Curriculum

Author / Site

Natural Balance

PO Team / All Sites

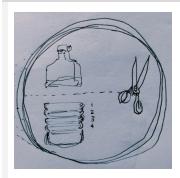
Date

Q2 2018

Series

4 Lessons / 60 Min.

A four-part lesson series where students create a hanging garden from recycled materials







VOCABULARY

Reduce, Reuse, Recycle, Rot, Compost, Oxygen Cycle, Biodegradable,

MATERIALS

PC

Projector

(Spray paint)

(Hot Glue Gun)

⊙ INTERNAL

☼ EXTERNAL

Plastic bottles (variety) Soap & water Recyclable Materials Paper Writing Materials

Paper Writing Materials Paint & Brushes Scissors Rope Soil & Seeds Combos

- Cambodia Media Album
- Afghanistan Media Album
- South Africa Media Album
- Plastic Pollution Website (ORG)
- Field Trip to a Recycling Plant (PBS)

RESOURCES

- 3R's video for lower fitness
- 4R's video for higher fitness
- Plastics in the Environment
- Plastic Bottle Inventions
- Pharrell Williams & Plastic
- A Story of 3 plastic bottles (TED Ed)
- Plastic bottle design
- Macrame knot tutorial

LEARNING OBJECTIVES

- △ Learn about recycling
 - Environmental impact
- △ Invent & Create Designs
 - Drawings & designs for recycled materials
 - Create unique & useful artwork from recycled materials
- △ Learn about gardening process
 - Students experience their plants grow.
- ▼ Students develop recycling vocabulary
- ▼ Students explore the impacts of pollution on their local communities
 - Students examine economic impact of recycling

PREPARATION

- △ Make sure lessons will be taught during the growing season; Spring is perhaps the best option, depending on which plants are used.
- △ Collect enough bottles so students are prepared for the activity.
- △ Prepare a bottle washing station with soap and water
- △ Educators have adapted the lesson for local community needs. All local research is completed and resource links have been added into the lesson plan. All lesson feedback has been shared with supervisors within lesson plan comments.
- △ Educators have identified a safe space for the activity
- ▼ Educators have experienced the full lesson and are familiar with topic and activities. Educators are familiar with all vocabulary and resources before the lesson.

ASSESSMENT

- △ The Nods and Shakes
- Recycling Review

Lesson GUIDES



LESSON 1:

ORIENTATION

15 Min **GET 4: Experiential Learning**

• Pollution in the skate environment allows kids to directly relate to the activities. Learning about plastic in the environment allows the students to solve the challenge so they can skate.

CCC 5: Think Global, Act Local

- Students are asked to think about how this global problem impacts their local communities.
- The lesson orientation ends with students sharing local action: ideas on how we can reuse plastic bottles.

The Polluted Skatepark

Stage an event. Before the session begins, scatter bottles throughout the space. Gather all students together. Call an 'emergency meeting' to announce that there will be no skating today....unless we can solve this garbage problem.

△ Ask the Class

- What are these bottles made of?
- Do you use plastic bottles at home?
- Is plastic bad for our environment?
- Have you seen plastic bottles in the street?
- What are ways we can reuse plastic bottles?

Show Me More

Share Plastic Pollution Website visual examples.

Ask the Class

- How does plastic pollution change the world?
- Why is this important?
- What can we do about pollution?

Bottles



Video of the kid's reactions in SA

Projector / PC

ACTIVITY

30 Min Caution!

The kids will want to play in the water, so be cautious of electronics in case of water fights

GET 3: Child-Centered Approach

• Children take learning into their own hands and take responsibility to solve the pollution problem.

GET 6: Growth Mindset

 Encourage students to explore creative ideas for reusing bottles. There are no wrong ideas here.

Documentation

Take photos of students holding their drawings, or several short videos of students explaining their ideas.

△ Experiencing Recycling

- Bottle collecting and washing. Take the group to pick up bottles and bring them to a washing station. When washing, make sure caps are off and separated from the pile of bottles.
- Learning support. During the activity, pass around examples of other recyclable materials.

∧ Reuse & Invention

- Hand out paper and writing instruments.
- Students draw ideas for how we can reuse our bottles
- Collect all the drawings
- Each student must explain their drawings and ideas when they submit them to the educator

Plastic bottles

Printed Images

- Soap & water
- Recyclable ₩ materials
- Paper
- Writing materials



Attention Span

Keep an eye on your group while they watch the video, and feel free to stop it early to begin the closure exercise

Show Me More

- Share a video. Bring students back to classroom area to watch examples of recycling. Turn the sound off and explain important points.
 - The Story of 3 Plastic Bottles
- Vocabulary. Pause the video at regular intervals to ask the group about key concepts and vocabulary
- \circ PC
- ⊙ Projector



REFLECTION

15 Min Creative Expression

Options for the Reflection

- students have paper and pencils to draw answers to these questions.
- Educators choose one question to focus on.
- The class draws their feelings.

