

Grade 3-5 Science Suggestions

Stem Challenges: Help kids stay hands-on and active with open-ended building activities while strengthening understanding in science, engineering, math, and technology. Kids can use any materials they have at home to complete the challenges.

Stem Challenge for the Week: Chain Reaction

Using household or readily available materials, you must create a method for cleaning debris from water in an emergency situation.

The Goal: for unclean water (with bits of dirt, plants, and other debris) to be poured in or over your contraption, and after passing through the water will be more sanitary.

Start: mix dirt, water and salad dressing (or cooking oil) together

Design: a contraption using materials below to pour water over to "clean" the water

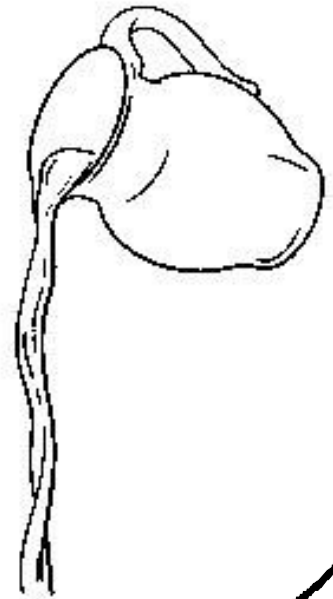
Test: which materials "cleaned" the water best

For this challenge, you can only use the following materials:

aquarium gravel
play sand
cotton balls
coffee filters
cloth

rubber bands
funnels
metric rulers
plastic cups
tap water

water that you have "polluted" with bits of objects and salad dressing



Design Page:

Explain your approach to this challenge
and draw a diagram:

Outcome:

What were the results of this challenge?

Evaluate:

On a scale of 1 to 10, how well did you accomplish this challenge? Why would you give yourself this grade?

Your Grade

What would do differently next time?

Reflect:

How might the skills to complete this challenge carry over into real-world applications?
