



ArtTutor

OIL PAINTING

Cheat Sheets

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CHOOSING AN OIL PALETTE



KIDNEY SHAPED PALETTE

- Lightweight with the thumb hole allowing it to be held comfortably with non-painting hand.
- Rounded shape allows colours to be set out around edge with centre reserved for mixing.
- Usually made of wood but can also be made of melamine or acrylic.
- Wooden colour is best for judging colours applied to a toned ground / canvas.
- White palette is best for judging colours applied to a white ground / canvas.



OBLONG PALETTE

- More space efficient and better suited to fitting in a portable easel or paintbox.
- Can be of any material including wooden board, plastic or glass.
- Cornered edges are cumbersome when moving around an easel - this is why oval palettes are more traditional.
- Kidney and oblong palettes require paint to be scraped away between paintings/sessions - plenty of cloths and rags are required to maintain a usable mixable surface.



TEAR OFF PALETTE

- Comes as a pad of tear-off wax paper sheets with stiff back board
- Available with thumbhole so can be held like a traditional palette.
- Much cleaner and quicker than traditional palettes.



DIPPER

- A single or double dipper (aka a palette cup) is useful to hold small amounts of paint medium/solvent.
- Can be clipped on to the edge of palette for easy access.

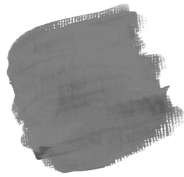


MIXING GREENS

		CERULEAN BLUE	PRIMARY BLUE	COBALT BLUE	ULTRAMARINE BLUE	PHHALO BLUE
LEMON YELLOW						
PRIMARY YELLOW						
CADMUM YELLOW MEDIUM						
YELLOW OCHRE						
RAW SIENNA						

Here are 5 common blues and 5 common yellows mixed, in most cases in roughly equal quantities to produce 25 greens. The left half of each green is a strong mix of the two colours.

The right half is a lighter mix with approximately 50% titanium white added to create a tint. Simply adjusting the ratios of blue, yellow and white will give you literally hundreds more greens.



MIXING GREYS

		CERULEAN BLUE	COBALT BLUE	PRIMARY BLUE	ULTRAMARINE BLUE	PTHALO BLUE
CADMIUM RED LIGHT						
BURNT SIENNA						
BURNT UMBER						
RAW UMBER						
RED OXIDE						

Here are 5 blues and 5 common reds/browns mixed in roughly equal quantities to produce 25 greys. The left half of each grey is a strong mix of the two colours. The right half is a lighter mix with approximately 50% titanium white added to create a tint. Adjusting the ratios of blue, reds/browns and white will give you literally hundreds more greys.



MIXING SKIN COLOURS

ALIZARIN CRIMSON
ULTRAMARINE BLUE
YELLOW OCHRE
TITANIUM WHITE



CADMIUM RED
CADMIUM YELLOW
PHTHALO BLUE
TITANIUM WHITE



Just by using three primary colours and white, many different shades and tints of skin colour can be created.

On this page, two sets of three primaries have been used to create eight different skin tones. With the addition of titanium white these can be lightened to create potentially an infinite number of variations.

The proportions of the primary colours have been adjusted in each one to provide a bias towards red, blue or yellow. Each colour swatch shows roughly the proportions of each primary used for each tone before white is added.



MIXING SKIN COLOURS



RAW
SIENNA
+
BURNT
SIENNA



RAW
SIENNA
+
ULTRAMARINE
BLUE
+
BURNT
SIENNA



ALIZARIN
CRIMSON
+
ULTRAMARINE
BLUE
+
BURNT
SIENNA



ULTRAMARINE
BLUE
+
BURNT
UMBER



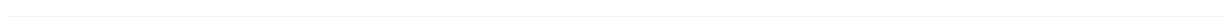
CADMIUM
RED
+
CERULEAN
BLUE



BURNT
SIENNA
+
YELLOW
OCHRE



Here are some further variations using common colours and are used by many top portrait painters. These 6 mixes, plus the ones on the previous page, can create the vast majority of skin tones you'll ever need.





