



SCHOOL BASED WORKSHOPS

SUSTAINABILITY SKILLS & KNOWLEDGE

Reverse Garbage workshops are an opportunity for participants to put the principles of sustainability, and specifically reuse, into practice through engaging, creative, interesting and enjoyable educational activities. All workshops aim to teach participants about waste reduction through the reuse of materials and waste minimal construction techniques (the majority of our workshops are tape and glue free). Students are given an opportunity to develop important problem solving skills in design and construction and are encouraged to learn co-operatively through sharing their skills and discoveries with each other. Reverse Garbage workshops teach valuable life-long skills and techniques that are just as important as choosing reused materials for a sustainable future.

In all Reverse Garbage workshops students develop knowledge, understanding of and skills in applying the processes of *Working Technologically*

NSW Syllabus Links:

STe-5WT Students use a simple design process to produce solutions with identified purposes

ST1-5WT Students use a structured design process, everyday tools, materials, equipment and techniques to produce solutions that respond to identified needs and wants

ST2-5WT Students apply a design process and uses a range of tools, equipment, materials and techniques to produce solutions that address specific design criteria

ST3-5WT Students plan and implement a design process, selecting a range of tools, equipment, materials and techniques to produce solutions that address the design criteria and identified constraints



EARLY STAGE 1	STAGE 1	STAGE 2	STAGE 3
<p>PUSHMI-PULLYU</p> <p>Make: Make a moving vehicle push toy using materials that you would find in your own home. Build your own car, ice-cream van or animal and learn how to make toys move with push/pull forces rather than batteries.</p> <p>Develop: Waste minimal construction techniques, an understanding of kinetics.</p> <p>NSW Syllabus links: <i>STe-6NE, STe-9ME, VAES1.1, VAES1.2</i></p> <p>Time required: 1.5hrs</p>	<p>WATCH IT GO!</p> <p>Make: Make a series of old fashioned kinetic toys including a spinning top that draws and a bird that pecks its way down a rubber band. Learn how to make things move with natural energy rather than batteries.</p> <p>Develop: Waste minimal construction techniques, an understanding of kinetics.</p> <p>NSW Syllabus links: <i>ST1-7PW</i></p> <p>Time required: 1.5hrs</p>	<p>FLOAT, FLY OR FLOP</p> <p>Make: Float a boat or fly a plane using materials that you would find in your own home. Learn how to make toys choosing appropriate materials and investigate buoyancy and aerodynamics</p> <p>Develop: Waste minimal construction techniques, an understanding of kinetics.</p> <p>NSW Syllabus links: <i>ST2-7PW</i></p> <p>Time required: 1.5hrs</p>	<p>SPACE STATION-ANDY THOMAS</p> <p>Make: Working in teams, construct a space station, satellites, lunar model and rockets using e-waste and obsolete plastic components.</p> <p>Develop: Waste minimal construction techniques</p> <p>NSW Syllabus links: <i>ST3-8ES</i></p> <p>Time required: 1.5-2hrs</p>
<p>LOOK AT ME</p> <p>Make: Imagine yourself with wild paper hair and bottle tops for eyes! Explore different approaches to portraiture and create your own self-portrait masterpiece with fabulous reused materials.</p> <p>Develop: Simple and accessible construction techniques, an understanding of visual representation</p> <p>Post Workshop Activity: Students can use their puppet to describe themselves or tell a story about themselves.</p> <p>NSW Syllabus links: <i>VAES1.1 VAES1.2 DRAES1.1 DRAES1.3</i></p> <p>Time required: 1.5 hrs</p>	<p>CHARACTERS</p> <p>Make: Make toys, puppets and dolls from re-used materials. Bring characters to life with materials that were destined for land-fill.</p> <p>Develop: Design and construction problem solving skills with re-used materials.</p> <p>Post Workshop Activity: Students can work in groups creating a performance based on their experience family & community life</p> <p>NSW Syllabus links: <i>HT1-2, EN1-6B DRAS1.1 DRAS1.2 DRAS1.3</i></p> <p>Time required: 1.5 hrs</p>	<p>SHADOW PUPPETS</p> <p>Make: Make shadow puppets and scenery from re-used materials. Bring characters to life with materials that were destined for land-fill.</p> <p>Develop: Design and construction problem solving skills with re-used materials.</p> <p>Post Workshop Activity: Students can work in groups creating a performance based on their experience of community & commemoration</p> <p>NSW Syllabus links: <i>HT2-1 HT2-2 EN2-6B DRAS2.1, DRAS2.3 DRAS2.2</i></p> <p>Time required: 1.5 hrs</p>	<p>STEAM PUNK MARIONETTES</p> <p>Make: Make marionettes from re-used materials. Bring characters to life with materials that were destined for land-fill. .</p> <p>Develop: Design and construction problem solving skills with re-used materials.</p> <p>Post Workshop Activity: Students can work in groups creating a performance based on the contribution of a diversity of people on the development of Australia</p> <p>NSW Syllabus links: <i>HT3-1 HT3-2 EN3-5B DRAS3.1 DRAS3.2 DRAS3.3</i></p> <p>Time required: 1.5 -2 hrs</p>

STAGE 1	STAGE 2	STAGE 3
<p>BIG BOX CITY</p> <p>Make: Make use of packaging you would typically find in your own recycling bin to build a collaborative box city. Construct your own buildings, cars, parks, roads and people and bring them together into a big box city!</p> <p>Develop: Simple and accessible construction techniques, an understanding of visual representation</p> <p>NSW Syllabus links: <i>ST1-14BE</i></p> <p>Time required: 1.5 hrs</p>	<p>SUSTAINABLE HOUSE</p> <p>Make: Build a collaborative sustainable house with packaging and other reuse materials. Particular attention is given to passive and active sustainable design and the properties of different construction materials.</p> <p>Develop: Simple and accessible construction techniques, an understanding of visual representation</p> <p>NSW Syllabus links: <i>ST2-14BE ST2-13MW</i></p> <p>Time required: 1.5 hrs</p>	<p>SHELTER SHELTER</p> <p>Make: Working in teams, students are challenged to construct a shelter suited to a specific environment. Teams consider real world issues such as accessibility to building materials and utilities, climate, and geography.</p> <p>Develop: Accessible construction techniques, an understanding of visual representation</p> <p>NSW Syllabus links: <i>ST3-14BE, ST3-10LW, ST3-13MW</i></p> <p>Time required: 1.5 hrs</p>
<p>CREATURE COMFORTS</p> <p>Make: Explore the hidden world of mini-beasts and make a bug, spider, snail or butterfly and a habitat for it to live in.</p> <p>Develop: Simple and accessible construction techniques, an understanding of visual representation</p> <p>NSW Syllabus links: <i>ST1-11LW</i></p> <p>Time required: 1.5 hrs</p>	<p>DIY PACKAGING</p> <p>Make: Design packaging for a product selecting materials based on their specific properties</p> <p>Develop: Simple and accessible construction techniques, an understanding of visual representation</p> <p>NSW Syllabus links: <i>ST2-16P</i></p> <p>Time required: 1.5 hrs</p>	<p>E-WASTE SCULPTURE</p> <p>Make: Learn sculpture secrets from contemporary artists and turn waste into wonderful works of art. Create your own artwork through a process of experimentation with everyday discards.</p> <p>Develop: Innovative waste minimal construction techniques and an understanding of material manipulation, experimentation and repetition. Problem solving skills in art, design and visual realisation.</p> <p>NSW Syllabus links: <i>ST3-16P VAS3.2 .</i></p> <p>Time required: 1.5hrs</p>