

Michael's Meals

After Michael finished his lunch, he threw it away responsibly. Some of his lunch included **biodegradable** materials like orange peels and peanut shells while the other things he threw away were **single-use plastics** like a sandwich bag, a water bottle, and a chip bag. After school, a garbage person came and took the garbage away in their truck.

The winds were blowing hard that day and the garbage bag fell off the truck and on to the side of the road. No one noticed. Over time, the garbage bag began to fall apart and the trash inside made its way down to the river below. The orange peel and the peanut shells began to break down and turn into soil. Other pieces of garbage became wedged between rocks in the river and piled along the shoreline where fish, snakes, birds, minks and bears all called home.

The rest of the garbage continued on toward the sea. Tired and beat up from their long journey, Michael's single-use plastics like his water bottle and chip bag began to break apart (but not break down) into smaller pieces called **micro-plastics** as they entered the ocean.

While in the ocean, Michael's water bottle broke up into such small pieces that a fish named Mackerel mistook it for food. Mackerel ate the plastic and began to feel unwell but was still hungry. In his quest for a satisfying meal, Mackerel began to eat more and more plastic pieces that looked like food. Mackerel's friends also ate microplastics from Michael's lunch. When these fish were caught by seabirds, the seabirds ingested the plastic and also became sick.

One day, Mackerel was caught by an angler. By chance, the angler just happened to be Michael's sister, Jane. After her day of fishing in the ocean, she brought the fish home to feed her family for dinner.

Questions for reflection:

- Describe the cycle of Michael's single-use plastics. How many environments did they travel to? How many animals might have interacted with them?
- How do you think eating a plastic-filled fish would affect Michael's family's health?
- How could Michael prevent his plastics from entering the ocean