare the data with the expert's score or with the wider population result from survey monkey:



[What you know](#)

[What you do](#)