COLOR BIAS OF PRIMARIES



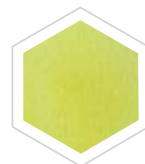
All primary colour paints (reds, blues and yellows) have a 'leaning' or 'bias' towards one of the other two primaries. For example, Alizarin Crimson is a red with a blue bias, whereas Cadmium Red is a red with a yellow bias.

Knowing the bias of the colours in your palette will help you mix the secondary and tertiary colours you want. It will also help you avoid mixing muddy and dull colours

If you want a vibrant purple for example, mix a red with a blue bias and blue with a red bias. That way you are only mixing two of the primaries (red and blue).

If you want a dull purple, then mix a red with a blue bias and a blue with a yellow bias. Now you are mixing all three primaries (red + blue + yellow). Mixing all three primaries results in a more neutral tone.

NB: The lists here though extensive, are not exhaustive, as manufacturers introduce or delete colours on a continuous basis.



YELLOWS WITH A BLUE BIAS

- Aureole
- Azo
- Lemon
- Cadmium Lemon
- Cadmium Yellow Pale
- Hansa Yellow Light
- Transparent
- Bismuth



YELLOWS WITH A RED BIAS

- Cadmium Yellow Medium
- Cadmium Yellow Deep
- Chrome
- Indian
- Naples
- New Gamboge
- Raw Sienna
- Yellow Ochre
- Permanent Yellow Medium
- Mars
- Quinacridone Gold



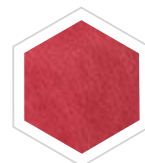
BLUES WITH A RED BIAS

- Cobalt
- Cyanine
- French Ultramarine
- Ultramarine
- Payne's Grey
- Indanthrene, Indigo



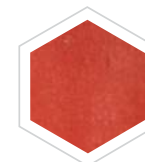
BLUES WITH A YELLOW BIAS

- Cerulean
- Pthalo
- Antwerp
- Intense, Monastial
- Manganese
- Turquoise
- Cyan
- Rembrandt
- Pthalo
- Prussian
- Paris
- Peacock



REDS WITH A BLUE BIAS

- Permanent Rose
- Alizarin Crimson
- Magenta
- Quinacridone Rose
- Rose Madder
- Crimson Lake
- Opera Rose
- Scarlet Lake
- Carmine



REDS WITH A YELLOW BIAS

- Cadmium
- Winsor
- Vermillion
- Perelyne
- Permanent
- Light
- Indian
- Venetian
- Pyrrrole
- English Red Oxide



TRANSPARENT & OPAQUE COLOURS

All paint colours, regardless of the medium used, have varying degrees of transparency. Knowing how transparent or opaque a colour is can help you when painting layers or glazes.

Bear in mind though that some colours may be classed as transparent by one manufacturer and semi-opaque by another and you can check this on the side of the paint tube or the manufacturer's website.

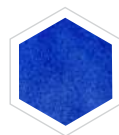
The lists here are colours that are generally considered transparent, semi transparent, opaque or semi opaque across the majority of brands.

KEY

T = Transparent
ST = Semi-Transparent
S = Semi-Opaque
O = Opaque



REDS



BLUES



YELLOWS

Alizarin Crimson	T
Light Red	O
Cadmium Red	O
Rose Madder	T
Bright Red	SO
Perylene Red	ST
Opera Rose	T
Venetian Red	O
Pyrrhol Red	ST
Permanent Rose	T
Quinacridone Red	T
Indian Red	O
Permanent Magenta	T
Permanent Rose	T
French Vermillion	O

Cobalt Blue	ST
Cerulean	O
French Ultramarine	T
Indigo	T
Prussian Blue	T
Indanthrone Blue	T
Pthalo Blue(Grn Shde)	T
Royal Blue	O
Antwerp Blue	T
Manganese Blue	T
Antraquinone Blue	SO

Yellow Ochre	SO
Raw Sienna	T
Gold Ochre	O
Quinacridone Gold	T
New Gamboge	T
Bismuth Yellow	O
Aureolin	T
Cadmium Yellow	O
Cadmium Yellow Pale	O
Lemon Yellow	T
Naples Yellow	O
Indian Yellow	T
Hansa Yellow Light	T



COLOUR TRANSPARENCY CHART



The transparency of a colour can easily be tested by creating a chart such as this.

