EcoBuzz

EcoBuzz Edition 46 Term 2 2012







Kia ora tatou

Term 2 is now well underway and hopefully a fun worthwhile time for you. We offer this latest issue of EcoBuzz to support your work and hope it is useful and inspiring.

It is very easy to feel overwhelmed at the immensity of the troubles looming for Planet Earth - our home. Rather than bury our heads in the sand or become depressed, we invite you to get active with your students – empower them to be change-makers. Don't throw huge issues at them but pick small local ones they can make a real positive difference with - then work with them as a partner in the problem solving. It gives you a break from always having to have the answers and it gives them vital skills to complement the core curriculum requirements.

Do you like the new look for EcoBuzz? We do **J**. Please, please make contact with any of us to share your ideas, give feedback or receive some support – we are here to help.

Thanks Jo, Lindsay, Rob, Adie and Claire





"So the environment is not 'out there', an 'issue' that we can choose to engage in or not. It is part of us, and part of our families and we are part of the environment."

Dr Pita Sharples

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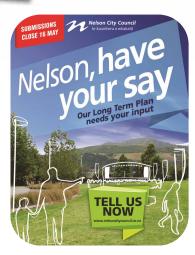
News from the Councils

Make a submission on the Long Term Plan 2012/22

Nelson City Council's Long Term Plan now open for submissions until 16 May.

Our Long Term Plan defines the work we plan to do in our incredible city over the next 10 years - and we need your input!

There are so many important issues to discuss and decisions to make. A ten-year plan presents many opportunities and trade-offs. We have to ensure we do everything with an eye to keeping our rates affordable and sustainable, while making Nelson a great place to live **J**.



So please send us your thoughts. Anyone can submit – a teacher, a student, a group, a class. We want to know what you support, what you don't support, and what's missing. The Long Term Plan Summary (which you can download from the Council website www.nelsoncitycouncil.co.nz) highlights the key topics – but you can submit on anything that is Council's business. One request though – if Room 4 decides to make a submission – please just send one submission rather than 30!

You can submit in writing – but the quickest and simplest way to make a submission is to use the form on the Council website at www.nelsoncitycouncil.co.nz - you will be emailed a copy of your submission once completed.

It's your city and your future - have your say!



L to R: Jane Morrison (Children's Library Assistant), Nicki Green (Nelson Provincial Museum Educator) & Debbie Daniell-Smith (Arts & Heritage Adviser) in front of a panel of Velvet the travelling longfin eel.

A visit from Velvet the Longfin Eel

Have you ever watched the big eels under the jetty at Lake Rotoiti or in the pond at Nelson's Queens Gardens? Or have you fed the Anatoki Eels or Jester House Eels with meat on a stick? Eels are a long standing taonga in Nelson/Tasman and Velvet the Travelling Tuna Tapestry came to visit the Elma Turner Library and Nelson Provincial Museum this schools holidays for Heritage Week. Velvet is travelling the country raising awareness about the amazing Longfin Eel and while she was here more than 100 people contributed to making 4 new panels for her body! Now she has gone to the Waikato but one day she might be long enough to wrap right round the Beehive in Wellington. For more information about Eels and a wonderful story about Velvet the Lake Rotoiti Eel visit Stephanie Bowman's website www.bowmansart.com and click the 'Save the eels' tab.





News from the Councils



Sir Peter Blake Youth Enviroleader's Forum

Nelson-Tasman was well represented at the Sir Peter Blake Youth Enviroleaders' Forum by Mitchell Chandler, Madison Billens, Jazz Lee, Holly Foxwell, Ella Tomsett, Anika Stephenson and Amy Louise Mill. Mitchell said that "the Sir Peter Blake forum was EXCELLENT." He really enjoyed the snorkelling at Poor Knights Islands and said the speakers and presentations were all good. They sailed the iconic sir Peter Blake boat Lion New Zealand from Tutukaka to Auckland Harbour – arriving in at 9pm!

