## Enlarging a photograph or drawing

"How to enlarge a photograph or drawing?" This is interesting if you are working on the basis of reference material (e.g. a photograph) and want to make a larger artwork. In particular if you are making a realistic artwork, you want the proportions to remain correct. Of course, you can always measure the proportions with a ruler, but this requires a lot of calculation. Fortunately, various techniques and tools exist that can help you.

The best-known example is probably the grid technique. In this case, the reference material is divided into a grid. You can draw a grid directly onto a reference photograph, or use tracing paper (translucent paper). For instance, you can draw a grid with squares of $1 \times 1 \mathrm{~cm}$. Also draw a grid on your empty canvas or sheet of paper, but with larger squares, e.g. of $2 \times 2 \mathrm{~cm}$. Then copy what you see in the squares of the reference material onto the larger squares of your canvas / sheet of paper.


Another method is the use of a so-called scale divider. A scale divider resembles a pair of compasses, but the pivot can be adjusted. This makes it possible to determine the scale. Use the smaller end of the scale divider to gauge the reference material. Then use the larger end of the scale divider to transfer the right proportions to your canvas / sheet of paper. Of course, you can use a scale divider in combination with a grid.
If your drawing skills are not relevant to your artwork, you can also print the reference material on a larger scale (possibly in segments). In this case, the reference material has the same size as you artwork. It is still possible to transfer the image to your canvas / sheet of paper by means of a grid. However, in many cases it is easier (and quicker) to use transfer paper. This is a kind of carbon paper which can be used to transfer the reference material to your canvas / sheet of paper. Most people first trace the reference material onto tracing paper (translucent paper). Or
they first make a line drawing on tracing paper and only use carbon paper for transfer to the canvas / sheet of paper.


The most expensive method is the use of a tracer projector. This is a type of overhead projector you can use to project the reference material on the canvas / sheet of paper. To do so, you need to hang the canvas / sheet of paper. Such tracers are available in simple and in very advanced versions.
These are just a few examples of the techniques and tools you can use to enlarge an image.

## Activity:

- Make a drawing or look for a picture you want to enlarge.
- Determine the size of the artwork you want to create.
- Use the grid technique. Watch the video to learn how to apply the technique.
- Make your artwork.

Success!

