



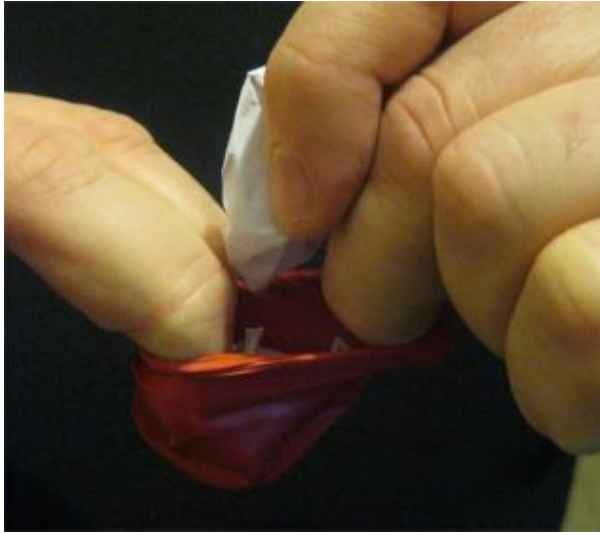
Proton



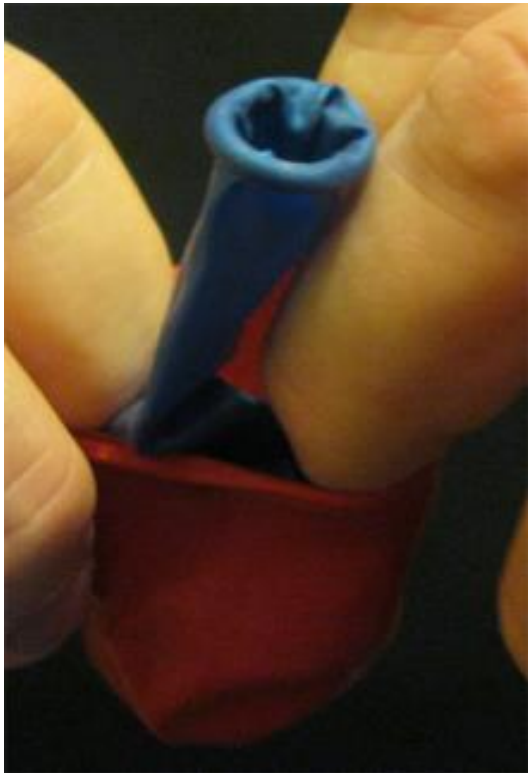
Neutron



Take a red and blue balloon, a neutrino and positron label.



Crumple up the labels into a ball and place inside the red balloon



Then push the blue balloon inside the red making sure you leave enough sticking out so you can inflate it



Once you have blown up the blue balloon you push in the part that was sticking out inside the red and blow up the red balloon.

