

Chlorophyll printing

Outdoor, Age 6 – 16, Cost per student in £– 0.00

Curriculum areas – Science, Biology, Art, Photography, Chemistry, History.

Chlorophyll printing creates an image on a leaf. When a leaf is picked and placed in sunlight over several days it will go pale. By placing objects or transparencies on the leaf under a glass frame results in an image. This is an excellent opportunity to talk about photosynthesis with students.

Plan ahead! Chlorophyll images can take up to a week in sunlight. It really is an experiment to return to when the kids in class have forgotten about it!

The best leaves to use are: nasturtium, banana, fig, or vine leaves. Tree leaves tend to be a bit hardy!

Use a positive image of a distinct subject. Even a favourite cartoon character or something related to the sun or plants. Photocopied images on paper don't allow enough light through so print the image onto an acetate. To increase the contrast you can print the images twice and sandwich them together.

Materials:

- Freshly picked green leaves.
- Clip frames
- Acetate templates
- Several days!



Image by Di Bos

Videos

[Ruth Jacobs](#) showing you the process with plants found on an allotment. (best to avoid tearing up local orchids etc!) An accompanying handout is [here](#)

[Almudena Romero](#) a lovely, not too long, video without any chatter but uses some unnecessarily pricy frames etc which can be avoided. It also shows how to make the image more permanent with copper sulphate (which won't be needed in the classroom). I would also suggest not to peek at the images half way through the exposure, however tempting!



Potential pitfalls

Old leaves

It really is important to experiment first with leaves you have easy access to at or near the class room. You don't want several days of expectation to be dashed by a dud leaf!

Initials

Get students to write their initials somewhere on the leaf to prevent fights!

Templates.

As with Turmeric and cyanotype prints, acetate templates can be used either on their own or along with plants, card templates etc, whether to run alongside a project or to appease organisations who are employing you! Make sure you use the correct sheets of acetate so the photocopier

doesn't gunge up with melted the plastic, (if it does,,,walk away slowly!). Leaves require a positive image to make a positive image on the leaf.

Tilting the frame to get the sun (for faster exposure)

Works fine with glass clip frames but the safer plastic frames are more bendy which can result in the leaves etc falling off the paper. Best to keep them flat.

Plastic frames are safer to use with smaller children however they aren't great at keeping the objects pressed firmly onto the paper. Best to reassemble the frames yourself.

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