

Year 1



How to save food

Lesson overview can we save our food?



This lesson has been developed to introduce students to the concept of food waste and saving food at home. They will begin reflecting on planning and action at home and school so food is not wasted, while also learning what to do to avoid food waste at home. They will investigate certain foods and decide if they can be consumed, stored correctly for later, or may be wasted; and classify fruit and vegetables into four categories. It is best to do this lesson after recess and/or lunch when the classroom or nearby bins will have food waste in them.

Learning intention



Students will:

- Reflect on the actions of themselves and others at home and school with throwing out and saving food
- Compare, discuss and investigate different foods
- Classify foods as; eat now, store and save, mix it up, or throw out.

Resources



- Access to classroom bin
- Gloves/tongs
- Interactive whiteboard (IWB)
- A variety of foods such as fruit and vegetables, yoghurt, bread, cheese etc. (or photos of) at various stages of ripeness and decay e.g. apples with spots, browned bananas, wilted lettuce
- Butcher's paper or Interactive Whiteboard
- Student worksheet

Differentiation



Support: Research is conducted as a whole class, teacher scaffolds tasks and questions to suit student ability

Structured: Use small group instruction to help support students investigate and discuss the foods

Extension: Students investigate unusual foods from around the world and how they are stored and used

Assessment



- Monitoring understanding throughout class discussion and questioning
- Collecting work samples
- Teacher feedback

Australian curriculum links



Science

Science as a human endeavour - people use science in their daily lives, including when caring for their environment and living things (ASCHE022)

English

English Literacy - Engage in conversations and discussions, using active listening behaviours, showing interest, and contributing ideas, information and questions (ACELY1656)

Lesson introduction



1. Explain to the students that this is a one-off activity to be done with the teacher during this lesson. They are not to remove food from bins at any other times as the bins and food items will be dirty, and the students can be exposed to germs. Discuss the concept of an experiment and ensure they understand that this activity is only to be conducted with a teacher at school. Brainstorm a list of strategies to ensure they are safe from the potential germs located in the bin while conducting the activity.
2. After recess and lunch, using a glove and transparent garbage bag, teacher shows students the waste from the classroom bins and as a class, report back on the types of food that have been thrown out. Record the different food items on butcher's paper or an interactive whiteboard. Introduce the concept of food waste – food that has been thrown out that at some time was suitable to consume.
3. Record all items, even if they are unavoidable, such as; fruit peel, cores, bones etc. Ask students if they think all households might throw out food, discuss how some families save food and avoid waste for a number of reasons such as; wanting to help the environment, not being able to afford lots of food products so they make the food last, wanting to save money, or giving left over food to others in need.
4. Ask students to recall other items of food that have been thrown out at school or home. Record ideas on butcher's paper or whiteboard.
5. Brainstorm and discuss the reasons people might throw out food. Discuss how important it is to save food and how we can reduce our waste to; save money, save rubbish, and to ensure children and families eat healthily and don't go hungry. Explain that one tip is to ensure their fridge is set to the correct temperature. Watch the following short video for more information www.youtube.com

Main body of teaching



6. Display food samples (or photos of) or images of a variety of foods such as fruit and vegetables, yoghurt, bread, cheese etc. Choose one or two that will be completed as a class with teacher modelling and distribute the others around the room for the investigation.
7. Introduce the concept of date labels by watching the following short video. Remind them that fresh products (fruit and vegetables) don't have date labels. www.youtube.com. Tell the students that they are going to investigate the different food samples and sort them into four categories. Introduce the four categories and explain what they mean (see below). Complete the first item of food together, jointly discussing which category it would suit and why.

Eat Now – the food is ready to eat today and will spoil (go bad/off) if not eaten today.

Store and Save – the food will be fine for a few more days if it is stored properly (e.g. refrigerator, crisper, in containers, fruit bowl).

Mix it Up – you probably wouldn't eat the food as it is but if you mix it up and cook/combine/ make it into something else it will be fine, such as putting brown bananas in cakes and smoothies, turning overripe fruit into jam or sauce, peeling and cutting off brown parts of apples to make apple pies, stewed apples, cutting the sprouting eyes off potatoes and making mashed potato, freezing mangos to use later in smoothies, freezing or drying fresh herbs to use in cooking.

Throw it Out – the fruit or vegetable is beyond saving or eating and needs to be thrown out because it has gone mouldy or spoilt. Discuss the places that fruit and vegetable waste can be thrown out such as; into a compost bin, replanted or put in a worm farm as opposed to going in the household or classroom bin.

Main body of teaching



8. Discuss and list the parts of fruit and vegetables that are generalised as 'true waste' – such as apple cores, mandarin peel, pineapple leaves etc. Differentiate between 'true waste' that can't be eaten and 'preventable/avoidable waste' that could have been eaten.
9. Place students into groups of two or three and give each student the investigating recording sheet. Ask them to explore the room, investigating and discussing the different fruit and vegetable samples or photographs. Students then record the different foods on their sheet, using words and drawings.
10. Once finished, the students report back to the class and share their findings with their peers. The teacher records the different answers on butcher's paper or on a whiteboard explaining why each food was categorised under the four headings.
11. Brainstorm and discuss the reasons why the fruit and vegetables on display may be thrown out before they are eaten. For each answer, students admit if this has ever been the reason that they or their household has thrown out food. Some examples include; didn't like the taste, forgot it was in the fridge or lunchbox, left out of the fridge in hot weather, bought too much and didn't get around to eating it all, stored in the fridge incorrectly.

Plenary



12. Ask students to reflect on and suggest answers:
 - How much food waste do you think our school throws out?
 - How much does your family home throw out?
 - What sorts of food are thrown out the most?
13. Share with students some statistics on food waste in Australian households. Discuss the importance of reducing food waste at home. Supporting information can be found on the NSW Love Food Hate Waste website: www.lovefoodhatewaste.nsw.gov.au
14. Ask students to brainstorm three things they can do at home and school to reduce throwing out fruit and vegetables as food waste. Students record on their worksheet. As a class share ideas and decide on three ways to reduce food waste. Record these ideas and display as a class.

Home activity / extension task ideas



For Home

Students take home the worksheet and, under adult supervision, complete a fridge and pantry audit of the fruits, vegetables and leftovers in the kitchen recording where food is stored and which category it best suits – eat now, store and save, mix it up, throw it out. Students should focus on the top 10 items their family likes to eat.

Extension

Ask students to create posters for the three ways the class decided to reduce food waste. Display posters near lunchboxes and bins around the classroom and school.

Extension

As a class, students jointly construct tips and ideas for storing and using fruit and vegetables, which can be sent home to parents or included in the school newsletter.