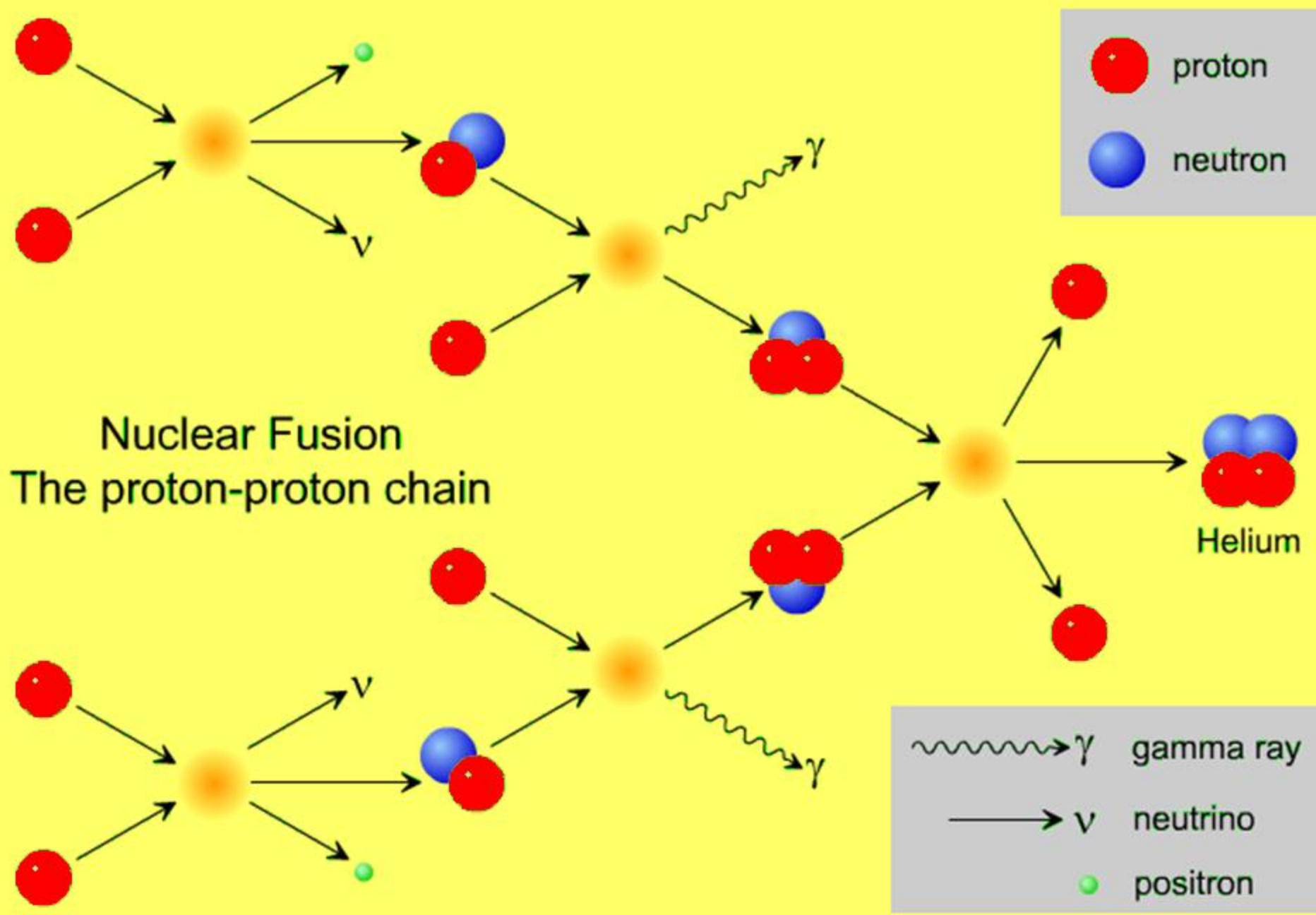


Now you have a proton and can push a pin in it to turn it into a neutron, positron and a neutrino



This then shows beta plus decay, you could simple change the arrangement and the labels to show beta minus decay.

You can also with several balloons show the proton chain for fusing hydrogen into helium



Nuclear Fusion  
The proton-proton chain

Helium

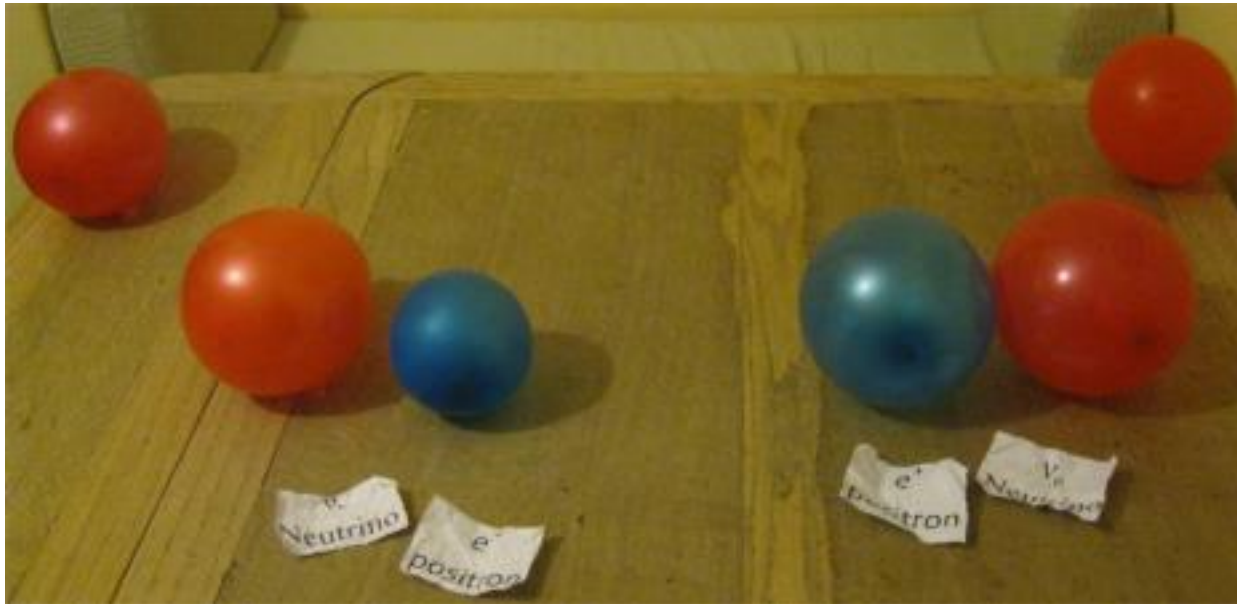
Student then hold the six protons. Two of the balloons have the blue balloon positron in them. These students then wander around. **Students should wear safety glasses.**



Two students bring their balloons together. This needs to happen in two sets, and one of the balloons in each set must have a blue balloon inside it.



The two sets of fused protons then have a beta plus decay turning one proton to a neutron. (Warn the student you are going to pop the balloon, **students should be wearing safety glasses**)



Then the other two protons fuse to make two helium 3 nuclei.





The two helium 3 collide



Then two protons move away and a helium 4 nucleus is formed.

