

Feel like a magician and impress your family and friends with the energy of air.

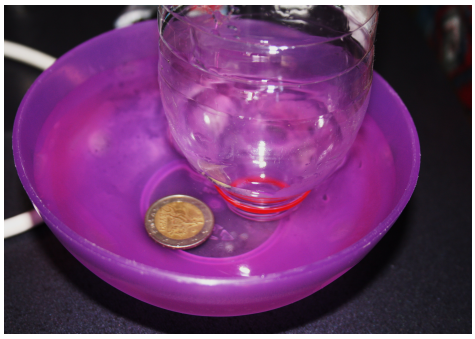
Today you can impress your family and friends with the “jumping coin”. You will feel like a magician because everyone will think that you have magic power but it is really easy. You don’t need help from your parents and you don’t need much time.



Now, let’s start. So what do you need?

1. Cold water in a bowl
2. A bottle with a small mouth
3. A coin that is bigger than the mouth of the bottle

Really important is that the coin is bigger than the mouth of the bottle. If the coin is not it will fall in the bottle and the experiment will not work anymore. So just remember.



After you have taken all the material you fill the cold water in a bowl. Now you put the coin and the bottleneck in the cold water that they get cold. Be careful that the cold water doesn't fill the bottle. Afterwards, put the bigger coin on the mouth of the bottle and put your hands around it and wait for circa one minute and look what happens. Have you seen the coin jumping?

If you want to surprise your family and friends with your magic power you need not explain them how it works but we will explain it to you that you can impress people with your amazing knowledge pf physics. The coin is jumping because of the thermal extension. At first the coin and the bottle have the same temperature. When you put your hands around the bottle the air in the bottle begins to heat up. The warm



air rises and tries to find a way out. The coin is the closing and that is why the coin jumps because the air goes out this way, the only way. All in all this it what makes your coin jump. If the air in the bottle cools down the coin will stop to jump. Have fun with these magic minutes.