## FAN 3 Sort and Color!

## Lesson Summary

Students learn how to sort their waste into recycling, compost, or trash using the FAN 3 carts in San Francisco.

## Overview

In this lesson, students will:

- Learn what items can be recycled and composted.
- Cut out and color items to be recycled, composted or trashed.
- Sort and paste appropriate items to appropriate bin.

Time
30-45 minutes for lesson

## Background

Every day, people in the City of San Francisco generate 6 million pounds of garbage that gets sent to the Altamont Landfill sixty miles away. Much of this waste can be diverted by recycling and composting. Recycling paper, bottles, and cans helps protect nature and animal habitat. It also conserves natural resources we depend on. Composting helps build precious topsoil and reduce the use of chemical fertilizers by providing nutrient rich compost that is used on local farms and wineries. When we recycle and compost, little is leftover that needs to be thrown into the trash and sent to the landfill.

The City of San Francisco and Norcal Waste Systems, the local waste hauler, have teamed together to create an innovative garbage collection program called The Fantastic 3 (FAN 3) which uses three different colored bins: green, blue and black. By using all three bins, residents can help divert thousands of tons of waste from the landfill while helping save energy and natural resources.

Fan 3 bins are easy to use! All leftover food waste and plant matter go into the green bin. Simply put, anything that comes from a plant or animal can be composted into the green bin. This includes food items like vegetable peels, eggshells, meat bones and dairy products. It also includes yard trimmings and dirty paper products like cheesy pizza boxes, paper napkins, paper towels and milk cartons. The blue bin accepts commingled recycling, which means you can throw all recyclables into the blue bin without separating them. For instance, you can put glass bottles and jars, all plastic bottles, plastic tubs and lids, aluminum cans and foil, tin cans and all paper and cardboard into the blue bin. You can also recycle ALL hard plastics including containers, bottles and even broken plastic toys! The only plastics you CANNOT recycle in San Franciso's blue bin are: plastic bags, plastic film and Styrofoam. Those things have to go into the trash. Other items that go into the trash include shiny plastic potato chip bags, aseptic juice boxes (cartons lined with foil and plastic), plastic straws, plastic utensils and plastic wrapping.


Vocabulary

- Recycle
- Compost
- Trash
- Landfill


## Materials

- Black trashcan
- Blue recycling bin
- Green compost bin
- Aluminum can
- Used piece of paper
- Plastic bottle
- Yogurt tub
- Potato chip bag
- Plastic spork or fork
- Plastic straw
- Apple core
- Banana peel
- Crumpled paper napkin
- Fan 3 Sort and Color coloring sheets (one per student or small group, including three bins per student or group)
- Child safe scissors
- Crayons or markers
- Paste or glue sticks



## Preparation



CA State Standards
Kindergarten Mathematics
S1.1 • Science 1a
Grade 1 Mathematics S1.0, S1.1, S1.2

1. Read background information.
2. Put all sample items listed above (cans, paper, peels, etc.) into black trashcan

## Classroom Activity

1. Hold up a black trashcan and ask students what it is and what might be inside. As they call out answers, hold up relevant items or suggest answers and then hold up items.
2. Explain that when we put things in the trash, they get taken away in big trucks and sent to the landfill. A landfill is a huge hole in the ground where trash gets buried. Landfills are smelly and ugly, and nobody wants them in their town.
3. Ask students if they know what recycling is. Take answers.
4. Hold up a used piece of paper and explain that recycling means we make something new from something old. When we recycle paper, we make new paper out of the old recycled paper. Hold up an aluminum can and a plastic bottle and explain the same thing. Put these things into the blue recycling bin.
5. Tell students that many things like paper, cans, and plastic bottles can be recycled. Show that a bottle is something that always has a neck like we do. Other things that can be recycled include plastic yogurt tubs. Hold up examples and put them into the blue recycling bin.
6. Explain that when we recycle, we help protect nature because we are using fewer natural resources. For example, paper comes from trees, so when we recycle paper we help save trees. Trees are an important part of nature since they provide food and homes for many animals.
7. Ask students if they know what composting is.
8. Hold up the banana peel and explain that instead of throwing leftover food like banana peels into the trash, we can put them into the green bin to compost them. When we compost, leftover food gets eaten by worms and other insects and is turned into dirt that is full of vitamins. This dirt or soil helps farmers grow plants that are strong and healthy. These plants become the foods we eat.
9. Hold up the apple core and ask students which container it should go into and then place into the green bin.
10. Hold up a used paper napkin and explain that dirty paper napkins can also be composted. Put it into the green bin.
11. Quickly review with students making sure they understand which items go in which bins. Have students sort the items.
12. Pass out coloring sheets and ask students to color a green bin, blue bin and black bin and then color, cut and paste the correct item onto the correct bin.
13. As a class, count how many items go in the blue bin, in the green bin, and in the trash. Create a simple graph or chart to represent the results. Compare data and discuss results.
14. Tell students they now know how to recycle and compost! Ask them if they can do this at school and at home.


We protect nature when
we recycle and compost!


