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# Resource pages

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## Resource 1.1

### Student Learning Journal

This learning journal will guide you through your investigation into climate change and sustainability in your school.

This journal is a record of the work you or your group does.

As a Word document you can add any text, images and pictures to it, tables and graphs, add any links to Internet resources or information.

Student  
name(s):.....

Team name:.....

Teacher name:.....

School:.....

## Stage 1: Exploring what is known

Each day we behave in particular ways, use particular technologies and manage our school spaces using a variety of resources. We may use energy to keep warm or stay cool; water for drinking and watering; and cars and buses as ways to get from one place to another. The energy and resources we use can release a variety of gases into the atmosphere that trap heat from the sun and cause the earth to warm up.

The energy we use in our school, home and cars, the food we eat and the things we buy can all affect how much greenhouse gas we produce. The good news is that we can save energy and water, reduce our school's running costs and remain comfortable, we can look at our diets and be healthier and we can look at how we make purchases and save money...and all these strategies can reduce greenhouse gases and reduce global warming.

### Exploring energy?

- What do I know about energy?
- How and where will I find out more about energy and my school?
- What does it mean to use energy in a sustainable way?

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### Exploring water?

- What do I know about water?
- How and where will I find out more about water and my school?
- What does it mean to use water in a sustainable way?

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**Exploring waste?**

- What do I know about waste?
- How and where will I find out more about waste and my school?
- What does it mean to manage waste in a sustainable way?

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**Exploring transport?**

- What do I know about transport?
- How and where will I find out more about transport and my school?
- What does it mean to travel in a sustainable way?

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**Exploring biodiversity?**

- What do I know about biodiversity?
- How and where will I find out more about biodiversity and my school?
- What does it mean to manage biodiversity in a sustainable way?

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**Exploring climate change?**

- What do I know about climate change?
- How and where will I find out more about climate change and my school, my community?
- What does it mean to adapt to a changing climate?

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## The evaluation rubric: a guide to review source materials

Go through the following steps:

- Evaluate one source at a time
- Examine and discuss each source with a partner
- Use the rubric below for each source, filling in details to support your judgements.

Resource title	Criteria	Not Met	Adequate	Good	Exemplary
	The source increases knowledge and understanding climate change and actions to reduce greenhouse gas emissions.				
	The resource is engaging for students.				
	The resource has a clear purpose and is well organised.				
	The resource gives a balanced account of an issue, and accurately reflected the broad range of informed opinion on the subject.				
	The resource encourages the reader to ask questions.				
	The visual representations accurately depict the scientific concepts being examined.				
	The visual representations provide an alternative way for the reader to examine the concepts being discussed in the text.				
	Captions accompanying each visual representation follow the above criteria.				
<b>Other Notes</b>					

These criteria are based on the official SB&F award criteria by Timothy Gerber. (2009). "Mock SB&F Prize for Science Books Election".

## Stage 2: Exploring needs to understand what might need to change

Search for and identify the needs and opportunities at your school to be more sustainable and reduce greenhouse gas emissions.

Or, explore a need or investigate a problem you have already discovered.

Maybe even create a survey to investigate a problem someone brings to you.

However you identify the need or opportunity keep well presented records of all your thoughts, investigations and reasons for decisions. Don't forget to show where you found your information. There are many suitable methods for recording, such as:

- Photographs
- Drawings
- Notes
- Graphs
- Diagrams
- Recordings
- Computer graphics

Make a plan of action. Give you area of investigation a title:

Consider a plan with the following headings.

What	How	When	Who and what's needed	How will we know if it worked

Remember you should also include acknowledgements to give sources of your information, whether it comes from books, people or places.

