

Go with the flow!



Background knowledge

Liquids flow and take the shape of the container into which they are poured. Some liquids feel “thin” and flow quickly, while others feel “thick” and flow slowly. This property of resistance to flow is called *viscosity*.

Science activity

Hunter tested the viscosity of different liquids by pouring each one into a tall jar and timing how long it took for a small lump of modeling clay to drop to the bottom.

Using the chart below, number the liquids in order of their viscosity. Write 1 for the least viscous liquid and 7 for the most viscous.

Liquid	Time taken (for modeling clay to fall)	Order
water	2 seconds	
vegetable oil	4.5 seconds	
olive oil	6 seconds	
nail polish remover	1 second	
golden syrup	90 seconds	
motor oil	10 seconds	
dishwashing liquid	7 seconds	



How long do you think the modeling clay would take to fall through apple juice? Explain.

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Science investigation

Collect different liquids in your home such as liquid soap, molasses, or one of the liquids noted in the above chart. Design and conduct an experiment to see which liquid has the greatest viscosity.

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Science activity

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Using the chart below, number the liquids in order of their viscosity. Write 1 for the least viscous liquid and 7 for the most viscous.

Liquid	Time taken (for modeling clay to fall)	Order
water	2 seconds	2
vegetable oil	4.5 seconds	3
olive oil	6 seconds	4
nail polish remover	1 second	1
golden syrup	90 seconds	7
motor oil	10 seconds	6
dishwashing liquid	7 seconds	5



How long do you think the modeling clay would take to fall through apple juice. Explain.

The modeling clay would probably take just over 2 seconds to fall through apple juice because apple juice is mostly water.

Science investigation

Be sure to use a tall glass in the investigation so liquids don't overflow. The more viscous the liquid, the slower an object will fall through it. The young investigator should drop the same object in each liquid for the most valid comparisons.