*Counting cells workshop August, 2015*

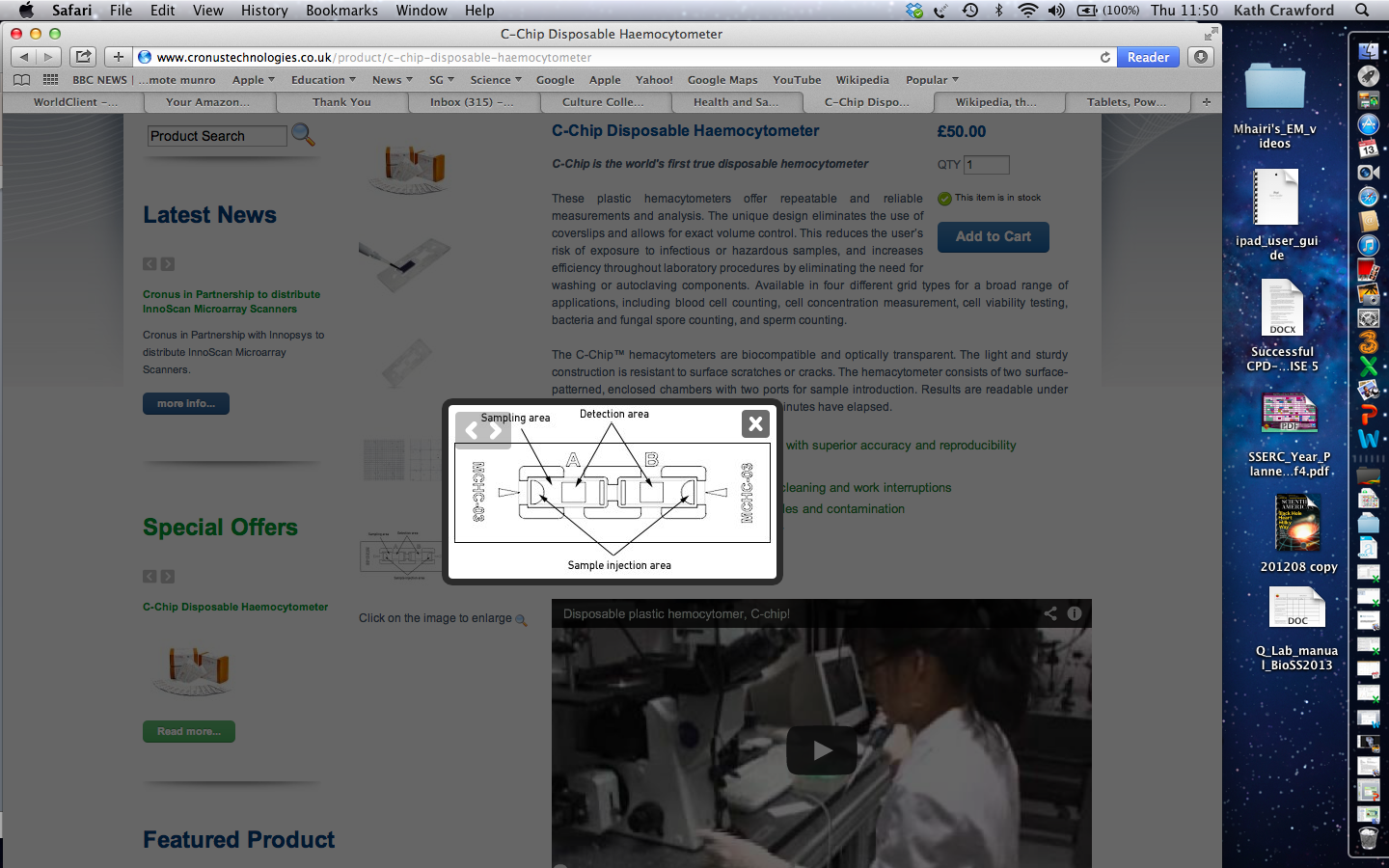
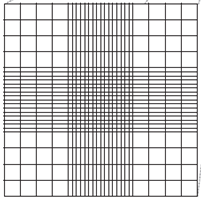
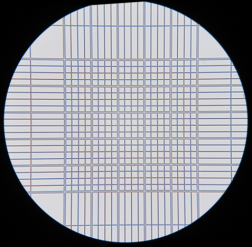
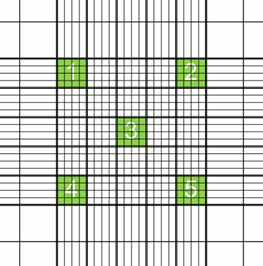
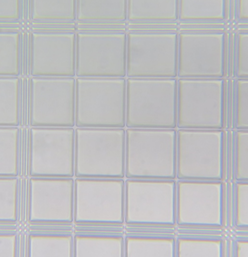
1. Getting to know the microscope:

* “Finding your way round the microscope”
* Observe a prepared slide – adjust light, focus at x40, x100 and x400.
* Practise moving the slide around