For Madison, "the marine aspect of the forum was a highlight for me, the ability to be so close and see the positive enforcements of marine reserves was amazing. Seeing marine life flourishing in the marine reserves I visited has made me want to check out the marine reserves in the Nelson area and also maybe be a part in enforcing more marine reserves in our region as only 1% of New Zealand's waters are protected by marine reserves."

The Forum is hands on, student driven and is designed to inspire and build the capability of young environmental leaders. Delegates have the opportunity to participate in field trips and workshops, develop leadership skills, and to meet and engage with like-minded contemporaries, inspiring and informative speakers and experts.

Upon returning to their regions they are encouraged to continue with their environmental work and help lead other youth in environmental stewardship **J**.

The Science of Whitebait

Some keen scientists and educators had the opportunity, over the holidays, to find out some interesting facts about whitebait or inanga and their spawning sites, from the expertise of researcher, Dr Mike Hickford. Twenty-one streams in Tasman and Nelson were checked and only two sites did not have evidence of whitebait eggs. See photograph for an example of how small the eggs really are! If your school or learning centre has a coastal stream nearby and you want to do purposeful science and help inanga or whitebait, then contact Jo at NCC or Adie and Claire at TDC to get help with planning. There will soon be educational resources available.







Regional Updates

Ecofest has transport theme this year and there's lots of opportunities for schools to get involved! The expo will be held at the Trafalgar Centre on 18th and 19th August.



Take the Ecofest Challenge and create a vehicle for the Ecofest Alternative-Powered (Toy) Car Competition!
Anything goes as long as it isn't powered by fossil fuels. Think creative!

There's also the annual Funky Fashion Show with 2 Categories for 2012: Recycled fashion and Op Shop Challenge.

Schools are also more than welcome to add a display or to have a stand at the expo. For more information contact Jo Reilly, Event Manager on Ecofest@xtra.co.nz or tel: 03 5433 663.

Transport for Tomorrow's World

We would like to invite students from Nelson/Tasman school to create a vehicle for the Ecofest Alternative-Powered (Toy) Car Challenge! Anything goes as long as it isn't powered by fossil fuels. Think creative! Whether it's solar power or rubber bands, as long as it can move forwards under its own power, it's in!

Rules? Not many – the main one is, as mentioned before – no use of fossil fuels. The other is size – entries can only be up to a maximum length of 300mm. Entries making good use of recycled materials will be viewed favourably, but it's the entrants choice to work out what best fits the challenge. Your Alternative-Powered (Toy) Car 'fuel' is entirely up to you! Solar panels, rubber bands, corkscrews, any innovations that will drive your car!

Entries will be judged at Ecofest, on the weekend of 18/19 August, at the Trafalgar Centre, utilising a 25m straight track and timing devices.

Categories will include Speed; Innovation; Best Use of Recycled Materials; and Sheer Whackiness! We can't wait to see what our creative pool of transport talent in local schools comes up with. Each category winner will receive \$100 cash for their school, proudly sponsored by Bowater Toyota, a division of BMG.

We will need information on who is planning to take part in this challenge by 29 June (end of Term 2), so please contact: Jo Reilly, Event Manager on Ecofest@xtra.co.nz or tel: 03 5433 663.

PS – We are also doing a CO2 car challenge, so if your school creates CO2 powered cars, please let us know and you can enter in that competition also!

Funky Fashion Shows

Ecofest is a joint project by the Nelson City Council and Tasman District Council. One of the goals is to highlight the Reduce – Reuse – Recycle message through the recreated fashion of the Funky Fashion Shows.

Categories for 2012:

Recycled fashion - made from recycled products

Op Shop Challenge – buy a complete outfit

The FunkyFashion show will be held at 12.30pm on both Saturday, 18 August and Sunday, 19 August 2012 at Ecofest at the Trafalgar Centre, Nelson.

Entries are invited for the Senior category (year 9 and upward), and Junior category (year 5-8). There will be limited spaces available, on a first-come-first-served basis.