On white paper, canvas or board, paint a black stripe down the centre, about 1/2" (1cm) wide. The precise width isn't critical. If you don't have black, you can create one with a strong mix of a blue and a brown. Let the stripe dry, then paint a streak of each of your colours across the stripe as shown. Use the paint straight out of the tube, undiluted.

Once the paint has dried, those that are transparent will be barely visible on the black stripe, such as here with ultramarine blue and alizarin crimson. Others like yellow ochre and cerulean blue will almost obliterate the black stripe, indicating they are much more opaque.



HOW TO MAKE A PERSONALISED COLOUR CHART



	CERULEAN BLUE	COBALT BLUE	PHHALO BLUE	PRIMARY BLUE	ULTRAMARINE BLUE	CADMIUM RED	ALIZARIN CRIMSON	RED OXIDE	BURNT SIENNA	PERMANENT MAGENTA
CADMIUM YELLOW										
YELLOW OCHRE										
RAW SIENNA										
LEMON YELLOW										
RAW UMBER										
BURNT UMBER										
DIOXAZINE PURPLE										
HOOKERS GREEN										
VIRIDIAN										
IVORY BLACK										

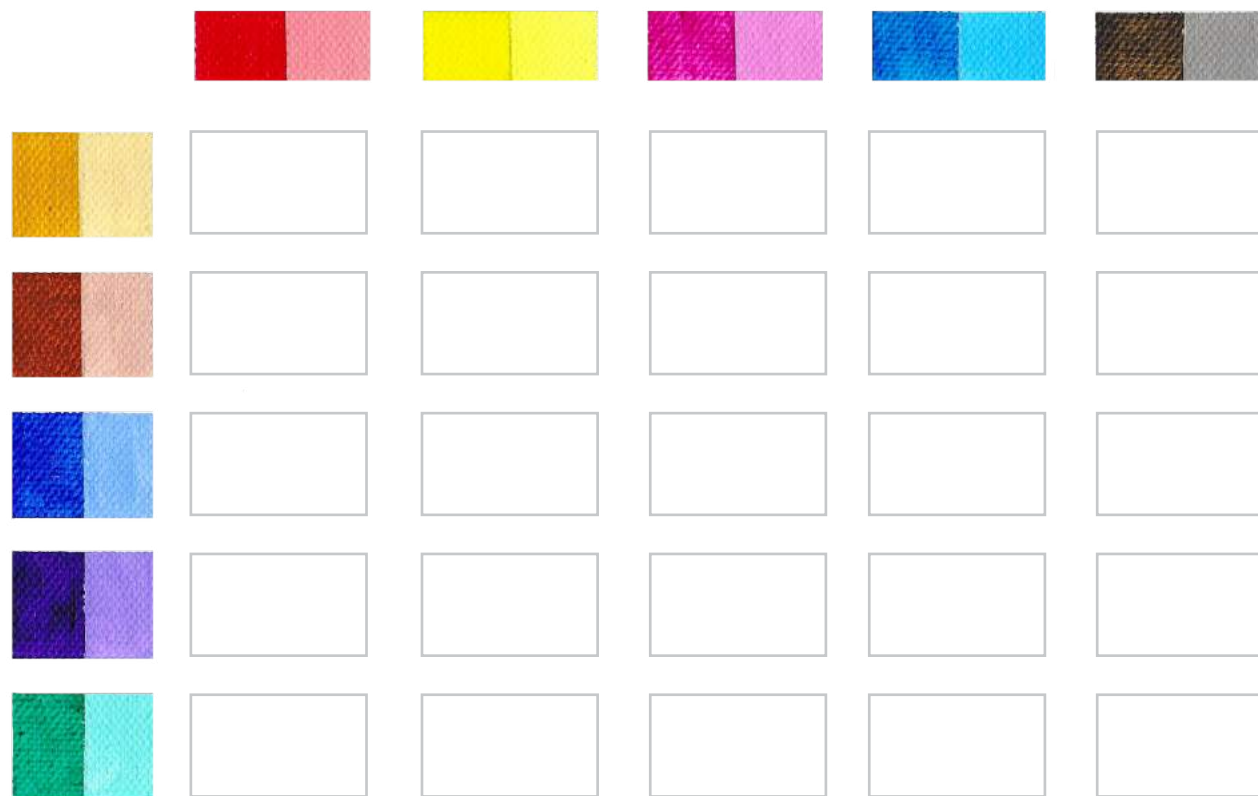
Too many leisure artists worry about having the 'right' colours, or the same ones they see being used by ArtTutor instructors.

