



# Styrofoam Education and Recycling Promotion

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Wyckoff Junior Environmental  
Commissioner Sebastian Dash



# What is Styrofoam?

- “Styrofoam” is a trademarked brand name of the Dow Chemical company used to describe a specific type of blue-colored, solid foam board that is mainly used as an insulator in buildings.
- But most people use the word “Styrofoam” to describe a white plastic foam material that we see frequently in our everyday lives



# Types of Styrofoam

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- Expanded polystyrene (EPS)
  - Expanded with air (95% air)
  - More crumbly
  - Individual foam beads are clearly visible.
  - Commonly used in foam packaging materials
  - Marked with the recycling number 6
- Extruded polystyrene (XPS)
  - Smooth
  - Less crumbly
  - Commonly found in food and drink containers

# Pros of Styrofoam

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- Cheap to manufacture
- Lightweight
- Effective insulator
- Durable
- Easily formed into different shapes



# Cons of Styrofoam Part 1

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- Harmful to factory workers who manufacture Styrofoam
  - Exposure to benzene and styrene
  - Benzene is a human carcinogen
  - Styrene is considered a carcinogen particularly for lymphatic and immune systems
- Harmful to consumers using Styrofoam products
  - Consuming hot food and drinks from Styrofoam containers, like hot chocolate, soup, coffee, or foods that have lot of fat like french fries, causes styrene to leach into your food, putting consumer's health at risk.



# Cons of Styrofoam Part 2

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- Harmful to the environment
  - Manufacturing is the 5th largest source of hazardous waste.
  - Made from nonrenewable petroleum-based products, making its production unsustainable.
  - Not biodegradable, taking over 500 years or more to break down in the environment.
  - Wildlife often mistake Styrofoam beads for food. The beads can clog their digestive systems and cause them to starve to death.
  - If people eat fish that have eaten Styrofoam, they could also be ingesting Styrofoam.

# Cons of Styrofoam Part 3

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- Additional statistics
  - 14 million tons of Styrofoam are produced every year globally
  - 25-35% the volume in American landfills is taken up by Styrofoam
  - Less than 1% of Styrofoam containers are recycled in the US.

# Styrofoam Recycling Guidelines

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## Allowed

- White Styrofoam
- Clean Styrofoam



## Not allowed

- Styrofoam that's any color besides white
- Styrofoam used to hold food or drink
- Styrofoam with any tape or labels
- Styrofoam that has any dirt, ink, or water
- Packing peanuts



# My Project

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- Created a 3.5 minute long video with animations on what Styrofoam is, how it is harmful, and how to recycle it.
  - Shown to all Wyckoff elementary school and middle school students.
- Organized a poster contest at the Wyckoff elementary schools and middle school to further promote the ideas shown in the video.
  - Posters were required to use the motto, “Save Our Home, Recycle Styrofoam” and cite at least one reason why recycling Styrofoam is important.
  - Students who won the poster contest had their posters displayed at their respective schools.
  - I was present at the poster contest award ceremony during a Wyckoff Board of Education meeting to acknowledge the winning students.

# My Project Part 2

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- Both the video showing and the poster contest were timed to promote the upcoming Wyckoff Styrofoam Drive that occurred on October 15th, 2021.
  - Winning posters from the poster contest were also displayed at the drive.
  - The drive collected 49 cubic yards of Styrofoam which were then given to Poly Molding in Haskell, NJ where it was properly recycled.

# Video

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# Winning Posters

Save Our Home  
Recycle Styrofoam  
Styrofoam can  
lead to cancer



Clean cups and to-go containers

**STYRENE**  
chemical that causes cancer



Rigid packaging



Egg cartons



Save our home!  
Recycle Styrofoam



## Fact 1

Styrofoam takes over 500 years to decompose!!



## Fact 3

Styrofoam is unhealthy. The chemicals that make up styrofoam leak into food and drinks.