All entry forms must be submitted by Friday, 20 July. All entries must be available to view by Friday, 10 August (unfinished but nearing completion is acceptable).

There will be a People's Choice Award category for all entries. This will be voted on by the viewing public and announced in local press in the week after Ecofest. Trophies will be awarded for all categories.

Funky Fashion Shows are co-ordinated by Christine Johnston of Labels in Nelson, who can be contacted on wk: 03 546 6556 or hm: 03 547 8376, or email: christine.johnston@live.com.

Regional Updates

Heads Up for 2012 Film Challenge and Workshop Series

This year's entry form for the film challenge will be up on www.theoutlookforsomeday.net in May/ June, but the basics are the same as ever: make a sustainability-related film, any genre, filmed with any camera and any length up to 5 minutes. Anyone up to age 24 can enter, either individually or in a team.

The entry deadline for **The Outlook for Someday** film challenge in 2012 is 21 September.

Building on the success of last year's pilot Workshop Series there will also be film-making workshops throughout New Zealand this year.

Nelson/Tasman workshop: Tuesday 3 July at The New Hub **SIGN UP** at www.theoutlookforsomeday.net to receive updates details about the workshops as soon as they are confirmed! Run by Connected Media Charitable Trust, www.connectedmedia.org.



2012 Teacher workshops:

Curriculum Experiences in the Environment

Science, Technology, Social Sciences, Literacy, Mathematics and Health incorporating Maori Perspectives and Sustainability.

Term Two

Thursday 10 May ~ 3.30 - 5.45pm ~ Nelson Environment Centre (NEC)

Smart Living - Energy and Waste Workshop

Explore Nelson Environment Centre and check out the resources they can offer you around energy efficiency, waste, and gardening. Check out what could work for your classroom: engage in some hands-on activities, make simple solar and water devices, tour their gardens, discover how a biodigester works and eat from their solar cooker (if it's sunny!)

Suitable for Primary and Years 9-10.

Term Three

Thursday 9 August ~ 3.30 - 5.00pm ~ Salisbury School, Richmond

Gardening workshop: "Growable"

You name it, if it involves student learning around healthy gardening practices it has been trialled at Salisbury. 'Kids Edible Gardens' expertise and encouragement for seed saving, companion planting, creative planting ideas, growing in and outdoors – veggies, herbs, edible flowers and seeing weeds in a new light ¤ Suitable for all levels.

Term Four

Tuesday 23 October or Thursday 25 October ~ 9:00am - 3pm ~ Kaiteriteri – Marahau

Whole day Camp focus LEOTC workshop: "Camp it Up"

Experiencing ways to incorporate sustainability into every aspect of camp trips. Travelling by the "Steadfast" sailing ship to Marahau for some hands-on learning and fun ideas for your school camps.

Suitable for Primary level.

For more information: JoMartin – phone 03 545 8728 or email jo.martin@ncc.govt.nz

A Change with Morning Tea practice

A Change with Morning Tea practice reduced food waste and increased healthy eating at First Years Richmond.

Current situation 2011 Morning Tea was provided by the Centre but some of the children did not like it. Leftover food was binned in the pig bucket, which felt wasteful of both food and finances.

How else could it be? Children eating healthy morning tea with no food waste.

Exploring Alternatives involved looking at what other schools were doing and undertaking a survey of parents.

Action Parents came on board at the start of 2012 really

well and feedback was positive, helped by Newsletter photo ideas and good communication.

Reflections A parent noticed the confidence her child had with morning tea and lunch time as a new entrant. Teachers and children see very little food waste for the pigs now, as all leftover food goes back home with the child. This has been an incentive for parents to reduce packaging in their child's lunch and plastic wrapping has been decreased dramatically. Food choices are less processed and increasingly healthier. Next step is to share what parents have done to cut or reduce the waste that goes home.







Heads up!

