painting and drawing

uses of the brush in UP
- real paint brushes have certain properties, like size, shape, type of bristle
- in a program like UP, the concept of brush can be more general
- a selected area or object can become the "paint" that is applied when you use the brush

uses of the brush, continued
- you can vary the object painted by the brush using other options in the Brush menu
- by varying the grid specifications via the Grid option in the toolbar you can control the density of the painted objects
- to convert back to a "regular" brush, choose the Brush panel in the tools window and select "Factory Shape"

brush example
- draw a circle
- select the circle using the "cut" option of the toolbar (indicated by a dotted rectangle, lasso or magic wand)
- customize the brush: on the main UP toolbar, choose Brush -> Get Selection -> No Background
- choose the dotted freehand brush
- the brush now draws circles!

fun filters
- paint programs provide some simple and fun filters to play with, e.g., under "Image" and then "Filter" or "Fun" in Ultimate Paint; use the options in the tools window

outline
- exploring Ultimate Paint (UP)
  - drawing
  - uses of the brush
  - fun filters
- concepts and applications
  - representing colours and images digitally
  - compressing image files
- applying the concepts
  - creating your own filters
  - choosing file formats for saving images

(details may vary with different versions)
**concepts:**
**colour in paint programs**
- in UP, colours can be selected from a palette
- alternatively, colours can be specified by selecting the red (r), blue (b), and green (g) intensities
- intensities range from 0 to 255
- this is the same RBG colour coding as used in HTML

**colour intensities**
- r, g, b all 0's represents black (no colour)
- r, g, b all 255's represents white
- r, g, b all the same is a shade of grey
- note that red and green make yellow – see Figure 1.4, page 9, of text

**references**
- freeware version of UP: http://www.ultimatepaint.com/download.php
- Jemima Periera's color wheel: www.ficml.org/jemimap/style/color/wheel.html