

Problem: How will the mystery liquid change the colors?

Information: Colors are spreading a bit but not mixing
Some are settling to the bottom of the dish
Some colors are spreading out more than others

Hypothesis: If the mystery liquid is added, then _____.

Materials: Whole milk (enough to fill the bottom about 1 inch)
Ajax dish soap (orange) in a small cup
Liquid food coloring (4 drops of each color)
Plastic dish with deep sides

Procedure:

- 1) Pour the milk into the plastic bowl so that about 1 inch of the bottom is covered
- 2) Squeeze 4 drops of each color into the bowl to make a diamond shape
- 3) Place the edge of the mystery liquid cup on the rim of the bowl and slowly pour the liquid down the edge of the bowl
- 4) Observe and record information

Data: (pictures for before/after of the pie plate)

Observations: The colors all mixed together then turned brown
As soon as the liquid hit the milk the colors spread all over the place
When the mystery liquid was poured, all of the colors moved to the opposite side of the bowl
The food coloring that sunk to the bottom of the bowl did not spread
After the mystery liquid was poured once, it did not have the same effect if you tried pouring it again
After a while the darker colors went to the top in layers
The colors did not turn brown, but they appeared faded
When we blew on the top of the milk, the colors all mixed and turned green/brown, mystery liquid kept its shape (kind of like oil and water)