



Nappy Polymer



You will need:

Nappy, coloured paper, zip-lock plastic bag, scissors, water, salt, teaspoon, food colouring

What to do:

1. Place the nappy on the coloured paper and carefully cut through the cotton lining.
2. Remove all the stuffing material and place in the zip-lock bag.
3. Scoop up any of the polymer that may have spilled on the paper and put into the bag.
4. Seal the bag (blow a little air into it as you seal it to make it puff up like a pillow)
5. Shake the bag for a few minutes to remove the polymer powder from the cotton –it should now rest on the bottom of the bag.
6. Remove the cotton from the bag and dispose of it with the nappy.
7. Add a few drops of food colouring.
8. Slowly add a little water at a time to the polymer in the bag and watch it absorb.

Take it further:

How much water can you get the polymer to absorb?

Now try adding a teaspoon of salt to the mixture. What happens?

DO NOT dispose of mixture down sink or toilet!

The Science:

Lots of polymers are water fearing (hydro phobic) like plastic cups and bags but these superabsorbent polymers are water loving (hydrophilic). You can also buy superabsorbent polymers from the garden shop –the crystals store up water and then release into the soil over time.