

Printing with RC Paper

TURN OFF WHITE LIGHTS -- ONLY RED SAFE LIGHTS MAY BE ON DURING PRINTING! IF YOU EXPOSE YOUR PAPER TO LIGHT OTHER THAN THE RED DARKROOM SAFELIGHTS, YOU WILL RUIN (FOG) IT AND YOU WILL HAVE TO THROW IT OUT!

Step 1 -- Handling your negative by the edges, put it in a carrier so that the words on the edge of the film are easily read (not upside down). When you close the carrier, be careful not to flip it so the words become upside down – you want them to be right side up. With horizontal shots, you want the top part of the image to be closest to you, with the words able to be easily read (sky closest to you). It doesn't matter what direction vertical shots are put in since you will be printing the image sideways. If there is any visible dust, use a can of air to blow it off, or wipe it with an antistatic cloth. DO NOT use your fingers – they are dirty and will smudge your negative! DO NOT use any old piece of cloth; it will scratch your negative. DO NOT blow on it, you will spit!

Step 2 -- With your negative in the enlarger, put a filter under the lens on the holder, or above the lens in the condenser chamber (make sure to close the chamber door tightly or you will fog your paper!) Start with a 3; you will change them to control the contrast later.

Step 3 -- Make sure enlarger and timer are plugged in and turned on. On the timer, find the button that says focus. Switch this on. The enlarger light should turn on, and you should see the projected negative. Turning the focusing knob, get your image in approximate focus. You may need to move the enlarger head up or down to make it the appropriate size. Using a grain focuser, turn the focusing knob until you can see the dots from the grain. Twisting the bottom part of the lens, set it to f 5.6 (align it with the line or make it light up depending on the lens). Make sure that the filter holder is not casting a shadow on the corners of your image if it is one found under the lens. Turn off the focus button. Set the timer to 3 seconds. Your enlarger should not be casting the projection of your negative; it should be dark.

Step 4 -- Cut a sheet of paper into four vertical strips. Put three back in the bag and seal it tightly. Put one under the edges of the easel. Take a piece of matboard and cover all but an inch of the test strip. Hit the expose button on the timer, not moving the matboard until the light turns off. Move the cardboard up another inch, then hit expose again. Repeat until you expose the last of the paper. Count how many times you do this, or mark with a pen or pencil where the cardboard is every time you move it.

Step 5 -- Using the tongs, submerge the strip of paper in the developer

completely. Holding edge of tray with your forefinger, rock slightly for 2 entire minutes. DO NOT STOP ROCKING TRAY! Using tongs, pick paper up and drain.

Step 6 -- Being careful not to dip developer tongs in stop bath, drop the strip of paper in the stop bath and use the stop bath tongs to submerge it completely. YOU WILL RUIN THE CHEMISTRY AND STAIN YOUR PRINTS IF YOU CONTAMINATE THE TONGS! Holding edge of tray with your forefinger, rock slightly for 5 seconds. DO NOT STOP ROCKING TRAY! Using tongs, pick up paper and drain.

Step 7 -- Being careful not to dip stop bath tongs in fixer, drop the strip of paper in the fixer and use the fixer tongs to submerge it completely. YOU WILL RUIN THE CHEMISTRY AND STAIN YOUR PRINTS IF YOU CONTAMINATE THE TONGS! Holding edge of tray with your forefinger, rock slightly for 2 entire minutes. DO NOT STOP ROCKING TRAY! Using tongs, pick up paper and drain.

Step 8 -- Using the fixer tongs, drop the strip of paper in the water tray and use them to submerge it completely. IT IS JUST WATER, AND WILL NOT CONTAMINATE THE FIXER! Rock a few times to rinse print. Using tongs, pick up paper and drain, then place in empty tray and take out into classroom for viewing

Step 9 -- Find the strip where your image does not look too dark or too light. Pay particular attention to the shadows, making sure that it's not so dark that you can't see the details, but watch that there is information recorded in the highlights as well.

*If the whole strip is too dark, close down your lens (the number will get bigger, the light will get darker). Repeat steps 4 – 8.

*If the whole strip is too light, open up your lens (the numbers will get smaller, the light will get brighter.) Repeat steps 4 – 8.

Once you have a strip where your image does not look too light or too dark, figure out what time that slice was made at. With a 3 second interval, the lightest strip will be 3 seconds, the one next to it will be 6 seconds, then 9 seconds, then 12 seconds – just keep adding 3 seconds to the last number. Note how much time you need to make your exposure. If it is 3 seconds, you must close down your lens (the number will get smaller) and redo the test strip.

Step 8 -- Set the timer for the time you figured out in step 7. Put a strip of paper under the enlarger and hit the expose button. Repeat steps 5 through 8. If you think the print is too light or too dark, adjust the exposure time accordingly – more time will make it darker, less will make it lighter. Exposure time is where you can finesse the detail out of the shadows, and the next step is where the highlights will get closer attention.

Step 9 -- Once you have the time figured out, examine the highlights.

- If they are flat and gray compared to the shadows (LOW CONTRAST), change to the next highest numbered filter. Keep moving up until you are happy with the print. If you start using a 4 filter and up, be careful that you are not going overboard and making the print too contrasty (You want there to be details in the whites, not pure paper white!) If you do decide it is necessary to proceed, you may need to add time to your exposure to compensate for denser filters.
- If they are too bright, with not enough detail for differentiation between paper white (HIGH CONTRAST), change to the next lowest numbered filter. Keep moving down until you are happy with the print. If you start using a 1 filter and down, be careful that you are not going overboard and making the print too flat. (You want there to be some white in there!) If you do decide it is necessary to proceed, you may need to add time to your exposure to compensate for denser filters.

Step 10 – Make a print of the image once you have it figured out. If you are printing more than one photograph, keep the prints in a tray of water that you change every half an hour. When you are done printing, move the prints ONE BY ONE into a tray of fixer remover. IF YOU MOVE THE WHOLE BUNCH AT ONCE, YOU MAY RUIN THEM AND MAKE THEM STICK TOGETHER! The need to be in the fixer remover for 2 minutes, being rotated top to bottom if there is a stack of six or more, or just soaking if there are 5 or less.

Step 11 – Rinse each print off under running tap water, then place in a tray to carry to the print washer. You may wash ten at a time in the washing tray which is set to fill at a medium speed. They need to be here for at least ten minutes.

Step 12 – One print at a time, put on Plexiglass and squeegee excess water off of print, being careful not to pull up the edges. It helps to keep a hold on one corner so the print doesn't plaster itself to the Plexiglass. Put paper on screen face up. Dry overnight. Pick up promptly next day to prevent damage; otherwise they will moved to the top drawer of the filing cabinet.

While printing, make sure to take breaks and go outside for fresh air AT LEAST EVERY HALF HOUR. PHOTOGRAPHIC CHEMISTRY IS NOT GOOD FOR YOUR HEALTH! Keep food and drinks on the table in the classroom so it is not accidentally confused with chemistry or contaminated. Wash your hand with soap and water before touching your face, eating, or smoking.

PHOTOGRAPHIC CHEMISTRY STAINS CLOTHING, so wear an apron or old clothes. If you have any concerns about what exactly you are using, consult the MSDS sheets located in the classroom.

EXPOSURE
CONTROLS
SHADOWS,

CONTRAST
CONTROLS
HIGHLIGHTS!