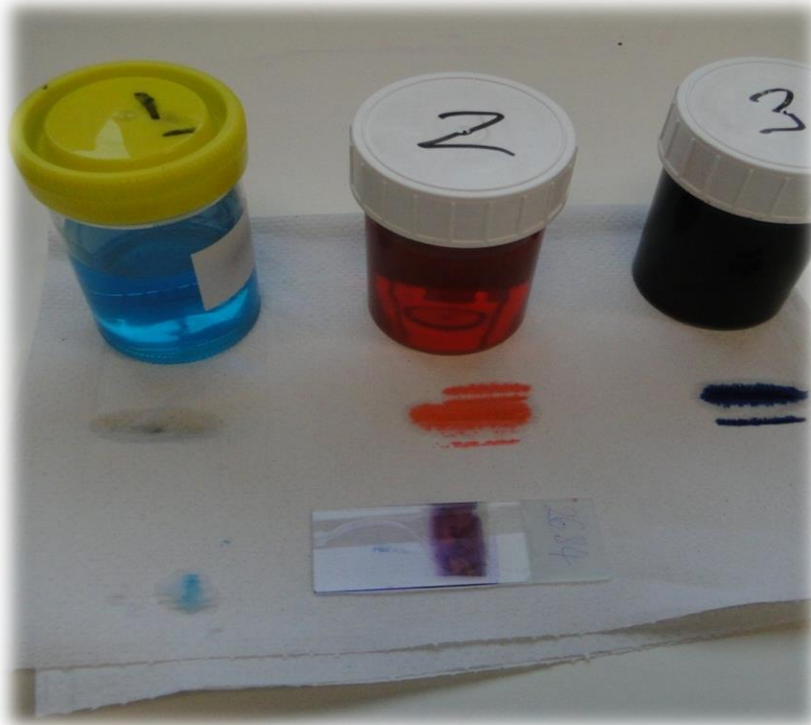


# Diff-Quik Staining



## Disclaimer

A series of booklets has been developed by the Clinical Skills Lab team (staff, recent graduates and students) from the School of Veterinary Sciences, University of Bristol, UK.

Please note:

- Each booklet illustrates one way to perform a skill and it is acknowledged that there are often other approaches. Before using the booklets students should check with their university or college whether the approach illustrated is acceptable in their context or whether an alternative method should be used.
- The booklets are made available in good faith and may be subject to changes.
- In using these booklets you must adopt safe working procedures and take your own risk assessments, checked by your university, college etc. The University of Bristol will not be liable for any loss or damage resulting from failure to adhere to such practices.

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Year Group: BVSc3 +



## Equipment list: Diff-Quik Staining

### Equipment for this station:

- Diff-Quik stain solutions in screw top pots (x3)
- Sample slide e.g. blood smear ('CSL\_L02 Blood Smear') or tape strip ('CSL\_P03 Tape Strip')
- Sink and tap
- Paper towel
- Gloves

### Considerations for this station:

- Diff-Quik will stain your fingers – wear gloves
- Microscope slides must be disposed of in a sharps bin
- Anything contaminated with blood must be disposed of in a clinical waste bin (unless it is sharps).
- Make sure you are familiar with 'CSL\_I02 Lab Area Rules': wear a correctly fastened lab coat/scrub top, mop up any spills and spray work surface with 1% Virkon and wash hands in the hand wash sink.

Anyone working in the Clinical Skills Lab must read the 'CSL\_I01 Induction' and agree to abide by the 'CSL\_I00 House Rules' & 'CSL\_I02 Lab Area Rules'

Please inform a member of staff if equipment is damaged or about to run out.

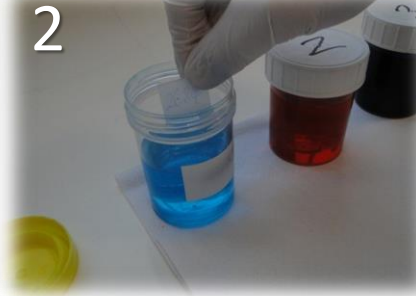


# Clinical Skills: Diff-Quik Staining



1  
Diff-Quik solutions should be stored in air tight containers to avoid evaporation or spillage.

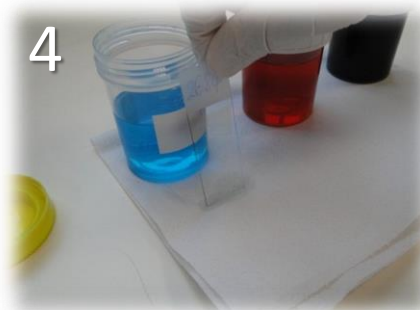
Start by opening all three pots.