It's far better (and cheaper!) to use the ones you have already - at least for now. This way you will learn to exploit the colours at your disposal and it will allow you to go out and select new colours only if it becomes really obvious that you need them.

For this exercise you are going to gather all of your existing colours and mix any two of them. The results of some mixes may surprise you and open up your eyes to possibilities you didn't realise were there. It's a very therapeutic exercise as well.



STEP 1



In the chart on the previous page I've used 20 colours I had at my disposal. You may have less and different ones and that's fine. Gather them together now.

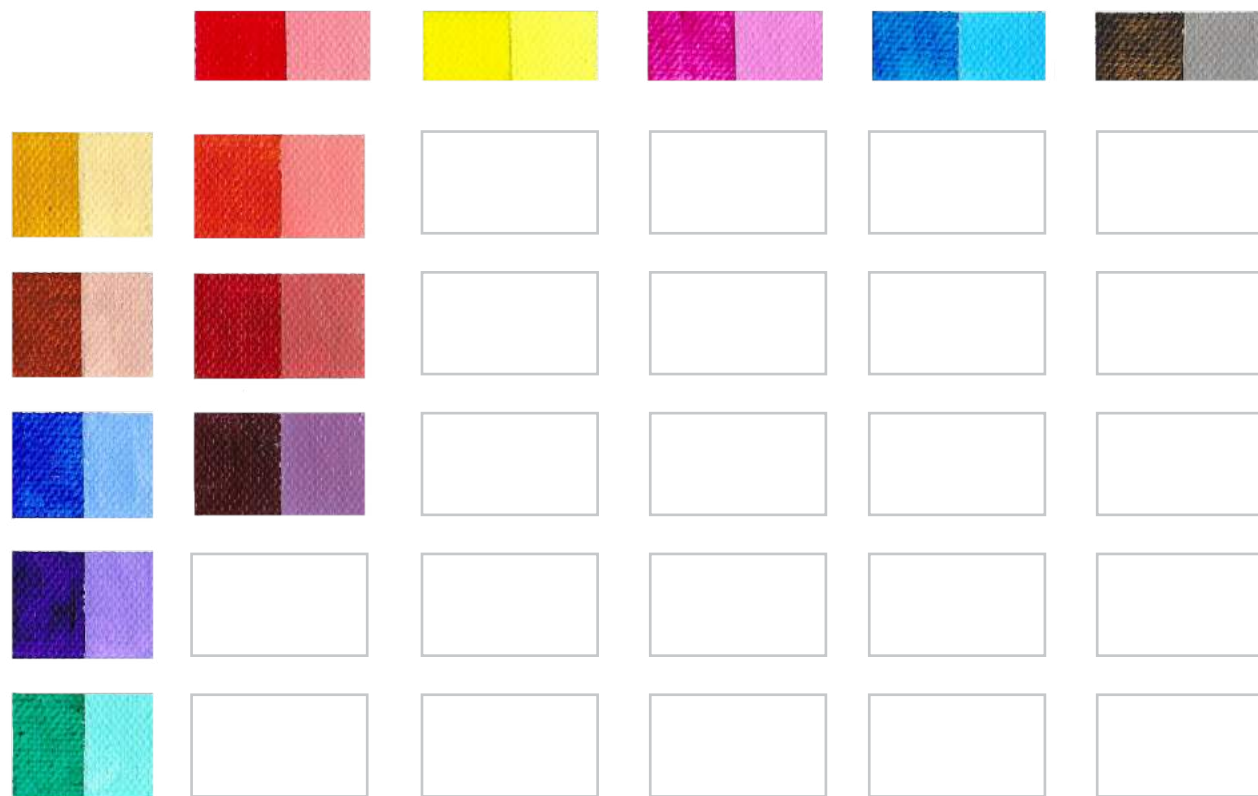
That chart was produced on a sheet of acrylic paper about 22" x 16" (40cm x 28cm or A2 size). The first thing to do is to draw a series of boxes in pencil about 2cm x 1cm. The actual size isn't critical as long as all the boxes fit on the sheet!