1. Prepare a slide of yeast suspension.

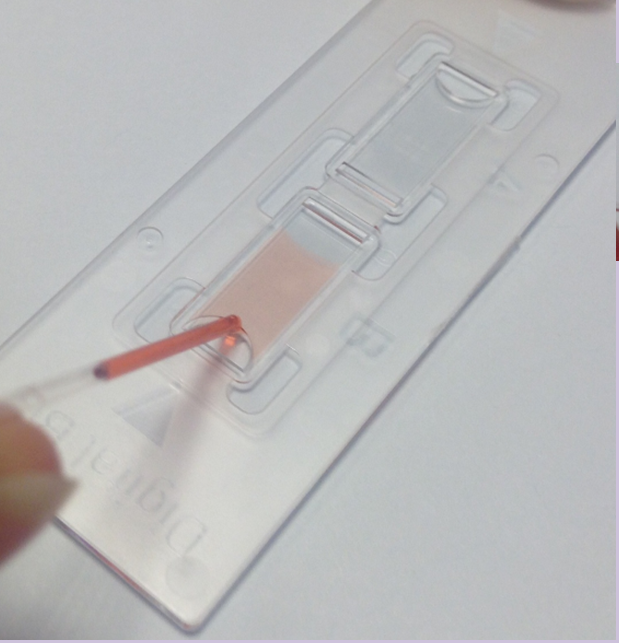
* Observe at x40, x100, x400

1. “Finding your way round the haemocytometer”

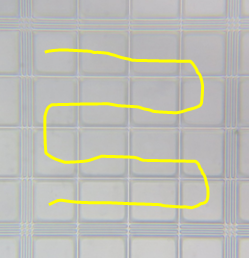
* Identify sample injection area
* Look at grids in the detection area with the naked eye
* Observe one detection area at x40 and identify the central grid
* Observe at x100 and identify ‘sample’ squares
* At x400, find the top left and right, central and bottom left and right sample squares.

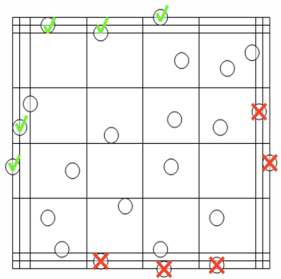
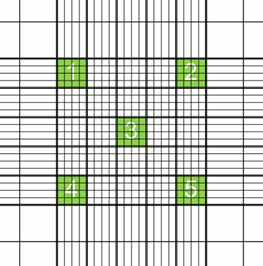
*Notice the boundary lines*

* Practise moving the haemocytometer around to find the sample squares.

1. Use a coloured dye to practise loading the haemocytometer using a capillary tube (load one sample injection area).
2. Load the other sample injection area of the haemocytometer with yeast suspension

* Observe at x40, x100 and x400
* Check that you can find the sample squares at x400

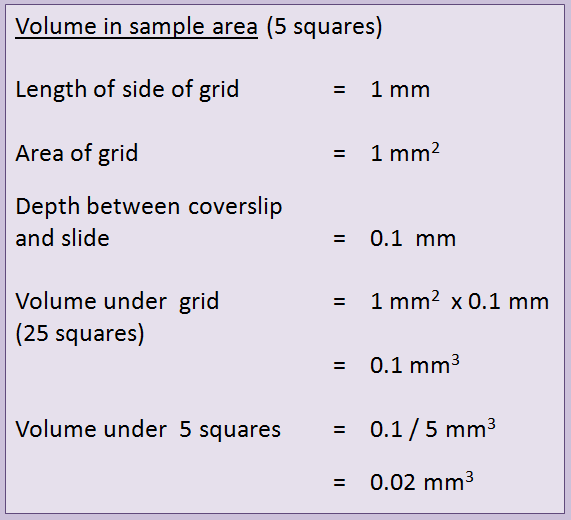
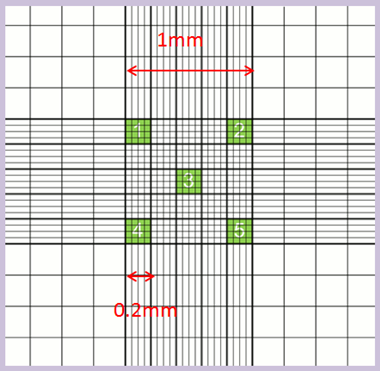
1. Counting the cells

* Count systematically
* Count all the cells within the sample square and those touching the top and left middle boundary lines
* **Count the cells in all 5 sample squares

Square 1 \_\_\_\_\_\_\_\_\_\_\_ Square 2 \_\_\_\_\_\_\_\_\_\_\_

Square 3 \_\_\_\_\_\_\_\_\_\_\_

Square 4 \_\_\_\_\_\_\_\_\_\_\_ Square 5 \_\_\_\_\_\_\_\_\_\_\_

1. Estimating the number of cells

