

Strawberry Ice-Cream Saves the Planet

Lesson plan

Year: 3-4 (ages 8-10)

Subject: Science/Humanities and Social Sciences/Sustainability

Duration: 1 hour lesson

Learning outcomes:

- Students will develop a greater understanding of the three-bin kerbside collection system through collaboration and small group activities
- Students will be able to list the main items that are able to go into each bin.

SCSA curriculum links:

- Science: ACSHE051, ACSHE062
- Humanities and Social Sciences: ACHASSK090

Materials needed:

- Whiteboard and markers
- Projector for videos
- Strawberry Ice-Cream Saves the Planet book
- Strawberry Ice-Cream Saves the Planet comprehension worksheet
- FOGO colouring sheet
- Waste Wise Chatterbox game
- Waste Management wordsearch.

Lesson procedure:

Introduction (10 mins)

Hook: On YouTube, watch the City of Swan clip 'Let's go FOGO – song' (3 -minutes) as an introduction to the topic of the three-bin kerbside collection system. Watch it twice for understanding.

Link: www.youtube.com/watch?v=hAYwWp3zjWE

Write these questions on the board for the students to think about whilst watching the video.

1. What three colours were the bins?
2. What was the lime green bin called?
3. What were some waste items that you saw went into the lime green bin?

After watching, ask these questions to the students:

1. What three colours were the bins?
Answer: Lime green, yellow, red
2. What was the lime green bin called?
Answer: FOGO
3. What were some waste items that you saw went into the lime green bin?
Answer: Any food or garden item (leaves, food scraps etc.)

Activity (35 mins)

Read the book *Strawberry Ice-Cream Saves the Planet*.

Provide each student with a copy of the comprehension worksheet for them to complete about the book.

Once students have completed the worksheet, go through the answers.

Activities for early finishers:

- FOGO colouring sheet
- Waste management wordsearch.

Conclusion (15 mins)

Students create a chatterbox about the three-bin system and play with them, testing each other with the questions.

If time permits, students can create their own waste wise chatterbox using the blank template provided.

Additional activity ideas:

- Create your own poster illustrating what goes into each bin
- Challenge yourself to make your own waste wise chatterbox using the blank template provided.

Strawberry Ice-Cream Saves the Planet

Lesson plan

Year: 5-6 (ages 10-12)

Subject: Science/Humanities and Social Sciences/Sustainability

Duration: 2x 60-minute lessons

Learning outcomes:

Students will:

- Develop a greater understanding of the three-bin kerbside collection system through collaboration and small group activities
- Understand the concept of waste and its impact on the environment
- Identify types of waste and sources of waste in their daily lives
- Explore strategies to avoid and minimise waste.

SCSA curriculum links:

- **Science:** ACSHE083, ACSSU043
- **Humanities and Social Sciences:** ACHGK020, ACHGK022

Materials needed:

- Whiteboard and markers
- Projector for videos
- Waste starts with you! worksheet
- Waste Sorting Guide handout
- *Strawberry Ice-Cream Saves the Planet* book
- *Design a fourth bin* worksheet

Lesson one procedure:

Introduction (10 mins)

Hook: On YouTube, watch the City of Swan 'Let's go FOGO – song' (3 minutes) as an introduction to the topic of the three-bin kerbside collection system. Watch it twice for understanding.

Link: www.youtube.com/watch?v=hAYwWp3zjWE

Have these questions written on the board for the students to think about whilst watching the video.

1. What does FOGO stand for?
2. What are some waste items that went into the lime green (FOGO) bin?
3. What is the purpose of the FOGO bin?
4. What does the verse “make the red bin green with envy” mean?

After watching ask the students for answers to the questions:

1. What does FOGO stand for?

Answer: Food Organics, Garden Organics.

2. What are some waste items that went into the green bin?

Answer: Any food or garden item (leaves, food scraps etc.)

3. What is the purpose of the FOGO bin?

Answers may vary: Protect the planet for future generations; return nutrients to soil; compost organics, reduce methane gas emissions; help the planet; reduce climate change.

4. What does the verse “make the red bin green with envy” mean?

Answers may vary: Filling the bin with all the ‘green’ items that go in there instead of the red bin OR making the red bin jealous with placing items in the green bin instead of the red bin.

Activity one: Book study (15 mins)

Read the book *Strawberry Ice-Cream Saves the Planet*

Students have learned about the three-bin system through the Chapman family’s adventures.

After reading the book, ask them the following questions:

1. What were some ways that the Chapman family reduced the number of extra items they had?

Answer: Sold, gifted, donated, repaired, took hazardous and bulky items to recycling centre, verge side collection.

2. Parties create a lot of waste! Think about Christmas time. What did the Chapman family do to have a waste free party?

Everyone bought a dish to share, pre-loved presents gifted in boxes or wrapped in material, homemade decorations.

3. What waste do you have a lot of at home? Think of things that regularly go in your bins.

Answers may vary: Soft plastics would be a popular answer as well as clothing and shoes.

Activity two: Waste reduction (40 mins)

Divide students into small groups.

Provide students with the Waste starts with you! worksheet.

- Students are to brainstorm some ways to avoid and reduce the waste they create at home
- Then, using computers, students are to conduct internet research into ways that waste can be reduced at home and add ideas to their brainstorm
- From their brainstorm and research, students are to consolidate the top three ideas they would adopt.

Sharing ideas: each group shares can one innovative idea with the class. Write them on the board.

Conclusion (5 minutes)

Review the ideas they have listed on the board. You can discuss whether the methods are practical and/or achievable, and provide examples, if any, of where they may already be implemented.

Lesson two procedure:

Introduction (10 minutes)

Hook: Begin with a short video, How Big The Great Pacific Garbage Patch Really Is? (4 mins)

Link: www.youtube.com/watch?v=vrPBYS5zzF8

Facilitate a class discussion on the video asking students if they were aware of these garbage patches, and if they had realised the magnitude of the problem. Ask them what statistic mentioned in the video they found the most surprising or concerning.

Activity two: Design a fourth bin (40 mins)

Break students into pairs or small groups. Introduce the concept of contamination and ask them if they have heard of this concept before. Create a definition together as a class.

E.g., Contamination – the result of making something dirty or ruined by adding items that are harmful or that do not belong.

Their task is to help address contamination of bins by designing a fourth bin. The bin would be provided to households, so they need to consider household waste.

Provide students with the Design a fourth bin! worksheet and Waste Sorting Guide handout. This material provides a visual representation of the items that go into each bin and those that cannot go into any bin and instead need to be taken to drop off locations. Each group will only need one worksheet.

Scaffolding ideas for lower ability students:

Instead of designing an additional bin, students can create their own poster illustrating what goes into each bin. This can be modelled from information in the Waste Sorting Guide.

Conclusion (10 minutes)

Students share their fourth bin concept through a gallery walk where they can go around the room looking at other groups' ideas.

This can be extended by having each group present their bin to the class.