FREE Enviroschools Teacher PD Retreat at Lake Rotoiti.

Where: Lake Rotoiti Lodge

When: Friday 30 August – Saturday 1 September 2012

NOTE: Teacher release available.

Contact: Jo, Adi, Claire or Lindsay to register expression of

interest.

Term 2 Nelson Enviroschools Cluster Group Meeting

A Practical Workshop exploring inter-relatedness through the family of Ranginui and Papatuanuku

This will be a fun and interactive professional development session using Maori Perspectives resources from the Enviroschool kit, providing practical ideas for the classroom.

Who: Open to all Teachers in Nelson Enviroschool.

Where: Victory School

When: Wednesday 23rd May.

3.30-5 pm

Please join us for a Fair Trade Afternoon Tea in the staffroom first.

RSVP: <u>lindseyfish@xtra.co.nz</u> or

phone 03 5445 302

Schools Taking Action



Nelson College for Girls envirogroup got busy for Earth Hour with a variety of actions to encourage staff and students to conserve electricity.



Two rooms from Tahunanui School spent half a day studying the health of the Maitai river and learning what they can do to improve stream health through the Waimaori .programme.

A group of Nelson College students have swapped their school uniforms for beekeepers' hoods as part of a new course designed to teach practical skills to those finding conventional classes difficult.

The students have become beekeepers as part of completing a National Certificate in Employment Skills, a two-year qualification.

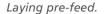


Nayland School students got involved in helping with native fish salvage to allow for gravel extraction and then stream bed restoration in Poorman stream. Ecologist Tom Kroos says "As a matter of interest; if you drained 680m of Poormans Stream from Nayland Road to Wakatu Drive you would find at least 1,644 fish and koura. Just over half of these fish would be longfin eels. That to me is an amazing abundance of fish in such a short reach of stream."

Lauren Baker (pictured), a year 12 student at Nayland College, said: "It was interesting how many aquatic critters were living in the stream. My friends and I really thought we were only going to find half a dozen eels, not hundreds."



Schools Taking Action





Feeding on pre-feed.



The three who did all the pre-feed bait and recording numbers of wasps are from left Jacob Rollo, Jack Kitney and Skye Davis.





Feeding on the bait.

Bait station and warning notice.

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Enjoying Lunch without the

Buzz

How do you feel when there is a wasp buzzing around the sandwich about to go in your mouth? Options for dealing with a single wasp is different to when there are dozens of wasps. Whilst we can appreciate that a wasp is just being a wasp, it is not nice being stung by one!

- •The scene: Maruia School.
- The issue: At certain times of the year, students couldn't even play outside for fear of being stung by wasps. Whilst this is not a new issue, dealing with it is.
- •Scientific study: In partnership with the Department of Conservation, a Nelson based company that has been trialling wasp bait and Reefton based, New Zealand Sustainable Forest Products; the students undertook a scientific trial. Students inspected 20 monitoring stations daily to record wasp numbers. They also came to understand the behaviour of wasps.
- •Time for action: With a licence to use the wasp bait when the near-threat threshold of wasps was reached, 60 stations were set up in the forest and around the edge of the school and community.
- **Results:** Wasp numbers reduced and children could play happily outside. It worked!
- Reflection from Brendon Horrell, NZFP: the partnership was a great experience and has made living around the Maruia forests better, as well as enhancing the local forest biodiversity. Now we will use the results to improve the trial for next year.

If any school has a problem with wasps, please contact Adie or Claire at TDC or Jo at NCC.

Schools Taking Action

Working closely together to achieve great results: Check out our plastic bottle greenhouse!

Hard working students from neighbouring schools helped us build our greenhouse out of plastic soft-drink bottles. This was a good example of how programmes working together can get results:

- Sarah, Small Planet facilitator, got the idea from Hira Kindergarten;
- Nelson City Council funded the roof materials;
- Waimea Sawmills donated the Douglas Fir timber for the frame;
- •the public brought us their plastic soft-drink bottles. They needed to be 1.5 litres in volume and we needed about 1500 bottles;



Aaryn Barlow, Master Builder, dug the foundations.



