

Working to Close the LOOP and Promote REUSE



## K-5 Elementary School Material Reuse Curriculum

**K-5 Modules** use dimensional learning appropriate for social studies, art, and science, to teach children about material lifecycles and create trickle-up-education for a more sustainable circular economy. San Francisco Unified School District's Office of Sustainability incorporated the Rubber Impact Project's K-5 educational curriculum modules, within their Earth Day Every Day web resources. https://rubberimpact.org/schoolmodule

## **DESIGN & FUNCTION:**

- **K-5 Elementary School Modules** teach about the material lifecycle of inner tube rubber and reuse opportunities through hands-on maker projects
- Working with bicycle inner tubes introduces students to rubber waste, dead-end material flows, and unique
  opportunities found in the abundant materials around us
- Students learn about the lifecycle of a bike tube and engage in hands-on creative activities
- Modules include techniques for waste inner tube prep and crafting with this engaging "raw" material
- Answers Essential Questions: What is rubber, how is it harmful for the environment, and how can it be used more
  responsibly? How do material lifecycles, recycling, and upcycling relate to bicycle inner tubes? What are some
  options for direct reuse of bicycle inner tubes?

## **BENEFITS of Elementary School Material Reuse Curriculum:**

- Module addresses nonrenewable resources while encouraging the reduction of human footprints
- Content aligns with CalRecycle's Education and the Environment Initiative, Common Core Standards, Next Generation Science Standards, California Art Standards, and themes from NCSS National Curriculum Standards for Social Studies
- Providing curriculum about material lifecycles has never been more relevant and early education means students don't have to re-learn these concepts later on
- · Teachers are eager for engaging sustainability curriculum and fun, low cost, hands on projects
- Inner tube rubber provides students with a free and accessible material they don't often experiment with and one that can be readily worked by students of all ages







▲ Downloadable activity sheets provide instructions for in-class projects

## FUNDING OPPORTINITY for development of K-12 Material Reuse Curricular Modules:

Seeking funding for the development of K-12 individual downloadable curricular modules focued on petroleum based synthetic rubber lifecycles, history of the material, environmental impacts of the material, and opportunities for material reuse.

**The Rubber Impact Project** seeks to engage communities to adopt a mindset and culture of reuse; to create a waste flow that incorporates reuse of inner tube rubber into a circular rubber ecology; and to pressure the rubber industry to move toward greater sustainability and environmental responsibility.

The Rubber Impact Project received the 2019 IMPACT Award from California College of the Art's Center for IMPACT given for groundbreaking approaches and solutions in the field of sustainability and social impact through the lens of art & design.

For more information please visit www.rubberimpact.org