Because I used 20 colours, I drew 10 boxes along the top and 10 boxes down the side. If you have 15 colours, you could do 8 along the top and 7 down the side, for example. Once you have your boxes drawn, paint a colour in the top row and in left hand column as I have done here. This chart is reproduced at a bigger size than the one previously, so only the first five boxes across the top and five from top to bottom are in view. It doesn't matter which colours go where, just place a unique colour in each box.

I filled in half of each box with pure colour and the other half mixed with roughly 50% titanium white, to create a tint.



STEP 2



In the top left hand empty box, mix the colour directly above it and to the left of it. Mix them in roughly equal quantities. You can see that I've already filled in several boxes with cadmium red mixed with yellow ochre, burnt sienna and ultramarine blue, in this case.

Paint the left hand side of the box a strong colour and add about 50% white to your mix to create a tint on the right hand side. This will show you how the colour changes across different strengths, which can change it quite a lot.

Repeat this for each of the boxes until you have a full chart similar to the one shown on Page 10.



LIMITED PALETTE SUGGESTIONS



LIMITED PALETTE 1

Limiting your palette can really improve your oil painting. Not only does it help to improve colour harmony it also makes the decision making process easier - and that helps you stay in the flow.

These two palettes are nicely balanced with a combination of cool and warm primaries. You can mix almost any colour you want from these limited selections and it will save you a lot of money on exotic paints that you rarely use after you've bought them.

Ultramarine Blue (warm)

Pthalo Blue (cool)

Cadmium Red (warm)

Alizarin Crimson (cool)

Yellow Ochre (warm)

Lemon Yellow (cool)

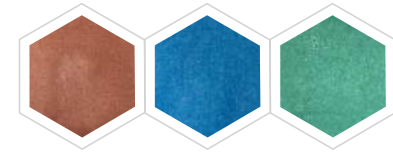
Plus (optional):

Burnt Sienna or
Light Red

Paynes Grey or
Indigo

Cerulean Blue

New Gamboge or
Cadmium Yellow



LIMITED PALETTE 2

Pthalo Blue

Cobalt Blue

Permanent Rose

Light Red

Hansa Yellow

Raw Sienna

Plus (optional):

Burnt Umber

Ultramarine Blue

Raw Umber

Viridian



BRUSH / KNIFE MARKS

**SYNTHETIC
FILBERT**



Traditionally, oil painters have used bristle brushes, made from coarse animal hair such as hog or horse hair. Over recent years, synthetic alternatives have been developed - which are softer than bristle brushes but firmer than brushes used for watercolour for example.

Synthetic brushes allow the artist to create relatively smooth layers. Bristle brushes can be used to create more texture and leave brush marks in the paint. Compare the brush marks of the two types of filbert brush on the left.

PALETTE KNIFE VS PAINTING KNIFE

A palette knife is used for mixing colours on a palette. It has a flat and straight blade, with rounded edges and a wooden handle. Unlike a painting knife, there is no "elbow" or bent arm in the blade - palette knives are always flat.

Painting knives give the artist the ability to spread paint thickly in an impasto style and an entire painting can be created with painting knives alone. They are available with metal or plastic blades and in a variety of shapes and sizes (typically pear shaped and triangular shaped). Most painting knives have a cranked arm or elbow in the neck. This helps to keep the knuckles away from the painting surface.

