S1
Manual Graphics

## MEASURING

Throughout the school you will measure in many different units. Most of the school will measure in Centimetres (cm), however, in the Design and Technology department; we measure in Millimetres (mm).

Occasionally, some rulers you will use work in cm, therefore it is very important we are able to convert all measurements to mm .

| Units |
| :--- |
| 1 cm |$=$| Millimetres |
| :---: |
| 10 mm |

## TASK 1

Using what we have learned, read the millimetre ruler and identify the given values.

A $\qquad$
B $\qquad$ C. $\qquad$ D $\qquad$

## E

$\qquad$ F $\qquad$ G $\qquad$

## TASK 2

Read the centimetre ruler and identify the given values. Write your answer down in mm.

A. $\qquad$ B $\qquad$ C. $\qquad$
D $\qquad$ E $\qquad$ F $\qquad$
G $\qquad$ H $\qquad$ J $\qquad$

## MEASURING

## TASK 1

Taken what we have learned from using a ruler and measuring accurately; Measure and label the following vertical and horizontal lines on the page. Two examples have been given.

Remember: think about accuracy and working in millimetres.


## FREE HAND SKETCHING

As the name suggests, freehand sketching means creating sketches without the use of any drawing equipment other than a pencil.

The key thing to sketching is to feel comfortable. To ensure this, you need to consider;

- The way you sit
- The position of your paper
- The control of your pencil


## Overhand

## Underhand

One of the most important techniques you will need to practice is controlling the pressure applied to the pencil. There are ways of holding the pencil such as Overhand and Underhand. The Underhand grip shown is more likely to produce good results rather than the more common Overhand 'writing grip'.

The only two pencils you will need to begin with are $\mathbf{2 H}$ for light construction lines, and 2B for outlines and shading.


Using the techniques you have learned, sketch a range of Vertical and Horizontal lines. - Remember: Shadow the line first before you sketch.

- Keep lines light and Parallel.


## TASK 2

Continuing from the first task, sketch a number of lines at 45 degrees.

- Remember : Shadow the line first before you sketch.
- Keep lines light and adjust your page to suit your sketches.

Using vertical and horizontal lines, fill the given area with a number of sketched boxes.

- Remember : Shadow the line first before you sketch.
- Keep construction lines light and darken the outline to define each shape.



## TASK 4

This time sketch a number of different circles without the use of construction lines.

- Remember : Orbit your wrist and pencil to fill the given area with sketched circles.
- Adjust your pages to suit your sketches.

1 POINT PERSPECTIVE


1 POINT PERSPECTIVE
EXTENSION TASK


## COLOUR THEORY

The knowledge of colour is an important part of Graphic Communication, as we must be able to understand the significance and purpose of the colour wheel and understand the relationship between colours.

The colour wheel demonstrates the relationship between colours and is split up into three sections, PRIMARY, SECONDARY and TERTIARY colours.

The triangle in the centre is made up of Primary colours

The next three are made up of Secondary colours; the result of mixing two Primary colours together.

Finally the colours around the outside are

## COLOUR THEORY

Colours can be separated into different categories;

- Warm and Cool colours
- Harmonising and Contrasting
(O) Warm colours, Yellow, Red and Orange are colours which give a feeling of warmth, an example of this can be found on taps to identify warm water.
() Cool colours, Blue, Green and Violet do the opposite and give a feeling of coldness, again it can be seen on taps to identify cold water.
() Harmony is created when colours close on the colour wheel are used together. It is an effective way of using colour to blend with the background or another object.
() Contrast is created when there are two colours opposite on the colour wheel. It is an effective way of using colour to make objects stand out from the background or other objects.


## COLOUR THEORY

TONE is the word used to describe how intense a colour is. A weak tone is a very light colour and a strong tone is a very strong colour.

## Flat Tones



Weak Tone

## Graded Tones



Strong Tone

The tone of a colour can be changed by adding white or black.

Adding white creates a TINT


Adding black creates a
SHADE

## TASK 1

Re-create flat tones and graded tones, using warm and cool colours as well as harmonising

## RENDERING

Using the rendering techniques we have already learned, complete the flat tone and graded tone boxes.

TASK 2

TASK 1


Flat Tone


Graded Tone


## DESK TOP PUBLISHING

Desktop Publishing is the process of using software to create publications such as magazines, posters, leaflets or packaging on the computer.

The DTP terms and features we will be focusing on in first year are;

- Line
- Shape
- Colour
- Font
- Target Audience
- Lines can be an important element in a layout. They are used to separate parts of the layout, connect parts of the layout or create emphasis by underlining features.
- Shapes can create visual impact in a layout. There are two main categories of shape; geometric and organic.
- Using colour creatively can make an enormous difference to the impact of a layout. It is important to consider colour combinations such as harmonising and contrasting. Try and limit your choice to a maximum of three colours.
- Font is the type of lettering used within a publication. Suitable selection of font styles can add visual impact to your layout. Consider the theme of your publication to help select the style of font.
- A target audience is who you are aiming your publications towards. A graphic designer needs to consider their target audience for any layout or publication created.


## Using what we know about the DTP terms discussed. Sketch out a aftershave or perfume <br> package of colour, font, target audience. <br> Remember; Think about Line, shape,




IDEA 2
TakNing the fencli for a walk

Evaluation



CREATING A SIT

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