

# Fast facts about waste reduction and recycling

Schools can use these "fast facts" in PA announcements, emails, school newsletters and other publications to educate students and staff about the benefits of waste reduction and recycling.

## Recycling

#### **General recycling facts**

- King County residents and businesses recycle 54 percent of all solid waste generated, yet 70 percent of what is still landfilled could have been reused, recycled or composted.
  King County Solid Waste Division
- Recycling reduces the amount of materials that are sent to the landfill. Garbage that sits in a landfill and slowly decomposes releases greenhouse gases that lead to climate change. – U.S. EPA
- By expanding its recycling program, Margaret Mead Elementary School (in Lake Washington School District) reduced garbage dumpster pick-ups from twice per week to once per week, saving the school district an estimated \$4,000 annually. – *King County Green Schools Program*

#### Paper recycling

- Each year the average U.S. resident uses 650 pounds of paper. UCLA student recycling club
- In 2015, 16.8 percent of the solid waste received at the King County Cedar Hills Regional Landfill was recyclable paper. – King County Solid Waste Division
- An estimated 47 percent of school solid waste is of paper that could have been recycled. – Los Angeles School Waste Composition Study
- Recycling conserves natural resources and saves energy. For example, every ton of recycled paper saves trees, electricity, and water, and results in 74 percent less air pollution, 64 percent less energy use and 50 percent less water use than manufacturing a ton of paper from virgin wood pulp. *Recycling It website*
- Trees absorb carbon dioxide, one of the greenhouse gases responsible for global warming. Recycling one ton of paper saves 17 trees, which can absorb approximately 250 pounds of carbon dioxide from the air each year. *Recycling Revolution website*
- Every ton of paper made from recycled materials saves about 7,000 gallons of water. That means each *New York Times* newspaper printed on recycled newsprint saves about 3.5 gallons of water. - *Washington State Recycling Association*

• A piece of paper can be recycled into new paper up to seven times before the fibers get too short for making paper. After that, it becomes toilet paper, tissue paper and paper toweling. – *Washington State Recycling Association* 

#### Aluminum recycling

- Aluminum is a metal that has to be mined from the earth. Once we have mined it all, it's gone. *Virginia Tech, Center for Economic Education*
- Recycling one aluminum can saves enough energy to run a TV or computer for three hours or the equivalent of half a gallon of gasoline. *Recycling Revolution website*
- Aluminum can be recycled over and over without degrading its quality. It can be recycled forever! *Recycling Revolution website*
- Recycling 23 aluminum cans conserves one gallon of gasoline. Washington State Recycling Association
- The aluminum beverage can returns to the grocer's shelf as part of a new, filled can in as little as 90 days after collection, remelting, rolling, manufacturing and distribution. Consumers could purchase portions of the same recycled aluminum can from a grocer's shelf 4 times a year. *Washington State Recycling Association*

#### **Plastic recycling**

- Nearly 10 percent of U.S. oil consumption approximately 2 million barrels a day is used to make plastic. *Metabolix Bioenergy Company study*
- Supplying the plastic water bottles that American consumers purchase in one year requires more than 47 million gallons of oil, the equivalent of one billion pounds of carbon dioxide that is released into the atmosphere. *Container Recycling Institute*
- According to the Beverage Marketing Corporation, Americans' thirst for bottled water has increased dramatically. In 1996 we bought 2.8 billion bottles of water; by 2010 that number had jumped to 42.6 billion bottles. – *Container Recycling Institute*
- Recycling one ton of plastic saves the equivalent of 3.85 barrels of oil. Washington State Recycling Association

#### **Glass recycling**

- Recycling one ton of glass saves 10 gallons of oil. *Washington State Recycling* Association
- When a glass bottle is recycled, 50 percent less water pollution is produced than when a new glass bottle is made from virgin materials. *Washington State Recycling Association*
- Glass can be recycled again and again with no loss in quality or purity. Glass containers go from recycling bin to store shelf in as little as 30 days—again and again. – Glass Packaging Institute
- Mining and transporting raw materials for glass produces about 385 pounds of waste for every ton of glass that is made. If recycled glass is substituted for half of the raw materials, the waste is cut by more than 80 percent. *Recycling Revolution website*

### Food waste reduction and composting

- Approximately 40 percent of food produced in the United States goes to waste. Wasted food in the U.S. totals 63 million tons, of which 10.1 million tons never get harvested from farms and 52.4 million tons ends up in landfills uneaten. U.S. EPA
- The U.S. spends \$218 billion per year (1.3% of GDP) growing, manufacturing, processing, distributing, and then disposing of food that is never eaten. U.S. EPA
- The land allocated to grow food, the use of scarce resources like water to make it grow, the fossil fuels used to ship it, and the space used to store it are all wasted when food ends up in a landfill. Approximately 21 percent of the United States' fresh water supply and 300 million barrels of oil are used to produce food that goes to waste. Uneaten food is the largest contributor of solid waste in our landfills. U.S. EPA
- And once in a landfill, food waste is a significant emitter of methane, a greenhouse gas that is 25 times more potent than carbon dioxide. *U.S. EPA*
- At the same time that we are wasting 40 percent of our food supply, one in seven people in the U.S. suffer from food insecurity. U.S. EPA
- According to King County's 2015 waste characterization study, 20.6 percent of solid waste sent to the landfill was categorized as food. *King County Solid Waste Division*
- A 2013 study published by Harvard School of Public Health looked at plate waste in several Boston middle schools and found that 40 percent of food served was discarded uneaten. The study estimated the nationwide annual cost of school food waste to be over \$1 billion. U.S. EPA
- As of October 2016, of the 250 schools that have participated in the King County Green Schools Program, 125 schools have collected food scraps and other compostable materials to be transported to Cedar Grove Composting, the area's regional composting facility. Food scraps and food soiled paper can be turned into compost, which helps build healthy soil. – *King County Green Schools Program*



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