

No waste Winter Fiesta!

Overall aims:

- Explore the concept of a circular economy
- Explore the concept of a linear economy
- Explore the principles of a circular economy, 1) designing out pollution 2) keep materials in use
- Explore the concept of regenerating natural systems by supporting bees and song birds
- Develop understanding of systems that support a circular economy
- Make predictions
- Enhance fine motor confidence
- Promote entrepreneurship
- identify opportunities to repurpose materials

2 Vocabulary - keywords

Repurpose, reclaim, restore, design, economy, biodegradable, pollination

3 Sustainable abilities developed

- Systems thinking
- Anticipatory competency
- Normative competency:
- Strategic competency:
- Collaboration
- Critical thinking
- Self-awareness

4 Pillars of sustainability included

- Economic
- Ecological
- Social

5 STEAM domains

Science, Technology, Arts, Engineering, Math



6 Teaching methodologies/activity outline

Designate a documentarian.

Ask the children about the last party they went to. What did they eat? Were there paper plates and paper cups? What games did they play? What were the decorations made of? How would you throw a party that designed out waste and pollution, utilised existing materials and even regenerated natural environments?

Explain to the children that they will be hosting a party for their families at the setting while observing the three principles of the circular economy.

- 1) Designing out waste and pollution
- 2) keeping materials in use
- 3) regenerating natural environments

The educator uses the NASA best engineering model as a framework for the project ASK - children identify the problem, requirements that must be met, and constraints that must be considered.

IMAGINE - children brainstorm solutions and research ideas. They also identify what others have done.

PLAN - children choose two to three of the best ideas from their brainstormed list and sketch possible designs, ultimately choosing a single design to prototype.

CREATE - children build a working model, or prototype, that aligns with design requirements and that is within design constraints.

TEST - children evaluate the solution through testing; they collect and analyse data; they summarize strengths and weaknesses of their design that were revealed during testing.

IMPROVE- Based on the results of their tests, children make improvements on their design. They also identify changes they will make and justify their revisions.

At the ASK stage, constraints include designing out waste and pollution and regenerating natural environments by inventing a game that encourages guests to join in to building bee houses and creating decals that will discourage birds from flying into windows.

7 Expected learning outcomes

The child will be able to:

- plan and carry out the Winter Fiesta
- co-host the Winter Fiesta
- explain how the planning of the fiesta designed out waste and pollution
- Explain how the fiesta regenerated a natural system
- Explain how the bee houses and the bird deterrents help regenerate a natural system.



8	Assessment Assign a documentarian and ask them to carry out interviews with co hosts and guests to get feedback on the fiesta.
9	Equipment and materials to be used in learning unit (tools, ingredients etc) repurposed fabric for bunting, newspaper, flour water for pinatas, groceries or home grown food for refreshments, home made cleaning materials, crockery, tin cans, used paper, bamboo canes, screw driver, glue, markers washing up liquid,
10	Kind of setting - lab, kitchen, outdoor etc. Indoors or outdoors,
11	References - source: https://www.greenchildmagazine.com/eco-friendly-birthday-party/ https://ny.audubon.org/conservation/how-create-window-decals-prevent-bird-collisions https://www.pacificbeachcoalition.org/diy-bee-house-recycle/