Aaryn built the frame with Barry, our volunteer.



Nelson Intermediate School team with Lydia, KEGS facilitator, preparing bottles.



We cut the bamboo poles to the right



We threaded them on to the bamboo poles.



We slotted the poles into the frame.



Jakob, our volunteer from Germany, during the Easter school holidays.



Here are the working teams from Nelson Intermediate, Victory and Hampden Street schools.



Aaryn put the roof on.



Waste Education Services



RCN e-Cycle's new e-Waste robot now has a name, E.R.I.C. (E-waste Recycling Is Cool). The name was selected after a two-week nationwide contest that saw over 300 submissions from across New Zealand. The youngest entrant was three years old and the oldest 65.

Over the next few months E.R.I.C. will be out and about meeting and greeting the public at new and existing RCN e-Cycle sites.



Hyperwaste Art Expo

On 22 June we will be staging our Hyperwaste Art Expo on the Cathedral steps. Nelson schools and early childhood centres on the Small Planet and Enviroschools programme have been invited to create a sculpture from materials that may otherwise be considered waste, mounted on a bamboo pole (Bunnings have kindly donated 40 poles!).

Ideally, making a sculpture will be incorporated into a wider waste education programme. The rationale is that students explore the idea that there is no such thing as waste; everything is a resource.

The sculptures will be exhibited from 11am till 2pm and then will be transported to Nelson's children's library, where they will be displayed during the school holidays and be incorporated into the holiday programme, which will have an environmental theme coinciding with Matariki.

The sculptures will be accompanied by a blackboard to capture people's ideas about waste. The public will be invited to bring a paper bag lunch and talk to some of the artists about the ideas behind their work.

If you would like to make a sculpture, please contact Sarah Langi: sarahlangi@nec.org.nz

New teacher resources on electronic waste now available

Educational resources on electronic waste are now available free to schools and communities.

Electronic waste, or 'e-waste', has been described as "the largest toxic waste problem of the 21st century". Luckily, we now have a solution for our growing pile of e-waste: RCN e-Cycle, a national e-waste recycling project, enables New Zealanders to recycle e-waste in a responsible way. To support this important project, RCN e-Cycle has developed educational resources to inform teachers, students and communities of the issues associated with e-waste and how to become part of the solution.

Free to download from the RCN e-Cycle website: http://www.e-cycle.co.nz/education/

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They include a behaviour-change guide and three education units with curriculum plans and activities:

- How to Be Smart and Recycle your Electronic Waste.
- •**The Education Units:** What are electronics? Levels 1&2; Manufacture and recovery of electronics Levels 3&4; Ethics and electronic waste Levels 5–8.

For more info, contact Sarah Langi: sarahlangi@nec.org.nz

The Art Box art exchange

The Art Box art exchange is getting well stocked with supplies of reused/recycled items just right for young children's art creations. The Art Box is for early childhood centres and is open every third Wednesday of each month. The next exchange day is 23 May at 3.30-4.30pm. A membership fee of \$15 per year per centre applies. For more details, please contact Sarah.



Nelson Environment Centre

Chris Fortune comes to KEGS Schools in Nelson

Kids Edible Garden Schools and pupils were treated to an inspirational cooking workshop to start term 2 off with a buzz. Cook Chris Fortune brought his portable self contained kitchen to Hampden Street school to show kids, teachers and facilitators quick, simple recipes they could follow using produce they had grown in the garden.



Levi helps Chris sample their pumpkin Gnocchi with salsa.

Chris shared his knowledge and emphasized the fun element, aswell as the satisfaction gained from eating something healthy that you had grown. Participants also got to try feta and squash crepes. The workshops will be complemented by a 'Kitchen in a box" including recipes and equipment for each current KEGS School.

