



Victorian curriculum connections

LEVEL 4: Years 5–6

Learning focus

Energy Savers activities address learning focus statements for Level 4 (Years 5–6).

Physical, Personal and Social Learning	Discipline-based Learning	Interdisciplinary Learning
<p><u>Interpersonal Development</u></p> <ul style="list-style-type: none"> Work effectively in different teams and take on a variety of roles to complete tasks of varying length and complexity. Work cooperatively to allocate tasks and develop timelines. Accept responsibility for their role and tasks. Provide feedback to others and evaluate their own and the team's performance. <p><u>Personal Learning</u></p> <ul style="list-style-type: none"> Develop and implement plans to complete short-term and long-term tasks within timeframes set by the teacher, utilising appropriate resources. Undertake some set tasks independently, identifying stages for completion. Describe task progress and achievements, suggesting how outcomes may have been improved. <p><u>Civics and Citizenship</u></p> <ul style="list-style-type: none"> Demonstrate understanding of the roles and responsibilities of democratic processes, when engaging in school and community activities. 	<p><u>English</u></p> <ul style="list-style-type: none"> Read, interpret and respond to a wide range of literary, everyday and media texts in print and in multimodal formats. Plan, rehearse and make presentations for different purposes. Sustain a point of view and provide succinct accounts of personal experiences or events. Adjust speaking to take account of context, purpose and audience, and vary tone, volume and pace of speech to create or emphasise meaning. <p><u>Mathematics</u></p> <ul style="list-style-type: none"> Present data in appropriate displays. Recognise and investigate the use of mathematics in real and historical situations. Explain reasoning and interpret solutions. Add, subtract, and multiply fractions and decimals and apply these operations in practical contexts, including the use of money. <p><u>Science</u></p> <ul style="list-style-type: none"> Explain change in terms of cause and effect. Use everyday examples to illustrate the transforming and transferring of energy. 	<p><u>Communication</u></p> <ul style="list-style-type: none"> Ask clarifying questions about ideas and information they listen to and view. Summarise and organise ideas and information, logically and clearly in a range of presentations. Identify the features of an effective presentation and adapt elements of their own presentations to reflect them. Using provided criteria, students evaluate the effectiveness of their own and others' presentations. <p><u>Thinking</u></p> <ul style="list-style-type: none"> Students develop their own questions for investigation, collect relevant information from a range of sources and make judgments about its worth. Use the information collected to develop concepts, solve problems and inform decision-making. Use creative thinking strategies to generate imaginative solutions when solving problems. Use a broad range of thinking processes and tools, and reflect on and evaluate their effectiveness.

...continued next page

<ul style="list-style-type: none"> • Present a point of view on a significant current issue or issues and include recommendations about the actions that individuals and governments can take to resolve issues. • Demonstrate understanding that there are different viewpoints on an issue, and contribute to group and class decision-making. • Present recommendations about the actions that individuals and governments can take to resolve issues. 	<ul style="list-style-type: none"> • Analyse a range of science-related local issues and describe the relevance of science to their own and other people's lives. • Explain how sustainable practices have been developed and/or are applied in their local environment. • Describe the purpose of experiments they undertake and relate this purpose to the nature of the data that is collected. • Use the terms relationships and cause and effect when discussing and drawing conclusions from the data they collect. <p><u>The Humanities – Economics</u></p> <ul style="list-style-type: none"> • Explain the need to be an informed consumer. • Plan investigations about economic issues in the home, school or local community and form conclusions supported by evidence. <p><u>The Humanities – Geography</u></p> <ul style="list-style-type: none"> • Recommend ways of protecting environmentally sensitive areas in a sustainable way. <p><u>The Arts</u></p> <ul style="list-style-type: none"> • Students experiment with and apply a range of skills, techniques and processes using a range of media, materials, equipment and technologies to plan, develop, refine, make and present arts works. • Consider purpose and suitability when they plan and prepare arts works for presentation to a variety of audiences. 	<p><u>Thinking</u></p> <ul style="list-style-type: none"> • Students develop their own questions for investigation, collect relevant information from a range of sources and make judgments about its worth. • Use the information collected to develop concepts, solve problems and inform decision-making. • Use creative thinking strategies to generate imaginative solutions when solving problems. • Use a broad range of thinking processes and tools, and reflect on and evaluate their effectiveness. <p><u>Design, Creativity and Technology</u></p> <ul style="list-style-type: none"> • Contribute to the development of design briefs that include some limitations and specifications. • Individually and in teams, students use a range of methods to research and collect data in response to design briefs. • Generate and communicate alternative design ideas in response to a design brief and demonstrate that they are aware of environmental and social constraints. • Reflect on their designs as they develop them and use evaluation criteria, identified from design briefs, to justify their design choices. • Describe the impact that products and technological systems have on people and the environment. <p><u>ICT</u></p> <ul style="list-style-type: none"> • Students safely and independently use a range of skills, procedures, equipment and functions to produce accurate and suitably formatted products to suit different purposes and audiences. • Students modify products on an ongoing basis in order to improve meaning and judge their products against agreed criteria.
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

...continued next page

Victorian Essential Learning Standards

This resource can be used to assess a range of Victorian Essential Learning Standards.

