

Chemigrammes and caffinol

In and outdoor, Age 11 – 16, Cost per student in £– 1.00

Curriculum areas – Biology, Science, Art, Photography, Chemistry, ICT, Cookery,

Chemigrammes make use of exposed, light sensitive photographic paper with homemade chemistry to enhance the colours obtained from the reaction of silver with light.

As well as creating images, its unique quality in a classroom is as a 'chemistry lesson' as the developer is made from fairly harmless chemistry found in a kitchen.



What does it do?

They enable people to create 'prints' of leaves and flowers on light sensitive photographic paper. The process is highly erratic, the advantage of which is that there isn't any being 'wrong' or 'better' than others. By complete accident, beautiful images can occur, as can indiscernible blotches! The most important element is interaction and fun.

[Videos and further information here](#)

How do I make the developer? (Video from an island in Croatia [here!](#))

To make 1 litre you will need:

- 125 ml instant coffee, (not decaf).
- 100 ml washing soda (or 35g only, if water free soda is used),
- 20ml vitamin-c



How is the image made?

Exposed photographic paper slowly darkens when exposed to light (see solargraphy) when developer is added, the darkening occurs very quickly. There are loads of variables with type of photo paper and even type of coffee so it's a case of play till you run out of photo paper!



What do I use to make the image?

The traditional approach is to get a selection of leaves, flowers and other objects with a distinctive shape, place them onto the chemistry, let them drain a bit then place them onto the photographic paper. The image will start appearing. Take the leaves off after a 30 seconds and photograph the image. It will carry on changing as time goes by!

How do I save the final image?

The best way is to photograph the image (see phone use) several times over several minutes as the colours and effect will quickly change. The final prints can be washed and dried but preserving them without some fairly yukky chemistry is tricky.