Many Nelson Schools operate the Kids Edible Garden Programme as an Enviroschool Action Project.It was great to also see facilitators and teachers from KEGS 'Associate schools' who are now self funded aswell as some volunteer facilitators, such as those at St Josephs and Nayland Primary School who were trained in the programme last year.



The Kids Edible Garden Programme includes a Facilitator Training Programme aswell as a Teacher Resource Kit linked to the curriculum for use in the classroom. This is currently being brought into line with National Standards. For further information about facilitator training or programme materials contact Lindsey Fish at the Nelson Environment Centre. lindseyfish@xtra.co.nz or phone 0211460247.

If any school is interested in having Chris in to do a workshop contact him at: http://www.chrisfortune.co.nz/school-cooking-demos

Our passionate and dedicated 2012 KEGS Facilitators with Chris Fortune. From Left to right: Kerry Pearce-Stoke School, Lydia Johnson-Nelson Intermediate School, Chris, Gabi-Auckland Point School and Grace Saunders-Hampden Street.

Energy in Schools Programme

Canterbury Community Trust has renewed funding to Nelson Environment Centre for the Energy in Schools Programme. This programme was developed last year with two pilot secondary schools: Nelson College for Girls and Nayland College. Now NCG has energy embedded into seven curriculum areas and Nayland has made changes that will result in energy savings, e.g. the school initiated a major switch-off campaign over the long summer holidays, replaced louvre windows and lowered ceilings.

With the new funding, the programme resources will be made available to more secondary schools. A new programme will be developed for primary schools and trialled with two pilot schools.

For more info, please contact Sarah. The school teams want to come back this term to finish it and when it is all finished we plan to celebrate. Thanks everyone—awesome!



WHAT'S THE STORY FOOD?

Nourish is an educational initiative designed to open a meaningful conversation about food and sustainability, particularly in schools and communities.

http://www.nourishlife.org/

Go tohttp://www.ecoliteracy.org/downloads/nourish-companion-guides for supporting lesson plans.

New web resource for stream monitoring

Those of you with an interest in freshwater invertebrates may be interested in this new web resource that is targeted at community groups doing stream monitoring. It could also be useful to biology students doing stream invertebrate work.

www.landcareresearch.co.nz/research/biocons/freshwater/

Using worm farms to reduce waste

Western Springs College in Auckland is planning to use worm farms as part of a project to reduce its waste by 50 per cent before the end of the year. With a \$55,000 grant from the Government's waste minimisation fund, it will set up six waste stations on school grounds, each with recycling and composting compartments and a worm farm. The funding will also be used to educate students on waste reduction and to employ an environmental consultant for 100 hours.

http://www.tewahanui.info/twn/ind ex.php/worms-part-of-the-solutionfor-school-waste-managementproject/

Garden Diva

Words aren't needed sometimes –some photos to inspire – waste reduction, gardening and creativity. What can your kids design? (thanks to the Garden Diva for the photos).

















Calendar

5-20 May	Fair Trade Fortnight. <u>www.fairtrade.org.nz</u>					
7-11 May	National Primary Science Week. www.royalsociety.org.nz/2011/12/06//primary-science-week-2012 www.royalsociety.org.nz/2011/12/06					
22 May	International Day for Biological Diversity 'Marine Biodiversity'					
Last Week May	Bee Week. www.nba.org.nz/national-bee-week					
25-27 May	World Vision 24 hour Famine. www.famine.org.nz					
5 June	World Environment Day - Green Economy - Does it Include you? www.unep.org/wed					
5 June	Arbour Day. www.nzarbor.org.nz					
8 June	World Oceans Day. www.doc.govt.nz www.worldoceansday.org/wordpress					
18-23 June	Hyperwaste. Sculptures from reused/ recycled materials by schools and Early Childhood Centres on display in central Nelson. www.wes.org.nz					
21 June	Matariki and Winter Solstice. www.korero.maori.nz/news/matariki					
22-29 June	Leadership week. www.sirpeterblaketrust.org					
7 July	Community Planting Family Day – Tahuna Beach Reserve. www.ncc.govt.nz					

