



Lesson objective

These activities build knowledge and awareness of sustainable and eco-friendly ways to live. They require children/students to view, identify and discuss the environmental message/s embedded in the dirtgirlworld episode and build on this initial understanding by exploring different ideas/concepts associated with selected materials. Each activity builds a clearer picture for environmentally sustainable choices. Each activity is developed with a curriculum perspective integrated into the learning experience.

Curriculum links: Australian Curriculum

This is an extract from the Australian Curriculum V3.0: English and Australian Curriculum: Science

English	Years F-2	ACELT1586	Recreate texts imaginatively using drawing, writing, performance and digital forms of communication
		ACELY1655	Respond to texts drawn from a range of cultures and experiences
		ACELY1650	Use comprehension strategies to understand and discuss texts listened to, viewed or read independently
		ACELY1788	Use interaction skills including turn-taking, recognising the contributions of others, speaking clearly and using appropriate volume and pace
Science	Years F-2	ACSSU003	Objects are made of materials that have observable properties
		ACSHE013	Science involves exploring and observing the world using the senses
		ACSSU017	Living things have a variety of external features
		ACSHE022	People use science in their daily lives, including when caring for their environment and living things
		ACSIS233	Engage in discussions about observations and use methods such as drawing to represent ideas
		ACSIS024	Respond to and pose questions, and make predictions about familiar objects and events
		ACSIS025	Participate in different types of guided investigations to explore and answer questions, such as manipulating materials, testing ideas, and accessing information sources
		ACSIS214	Through discussion, compare observations with predictions

© Australian Curriculum, Assessment and Reporting Authority 2012

Viewing and interpreting

As a class, view dirtgirlworld Episode 27, Apples, and initiate a class discussion about the different uses for apples. Prompt students with ideas drawn from the episode including how apples are used in everyday cooking.

Make a list of how apples are used and display these as a Word Wall in the classroom.

Exploring and discussing

Class exploration: visit a couple of websites on an IWB, or alternatively navigate individual students through Google to search for the page:

- Apple Fruit Facts Buzzle.com: www.buzzle.com/articles/apple-fruit-facts.html
- What can I make with it: Apples: www.whatcanimakewithit.com/what-can-i-make-with-apples
- Apple and Pear Association: www.apal.org.au/consumers.cfm
- Market fresh: www.marketfresh.com.au/mf.asp#

Draw the students' attention to the *eco-friendly* uses for apples. Discuss the many and varied ways apples can be used, particularly in the kitchen and in the garden. Ask students to draw on their personal experiences to come up with some suggestions such as juicing left over apples, making food with left over apples or creating compost with apples.



Ask students to work in pairs to create a diagram of an *eco-friendly use for an apple*. Refer to the attachment for a sample diagram.

Design and create a classroom tree from recycled cardboard or newspaper. Display the students' diagrams of *eco-friendly* uses for apples on the branches of the tree.

Questioning and investigating

This is a good activity to follow on from the above sequence, or it can be used as a stand-alone activity. Before the lesson, ask students to bring in an apple from home or alternatively ask a local greengrocer for a bag of apples that may be 'past the used by date' but still firm enough to cut, particularly if you would like to highlight the use for uneaten apples!

Allow the students to examine the physical nature of the apple. Cut the apples in half as a cross-section of the apple. You may cut straight down the middle with the apple sitting upright or turn the apple on its side and cut through the circumference. This will give students two alternate views of the apple.

While the students are examining the apple section, ask the following questions to get them to look closer at the physical characteristics of the apple.

- Describe the outline shape of an apple.
- What colour and texture is the outside of the apple?
- What term is used to refer to the outside of an apple? Why?
- What other features can be seen on the outside of an apple? For example, stem, leaf, markings, blossom end, etc.
- What variety of apple is it? For example, Jonathan, Golden Delicious, Granny Smith, etc.
- What other varieties can they name?
- What does an apple look like on the inside?
- What parts make up the apple?
- What is the function of each of these parts?
- When we eat an apple, what parts do we eat and, what parts remain?
- What can we do with the uneaten part of an apple?



Identifying and categorising

Look for a close-up still image of the cross-section of an apple and project this on an IWB or screen in your classroom. You may also choose to use the 'cross-section of an apple' image on:

- The Virtual Apple Parer Museum: http://appleparermuseum.com/AppleAnatomyCrossSection.htm
- What are the layers of an apple: www.ehow.com/list_7524251_layers-apple.html

Ask students to draw the cross-section of their apple and label the cross-section with words used by the students and then compare these to the specific scientific labels for the parts of an apple. This would be a great way for students to learn about scientific terms.

Applying and creating

Discuss with students how apples grow. Have them look for patterns of growth on the inside and outside of the apple. Develop a common understanding about how apples grow and when they are picked or harvested.



Using a variety of paints in the classroom, ask students to take the two halves of their apple and use their apples as stamps on small pieces of cardboard (half an A4 size). The students may like to gouge out some flesh and eat part of the apple and see what happens when they print the apple again, and in a different colour. They can create interesting patterns by overlapping the shapes and turning the apples around to create more complex patterns.

Collect the stamped sheets and use them as decorations for a card or book cover.

Be creative!

