CLEAN AND GREEN (3-5):

Common Core Standards
Reading - Informational: 3.RI.1, 3.RI.4, 3.RI.7, 4.RL.1, 4.RL.4, 4.RL.7, 5.RL.1, 5.RL.4, 5.RL.7
Mathematics: 3.MD.2, 4.MD.2, 5.MD.2

Teachers: Ask each student to bring an empty, 7.5 ounce soap dispenser to class.
Together: Talk about microbeads and why they'll be banned in Hawaii in 2018. Think of the kinds of products that microbeads are used in and why.
Teachers: Break the class into teams. Provide each team with three biodegradable alternatives (e.g. salt, sand, and oatmeal) and three reusable plastic containers.
Students: Fill each reusable plastic container with one ounce of water. Place one teaspoon of hand scrub alternative in each cup. Observe the following:

- Which dissolved the quickest?
- The slowest?
- What caused these results?

Students: In a measuring cup, combine 6 ounces of water, 1.5 tablespoons of castile soap, and 1.5 tablespoons of the hand scrub of your choice. Stir the mixture and pour it into your empty soap container. Think of a name for your product and design a label for your bottle with the permanent markers. Share your product with your classmates.

MATERIALS:

- 7.5 ounce soap dispenser
- Castile soap
- Measuring cups and spoons
- Natural hand scrubs (e.g. oatmeal, salt, and sand)
- Permanent markers
- Reusable plastic containers
- Water

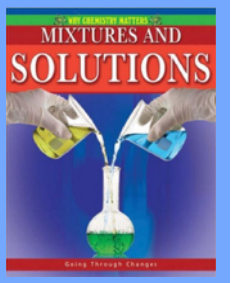
ARTICLE:

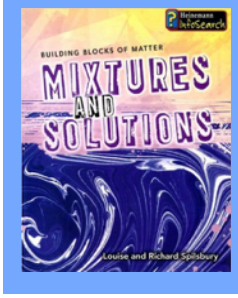
How Plastic in the Ocean is Contaminating Your Seafood, NPR

BOOKS:

Mix it Up! Solution or Mixture?, by Tracy Nelson

Mixtures and Solutions, by Molly Aloian





Mixtures and Solutions, by Richard Spilsbury

HANDOUT:

Microplastic Marine Debris, by the National Oceanic and Atmospheric Association

WEBSITE:

Solutions as Special Mixtures, by Thunderbolt Kids