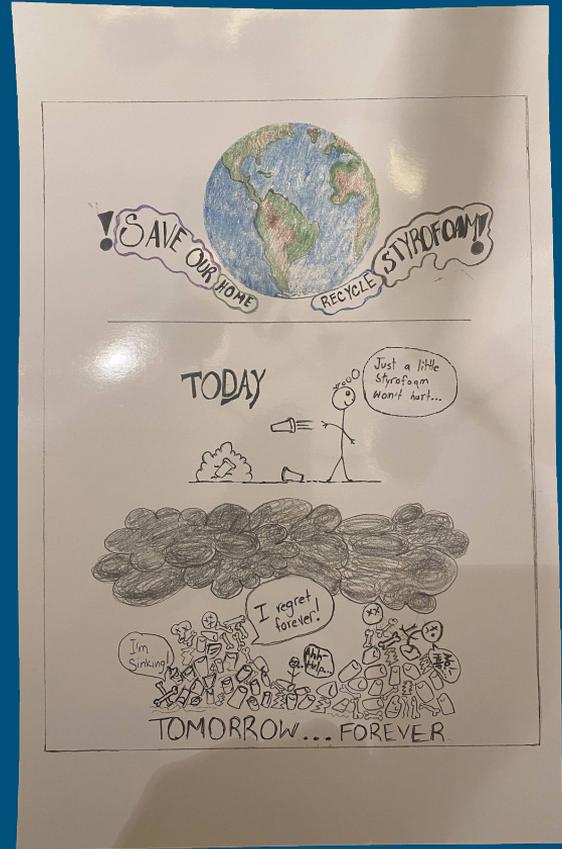
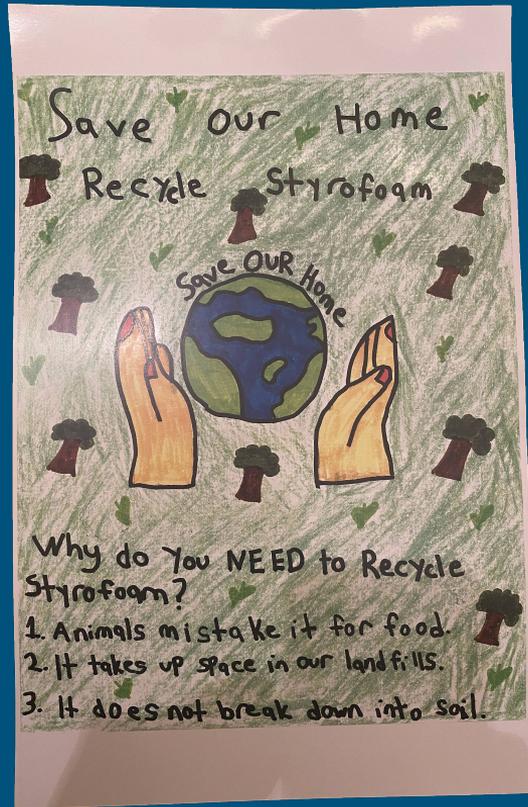
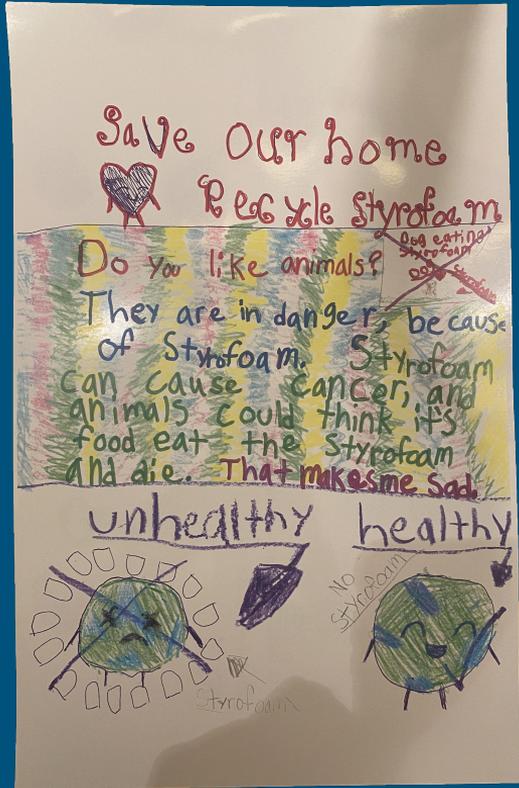


## Fact 2

Animals sometimes mistake styrofoam for food when it breaks down in small pieces.