NZASE National Primary Science Week

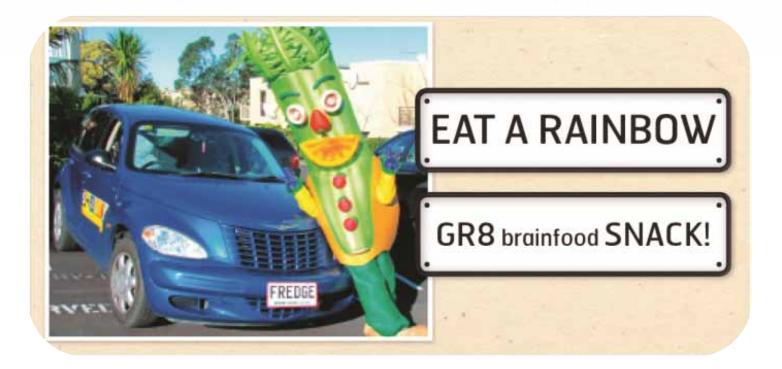
COD AWE WONDER INTEREST

2-7 May 2011



	Monday 7	Tuesday 8	Wednesday 9	Thursday 10	Friday 11	
For Teachers	Cawthron Institute: Teacher PD Event. 3.30- 5pm. FREE Astronomy Night: Jenny Pollack, Nelson Girls College (Venue TBA). 7-9pm	Show and Tell: Come and join Victory staff meeting! 3.30- 5.30pm	Toys in Science: Sterling Cathman aka "Mr Science". Including Nature of Science. Victory Primary School. 3.30-5pm	Chemistry for Kids: Tristan Riley, Nelson Boys College. Victory Primary School. 4- 5pm	Nature School: Natureland's Christine Ewers. Tahunanui School. 3.30-5.45pm	
	Steadfast Sailing: 3.30-5pm. \$25			Smart Living: Energy and Waste workshop. Nelson Environment Centre. 3.30- 5.45pm (Suitable for Primary and Years 9-10)	A Social Gathering: To end the week and meet others interested in Primary Science. Smugglers Pub and Cafe.	
For Schools	The Big Experiment – Monarch Butterfly Tagging. BP Challenge Competition for Science Wee Daily Experiment. A new experiment will be posted each day at http://www.nzase.org.nz/primaryscienceSTRATION: Please register your attendance by email – admin@victory.school.nz Nelson Co-ordinator: Sterling Cathman, sterling@MrScience.co.nz					

Teacher Activities



Activity one: Learning and sharing our understanding about fruit and vegetables

Levels 1 to 4

Visit <u>www.5aday.co.nz</u> - interesting fruit and vegetable facts to gather nutritional information about fruit and vegetables.

Pick Me

Discuss a range of different fruit and vegetables and how different colours help our bodies in different ways.

Ask students to complete the following sentence: If I was a fruit or vegetable I'd be a...

Children draw themselves as their favourite fruit or vegetable.

Children come up with two reasons why they chose that particular fruit or vegetable, e.g. tomato because I can be used in different ways and I'm good for the heart.

Children become a part of a fruit and vegetable store, holding their picture up in front them so they can be easily identified (they may like to group themselves with other similar fruit or vegetables). The teacher leads by example and goes shopping, she fills her shopping cart with those fruit and/or vegetables that 'sell' themselves e.g. tell the teacher why she should include them in her shopping this week.

5+ A Day Picnic

I'm going on a picnic and I'm going to take a mouthwatering mango, who would like to come on a picnic and what are you going to bring. Children quickly catch on to the fact that they can only come on the picnic if they use alliteration with a fruit or vegetable they choose to bring (e.g. gorgeous green grape, enormous eggplant, wickedly wonderful watermelon, etc).