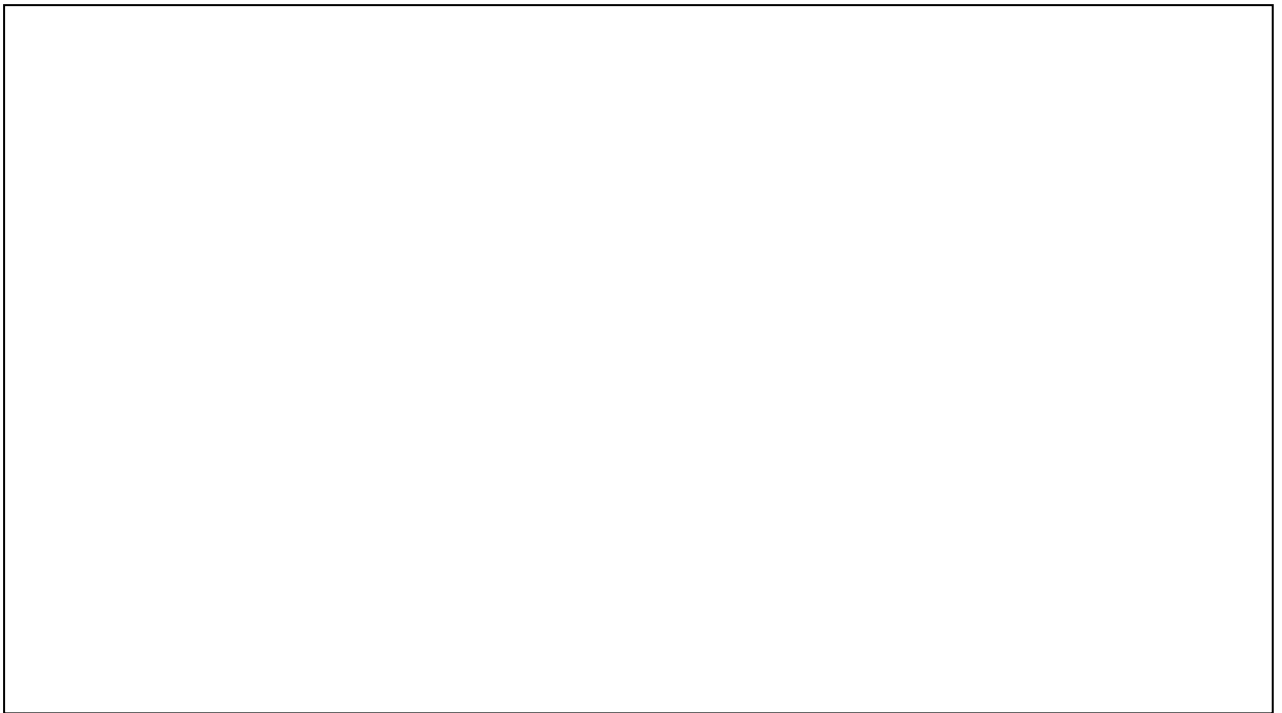
Finally start thinking how you will produce a record of this exploration or investigation.

Add other ideas for your plan below!

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### Stage 3: My Vision

Write about or illustrate your vision of your school as a sustainable school.



Add your vision in words below!

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**Stage 4: My case for what needs to change**

What I think needs to change at our school about how we use energy and why.

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What I think needs to change at our school about how we use water and why.

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What I think needs to change at our school about how we create and dispose of waste and why.

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What I think needs to change at our school about how we use transport options at the school and why.

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What I think needs to change at our school about how we feed the students at school and why.

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What I think needs to change at our school about how we use food scraps and green waste and why.

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What I think needs to change at our school about how we plant and look after our trees and gardens and why.

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Who do we need to talk about these issues and why?

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Do we need to learn more?

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**Stage 5: My draft sustainability action, idea, campaign, design or project**

Once you have identified the change that needs to be made, there can be a number of different options and actions that might produce the change. Describe your idea, campaign, or project...draw your design...or plan a model of it.

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## Stage 6: My resources that I might need

Consider:

- Who might be available to help you?
- What information might you need?
- Where might you find the information?
- What time is available for the project?
- What finances are available for the project?
- What resources are available for the project? (Consider recycling as much as you can like spare off cuts of wood for a garden bed.)
- What might limit your actions?

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## Stage 8: My approach

Consider how you/ your team are going to communicate the idea, campaign, project or design. Will you put up a display? Will you hold a presentation and talk about it?

Add your approach below!

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**Stage 10: My reflections**

Your personal opinions, the decisions you have made and your reasons for them are important. Reflecting on them and recording them will help you to have a better understanding of yourself and the work you have achieved.

Reflect on and answer the following questions:

- How has my/our attitude and behaviour changed as a result of my learning?
- How well did I/we contribute to any group/team learning activities?
- How can I/we apply what I/we have learned to another sustainability issue?

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