Make sure to leave time at the end for students to share their work in an open discussion.

△ The Nods and Shakes

- Agree Nod head
- Disagree Shake head
- Not sure Raise a hand
- Raise your hand if you feel recycling plastic bottles can help the world to be a cleaner place.
- Keep your hand raised if you feel good about this.

Follow up after class with students who raised their hands ("not sure") to find out how to improve the lesson.

▼ Recycling Review

- What did we do today?
- Why is this important?
- What can happen to bottles that aren't recycled?
- What can recycled bottled become?
- What can you do at home to reduce pollution in the environment?

Writing materials



Writing materials

LESSON 2:

ORIENTATION

STUDENT ACTIVITY

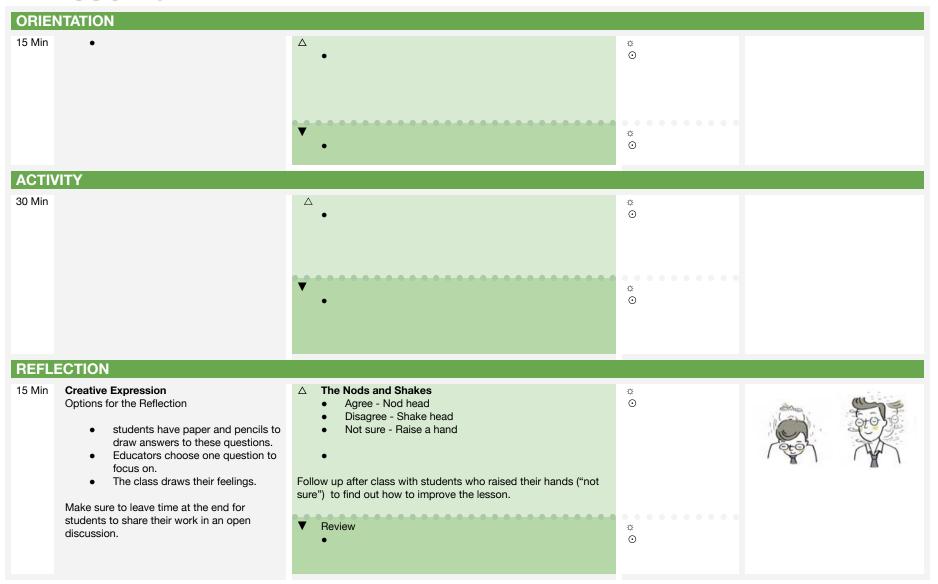
TEACHING STRATEGY

TIME

EXAMPLES

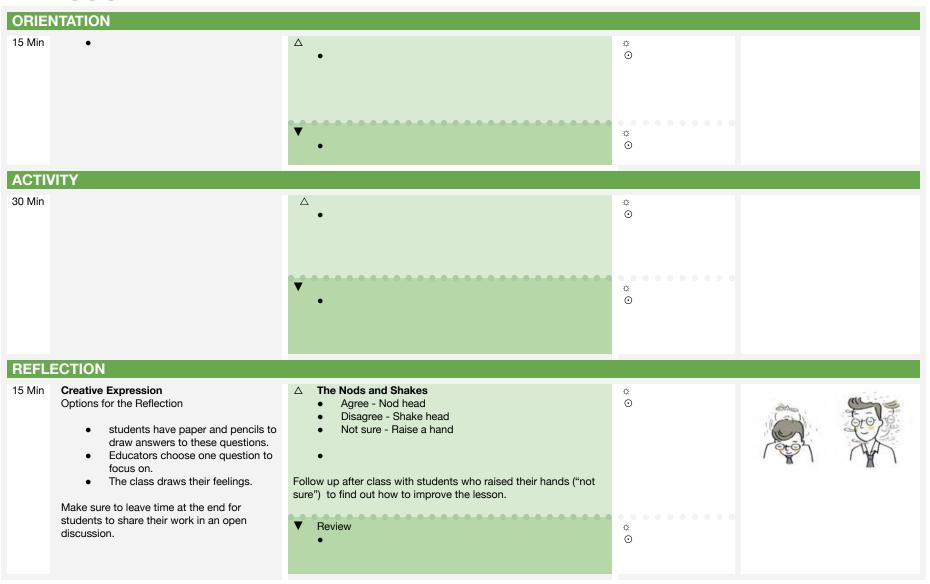
MATERIALS

LESSON 3:



STUDENT ACTIVITY

LESSON 4:



STUDENT ACTIVITY

TIME	TEACHING STRATEGY	STUDENT ACTIVITY	MATERIALS	EXAMPLES