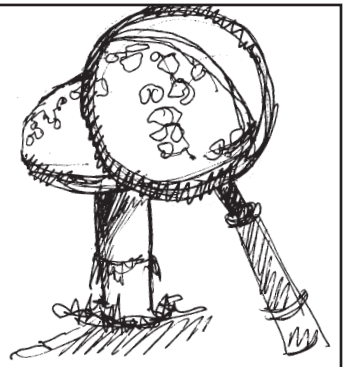
WORKSHEET 8

NOTES

Health and Safety
TAKE CARE WITH BOILING WATER!
ALWAYS WASH YOUR HANDS AFTER TOUCHING FUNGI



DYEING WOOL WITH FUNGI

This experiment shows you how fungi can be used to dye wool a variety of beautiful colours.The dyes come from chemicals that occur naturally in fungi. Different fungi contain different chemicals and so can give different colours.

You will need:
Approximately 100g clean mushrooms, coarsely chopped
Approximately 100g of light-coloured natural wool
A large aluminium, tin or copper pot *
Approximately 3 litres water (2 litres if using dried mushrooms)
A mixing spoon
A straining spoon or sieve
A means of heating water

Tips:
- Different fungi give different colours, so experiment!
- Try varying the amount of fungus to get different shades of colour.
- You don't have to use mushrooms - brackets, jelly fungi and boletes will also work.
- If there is no colour you have probably just been unlucky - not all fungi produce dyes so try again with a different species.

What to do:
1. Boil the water in the pot, add the mushrooms and simmer for 30 minutes.
2. Carefully remove the mushrooms using a straining spoon or sieve.
3. Add the wool to the water and simmer for 30-60 minutes (add more water if the volume is getting low).
4. Allow the wool to cool in the pot, wash in warm water to remove excess dye and dry (e.g. outside on a sunny day or in an airing cupboard).

* Note: Natural dyeing normally requires a colour fixative or "mordant", such as alum (aluminium potassium sulphate). This is not necessary if you use an aluminium, tin or copper pot as the metal in the pot will take part in the dyeing reaction. However, if you use a non-stick saucepan, you should add a few copper coins to the mix.

How can I find out more?
For advice on which fungi to use and the colours they produce:
www.rbge.org.uk/research/celtica/fungi/dyes.htm
To see some beautiful results: www.somamushrooms.org/Dye/body_dye.html