2  
Gently dip the slide into staining **pot 1** (Fixative solution) for one second...



3  
... and remove.  
Repeat - dipping the slide a total of 5 times, each time lasting 1 second.  
*(It takes 1 second to say "one thousand")*



4  
Drain excess fluid onto the paper towel.



5  
Dip slide into **pot 2** (Solution A, eosinophilic stain) for one second...

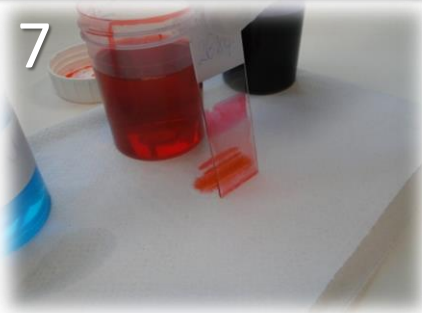


6  
... and remove.  
Repeat - dipping the slide a total of 5 times, each time lasting 1 second.  
*(It takes 1 second to say "one thousand")*



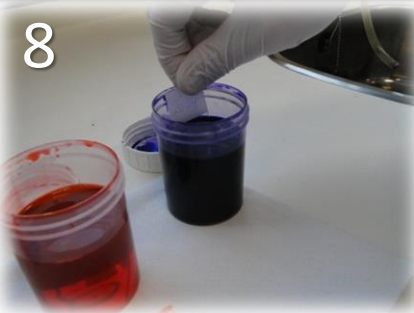
# Clinical Skills: Diff-Quik Staining

7



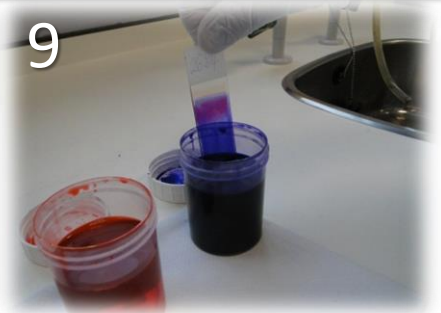
Drain excess fluid onto the paper towel.

8



Dip slide into **pot 3** (Solution B, basophilic stain) for one second...

9

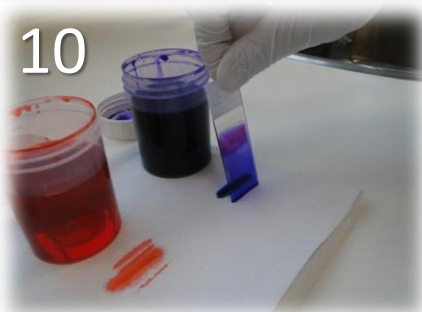


... and remove.

Repeat - dipping the slide a total of 5 times, each time lasting 1 second.

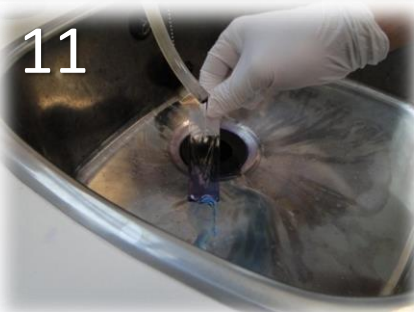
*(It takes 1 second to say "one thousand")*

10



Drain excess fluid onto the paper towel.

11



Rinse the slide with the rinse buffer solution or under gently running tap water until the slide is pink and the water runs clear.

12



Rest the slide vertically and allow it to air-dry. Do not wipe or blot the top of the slide with tissue or you will remove or destroy the cells.

Microscopic examination can be performed when the entire slide is dry.



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## Resetting the station: Diff-Quik Staining

1. Dispose of microscope slides in a sharps bin
2. Close all the Diff-Quik pots securely
3. Wipe up any spills and leave the area clean and tidy
4. Anything contaminated with stain etc. (e.g. tissue, paper towel, etc.) must also be disposed of in a clinical waste bin

*Station ready for the next person:*



Please inform a member of staff if equipment is damaged or about to run out.



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## I wish I'd known: Diff-Quik Staining

- Prepare the area to dry the slide first, and consider where will be the best place to open the pots (avoid getting stain on your hands or clothing – wear gloves and a lab coat, apron or scrub top).
- Always have spare paper towels and Virkon spray on standby for those spills – clean any spills immediately!