

Extension #4: Can You Identify Plastics by a Strip Flex Test and Stain Test?

Procedure:

Fill in the chart below with your observations from doing the strip flex tests. Groups will need 30 total strips, five from each of the six types of plastics. Cut the strips from the plastics containers collected by your class.

Directions for the strip flex and stain test: Take a strip of plastic, fold it end to end and then press it with your fingers. Check for cracks in the fold, or a color change. Use tongs when dipping the strip into hot water. Then dip a strip in coffee or mustard to check for staining of the plastic.

Rating scale for flexibility: (1) cracks (2) stiff (3) somewhat flexible (4) very flexible

Rating for stains: Yes or No

Flexibility Tests in these columns.				Stain tests here.		
Kind of Plastic	Control	Boiling water	Ice water	Coffee staining	Mustard staining	Comments
1						
2						
3						
4						
5						
6						

Conclusions:

1. Is it possible to identify a kind of recycled plastic by its flexibility test? Explain.
2. Is it possible to identify a kind of recycled plastic by its stain test? Explain.