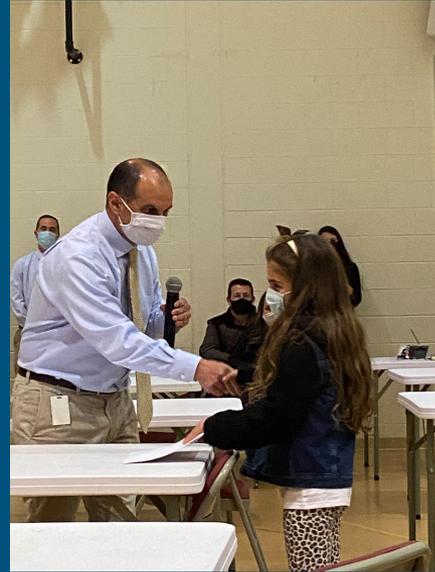


# Winning Posters

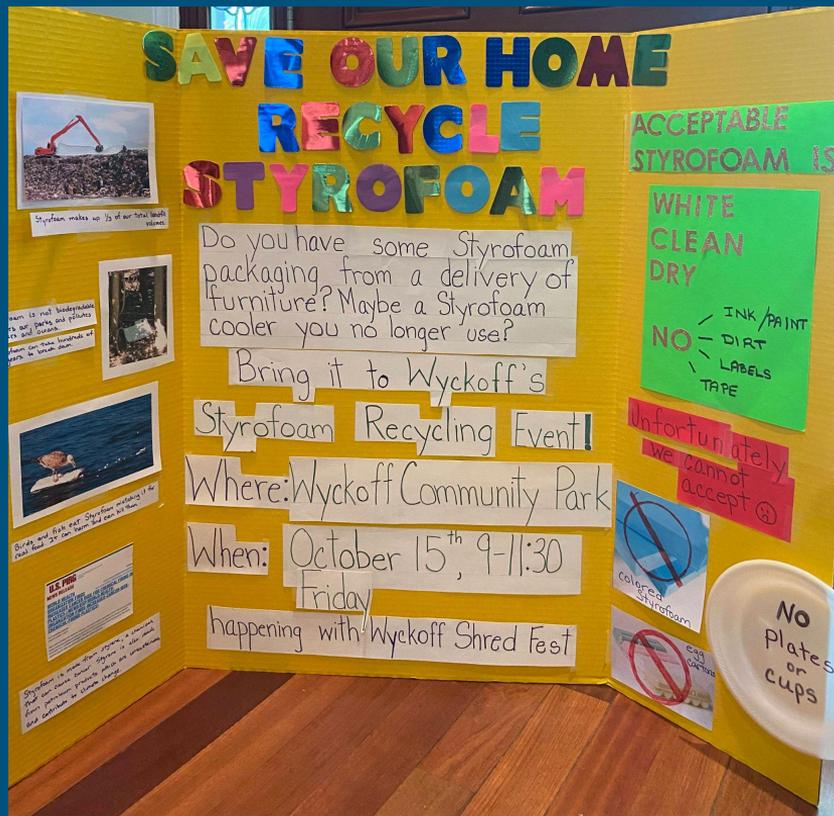
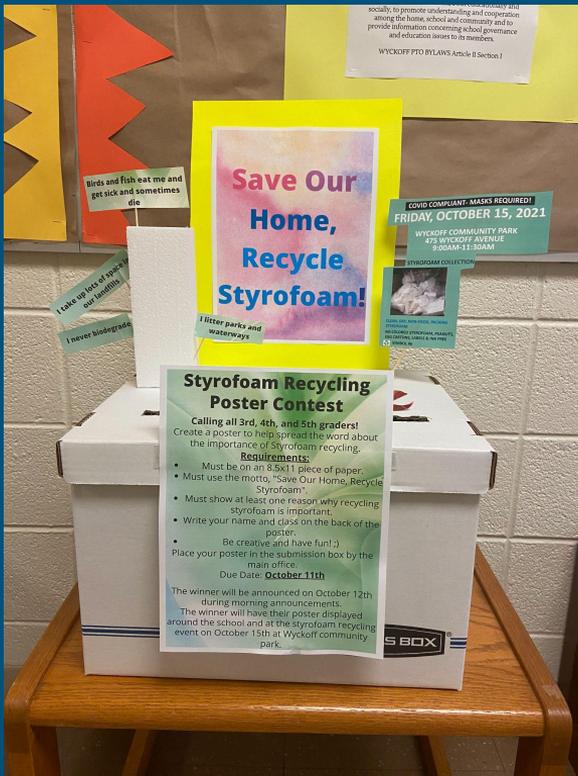


# Poster Contest Award Ceremony

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# Additional Photos



# Additional Photos



# Sources

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