

How To...

Day 24: Balance droplets on a coin

Test surface tension and cohesion with this simple investigation. Using just a dropper (pipette) and a coin, investigate how many droplets you can fit on a coin.



Instructions

1. Fill the dropper with water.
2. Make a prediction. How many drops of water do you think will fit on top of the coin?
3. Carefully, add one drop of water at a time to the top of the coin. Hold the dropper just above the top of the coin (not touching it) so each new drop has to fall a short distance before it merges with the drop on the coin.
4. Watch the drop on top of the coin carefully as it grows. It should keep getting bigger and bigger until it touches the edges of the coin.
5. Keep adding drops one at a time.
6. How big does the drop on the coin get before it finally spills over the edges?

What variables could you now change?

- Put the coin on an ice cube
- Use water from the fridge
- Dip the coin in oil before starting
- Add salt to the water

Don't forget to dry off the coin before you start your second attempt!