This table provides an example of how the activities might be used to assess some Level 4 standards (Years 5–6).

Strand	Domains	Dimensions	Key elements of standards. Students;
Physical, Personal and Social Learning	Interpersonal Development	Building Social Relationships	<ul style="list-style-type: none"> Demonstrate, through their interactions, respect for a diverse range of people and groups.
		Working in Teams	<ul style="list-style-type: none"> Work effectively in different teams and take on a variety of roles. Work co-operatively to allocate tasks and develop timelines. Accept responsibility for their role and tasks.
	Personal Learning	Managing Personal Learning	<ul style="list-style-type: none"> Monitor and describe progress in their learning. Negotiate learning improvement goals and justify the choices they make about their own learning.
	Civics and Citizenship	Civic Knowledge and Understanding	<ul style="list-style-type: none"> Explore the elements of sustainability in local, national and global contexts.
		Community Engagement	<ul style="list-style-type: none"> Think critically about their own values, rights and responsibilities and those of organisations across a range of settings. Consider different perspectives and articulate and justify their own opinions on local, national and global issues. Apply their knowledge and skills in a range of community-based activities.
Discipline-based Learning	English	Speaking and Listening	<ul style="list-style-type: none"> Develop and demonstrate knowledge about the appropriate oral language for particular audiences and occasions.
		Reading	<ul style="list-style-type: none"> Understand, interpret, analyse, reflect upon, and enjoy written and visual, print and non-print texts.
	Science	Science Knowledge and Understanding	<ul style="list-style-type: none"> Develop an understanding of energy and force as a way of explaining physical phenomena. Answer their own questions while thinking through contemporary challenges and issues. Come to understand how science relates to society and the environment.
		Science at Work	<ul style="list-style-type: none"> Learn to be curious and to use scientific understanding and processes to find answers to their questions. Gain insight into relationship between science, technology and society both now and in the future. Explain how scientific knowledge is used or could be used to deal with a social issue or problem.
	The Humanities – Economics	Economic Knowledge and Understanding	<ul style="list-style-type: none"> Develop the ability to use economic knowledge and understanding to evaluate economic decisions and policies.
	The Humanities – Geography	Geographical Knowledge and Understanding	<ul style="list-style-type: none"> Make informed decisions about local and global issues, including sustainable use and management of the world's resources.

...continued next page

	Mathematics	Number	<ul style="list-style-type: none"> Describe their investigations with correct mathematical terms, symbols and notations. They use mathematical procedures to construct and systematically investigate conjectures or hypotheses.
		Measurement, Chance and Data	<ul style="list-style-type: none"> Learn to collect, analyse and present data.
		Working Mathematically	<ul style="list-style-type: none"> Develop a sense of mathematical inquiry - problem posing and problem solving, modelling and investigation.
	The Arts	Creating and Making	<ul style="list-style-type: none"> Explore experiences, ideas, feelings and understandings through making, interpreting, performing, creating and presenting.
Interdisciplinary Learning	Thinking	Reasoning, Processing and Inquiry	<ul style="list-style-type: none"> Collect relevant information from a range of sources and check it for accuracy. Distinguish between fact and opinion.
		Creativity	<ul style="list-style-type: none"> Learn to seek innovative alternatives and use their imagination to generate possibilities. They learn to take risks with their thinking and make new connections.
		Reflection, Evaluation and Meta Cognition	<ul style="list-style-type: none"> Evaluate the validity of their own and others' ideas. Develop their meta cognitive skills in planning, monitoring and evaluating their own thinking processes and strategies.
	Communication	Listening, Viewing and Responding	<ul style="list-style-type: none"> Ask clarifying questions, develop interpretations and provide reasons for them.
		Presenting	<ul style="list-style-type: none"> Use a range of presentation formats to summarise ideas and organise information logically and clearly to meet the needs of an audience and purpose. Identify the features of an effective presentation and adapt elements of their own presentation to reflect them.
		Investigating and Designing	<ul style="list-style-type: none"> Research, collect data and generate ideas in response to design brief inquiry. Use a range of strategies to develop ideas that contribute to new design briefs.
	ICT	ICT for Creating	<ul style="list-style-type: none"> Use ICT tools to create solutions to problems and for creating information products.
	Design, Creativity and Technology	Investigating and Designing	<ul style="list-style-type: none"> Identify ideas, problems, needs, wants and opportunities. Develop design briefs to define an idea, problem, need, want or opportunity and requirements for a solution.
		Analysing and Evaluating	<ul style="list-style-type: none"> Test, improve, modify and consider alternative approaches to design problems.

The above material is an extract from material produced by the Victorian Curriculum and Assessment Authority (VCAA), Australia. Students and teachers should consult the Victorian Essential Learning Standards website, <http://vels.vcaa.vic.edu.au>, for more information. This material is copyright and cannot be reproduced in any form without the written permission of the VCAA. No part of this material may be reproduced (other than the use permitted by this copyright permission), stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of the copyright holder.