

# Microplastics

A Regional Science Consortium

Education Initiative



Subject: Science

Grades: 4-6

Number of Participants:  
15 groups of 1-3 students

## Regional Science Consortium

# Microplastics

This lesson provides students with an introduction to microplastics through educational information in the form of a recorded PowerPoint lesson, video, and hands-on activity.

## Supply List

### In this kit:

- Digital copies of materials available at [www.RegSciConsort.com](http://www.RegSciConsort.com)
  - Microplastics lesson (ppt)
  - Microplastics lesson (mp4)
  - Educational video
  - Paperwork
    - Introduction (pdf)
    - Activity instructions (pdf)
    - Student worksheet (pdf)
    - Teacher guide (pdf)
    - Skype with a Scientist discussion points (pdf)
- Samples (15)
- Contain dryer lint
- Mesh (120)
- Large (30)
- Medium (30)
- Fine (30)
- Super fine (30)
- Plastic beakers (15)
- Rubber bands (30)

Component	Length
Lesson	10:28
Video	4:20
Activity	30-45 min
Worksheet	
Skype with a Scientist session	15 min

### Provided by educator:

- Paper towels
- Water
  - Added to dryer lint samples

## Goal

After completing this lesson, students will have gained a detailed understanding of microplastics in the environment, their role in Erie, PA, and what actions they can perform to reduce their personal contribution to this global issue.

## Additional Resources

Related RSC Lessons:

- Ichthyology (Coming soon!)
- Marine Debris (Coming soon!)
- Stormwater Runoff

Citizen Science Programs:

- International Coastal Cleanup
  - <https://oceanconservancy.org/trash-free-seas/international-coastal-cleanup/>
- The Big Microplastics Survey
  - <http://microplasticsurvey.org/get-involved>

## Pennsylvania Academic Standards

Grade 4	Grade 7	Grade 10	Grade 12
3.1.4. E	3.1.7. E	3.2.10. C	3.2.12 C
3.2.4. C, D	3.2.7. C, D	4.3.10. A, B	4.2.12. A
3.3.4. A	4.2.7. B, D	4.6.10. C	4.3.12. A, C
4.2.4. D	4.3.7. A, B		4.6.12. A, C
4.3.4. A, B	4.6.7. C		4.8.12. C
4.8.4. C	4.8.7. C, D		