Bumper Crops

Design and decorate a personalized registration plate to promote fruit and vegetables. Display around the room – perhaps make them into mobiles.

Teacher Activities

Activity two: Green Playground equipment

This lesson is designed to show students the bigger meaning of recycling by focusing on what is created from the process. Many commonly recycled materials such as tires, scrap metal, and cardboard are converted into materials used in the construction of green play structures.

LESSON OVERVIEW

Science for years 2 -5 Length: 50 minutes

These activities are geared toward visual, kinesthetic, and tactile learners.

Objectives: After completing this lesson, students will be able to:

- Identify and describe the three R's of waste management: reduce, reuse, and recycle.
- Identify common objects can be recycled for green play structures.
- Identify ways to practice good waste management.

LESSON BACKGROUND

Relevant Vocabulary:

- Reduce: to make something smaller or use less, resulting in a smaller amount of waste.
- Reuse: to use an item more than once.
- Recycle: to process used materials into new products.
- Sustainable: able to be sustained for an indefinite period without damaging the environment, or without depleting a resource; renewable.

Information:

Green playground equipment is not just about a product that represents a lower carbon footprint; it is about the health and safety of the children who play on them. Green, or eco-friendly play structures are safe and healthy for children and they are made from materials that have had less impact on the environment than traditional play structures. Green play structures can be made from a myriad of materials, almost all of which are recycled or sustainably grown, harvested, or created.

Recycled structural plastic, recovered or recycled lumber, old milk jugs or soda bottles, wood that is harvested responsibly from sustainable forests, scrap metal, recycled cardboard, used sneakers and old tires are some of the most popular materials.

Resources:

Earth Day Network's Green Your School – Recreation Page: http://earthday.net/greenschoolsrecreation

NIEHS Kids Page: http://kids.niehs.nih.gov/recycle.htm
EcoPlay Playgrounds: http://www.safeplaysystems.com/

Green Action: http://www.playworldsystems.com/green_action

LESSON STEPS

Warm-up: Favourite Equipment Share

Begin this lesson by discussing playground equipment with your class:

- a) What is your favourite piece of playground equipment? Why?
- **b)** Note: Consider taking students outside for a "playtime," and carrying out part or all of the lesson outdoors!

Lead students to wonder what materials are used to make playground equipment.

Part One: The Three R's

1. Begin this activity by writing 'Waste Management' in the centre circle of a web diagram.

Ask students what waste is. Ask students how they can improve waste management.

Answer: reduce-reuse-recycle. Write these terms in adjacent circles to create the web.

Teacher Activities

Example: Ask students to define these three terms in their own words.

- **a)** What does it mean to reduce? How can you reduce waste?
- **b)** What does it mean to reuse? How can you reuse waste?
- **c)** What does it mean to recycle? What materials can you recycle?

Part Two: It Becomes What?!

- **1.** Divide students into two groups. Give one group of students images of (or actual) commonly recycled materials (photos on left). Give the other group of students images of playground structures or materials made from recycled materials (photos on right)
- **2**. Ask students to see if they can determine which "before-and-after" images match. Have the "before" students find their corresponding "after" students and pair up
- **3.** Once the pairs have determined which materials are matches, ask them to share their results.

Wrap Up:

1. Once all of the student pairs have shared their findings, ask students if there were any pairings they found to be surprising. Why were they surprising? 2. Review with students the ways in which they can reduce, reuse, and recycle.

Extension Activity

- **1.** If your school does not currently have a recycling program, consider starting one. Students could be responsible for collecting recyclable material from each classroom.
- **2.** Did you know that some companies make playground materials out of the rubber from old sneakers? Organize a Shoe Drive with your class and donate used shoes to one of these organizations. We can take them to Rebel Sport in Nelson!!

(Check out http://www.soles4souls.org/donate/ to see this is worldwide). This is a great way to reuse beat-up shoes that may otherwise have been thrown away!

Borrowed from Lindsay DeHartchuck
Earth Day Network www.earthday.net/education



















