Fats, Oil, and Grease Relay Race

Grade Level: Elementary

Duration:
• Prep time: 20 minutes
• Activity time: 10 minutes

Subject Area: Water pollution, sewers

Setting: Large open space, indoors or outdoors

Objective:
Participants will learn about the #1 cause of sewer overflows and backups in Cobb County: residential FOG (Fats, Oil, and Grease). Participants will practice scraping their plates after a meal to prevent pipe clogs, which lead to environmental degradation through sewage being leaked into streams, lakes, and rivers.

Materials:
• Class set of plastic plates
• Velcro (hook side)
• Felt, cut into small squares
• Class set of plastic spoons
• Ping pong balls, marbles, pom poms, or other objects to represent food
• 2 (or more) Rubbermaid tubs labeled “Kitchen Sink”
• 2 (or more) Bucket labeled “Trash”

Background:
Fats, oil, grease, and food can clog home and sewer pipes. Even the use of hot water, soap, and the garbage disposal isn’t enough to break down these substances. Eventually, the grease will cool and solidify, creating a clog in the pipe. Any other solid substances will increase the clog. Eventually the pipe will back up either into a home or out of a manhole.

In addition to being bad for our homes, a sewage spill is bad for the environment. Since manholes are often located near creeks and rivers, leaking sewage often pours directly into the water, adversely affecting aquatic life and the surrounding ecosystem. It can also affect our drinking water supply and be very unsightly.

We can prevent this problem by not putting any grease or food waste down the drain. Plates should be scraped or wiped clean into the trash before being washed.
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The Activity:

Prepare the Activity  Attach the hook (rough) side of the Velcro to the inside of the plastic plates. Sprinkle 10 felt pieces on the Velcro. This represents grease on the plate. Put a handful of “food” in each plate. Set up the playing area with the plates on one side, and the “Kitchen Sink” and “Trash” on the other.

Lead an orientation. Ask participants what they do with leftovers on their plate. If they rinse them down the sink, ask if they know where it goes. Can they think of any problems with washing it down the sink? Discuss how FOG and food particals can harm the sewer system and their home.

Form teams and discuss rules. Divide the group into equal teams. Each team should have their own sink and trash receptacles. Each player receives a plate with grease, food, and a fork. Teams line up on the opposite side from the sink and trash.

The relay begins. The game is a relay, with one person from each team walking to other end of the playing field, scraping their food and grease in the trash, and depositing their plate and fork in the sink. The player then returns to their team and goes to the back of the line. The next player then begins. The first team to complete the relay with ALL their food and grease scraped off and plates and forks in the sink wins. Deduct points for dropping food, running, not scraping their plates clean, or throwing away plates or forks.

Wrap Up:

Congratulate the winning team and remind participants about the importance of not putting grease, oil, or food down the sink. Encourage participants to go home and practice what they’ve learned at their next meal, and share the information with their family.