**HORSEHAIR
FILBERT**



**PAINTING
KNIVES**



**PALETTE
KNIFE**

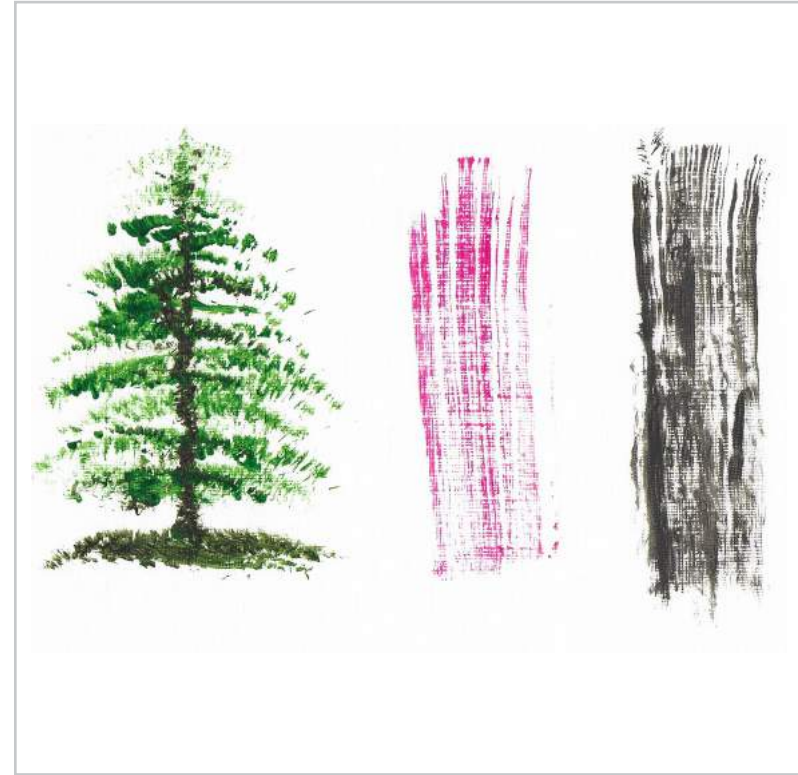


BRUSH / KNIFE MARKS



FLAT BRUSH

Ideal for creating straight edges and prominent textures with the hog version. Great thin lines can be achieved when the chisel edge is exploited in the synthetic varieties.



FAN BRUSH

Its unique shape can be pressed onto the canvas so the bristles create curved marks either upwards or downwards, especially with the hogshair versions. Perfect for fir trees!

Woodgrain texture is also a straightforward process. In synthetic varieties the hairs tend to clump together so not as easy to replicate these textures.



BRUSH / KNIFE MARKS



FILBERT BRUSH

A real all-rounder, with good control of many paint strokes. Many artists find the filbert their default brush for most work.



RIGGER BRUSH

Produces a thin, freehand line with the long tip. Originally devised for painting ropes and ship's rigging, hence its name. Don't overlook its ability to be 'scrubbed' sideways or flicked upwards, to create excellent rock textures and fissures, small bushes and grasses etc.



BRUSH / KNIFE MARKS



ROUND BRUSH

Another excellent general purpose brush, capable of creating a variety of marks.

Can easily produce a thin and thick line in the same stroke by altering the pressure put on it and as with the flower head shown, can give a lovely petal shape by 'stamping' the length of the brush on the paint surface.



KNIFE

Painting knives are made in a variety of shapes - perfect for heavy, impasto creations. At their best for loose work, as can be seen here they can create pleasing 3D partially mixed colours or be scraped out thinly to exploit the texture of the paint surface.

In the mountain example a thick, dark base coat has been allowed to dry and then thinner layers of lighter colours scraped over the top in a hit and miss effect to give a pleasing effect of snow in sunlight and shadow.



LIMITED BRUSH & KNIFE SET



This is a very basic starter set, which can easily be adjusted, depending upon whether you prefer additional hogshair brushes or more of the synthetic variety.

NB: Don't rely exclusively on the numbering of brushes as an indication of size as each manufacturer will apply different standards. So a No. 8 Round in one range could be the same as a No.5 Round in another.

Wherever possible, check sizes yourself in an art store or, where this isn't possible, see if the website provides information as to the actual size of the brush head; e.g.. 1/2" across the metal ferrule or 3/4" from the end of the ferrule to the tip of the brush, etc. The above have all been given a general indication of size for this reason, rather than the number being quoted.



LIMITED BRUSH & KNIFE SET



In this group, I've eliminated the Hog brushes for an even more basic starter set. The Hog brushes could be added later or you may prefer to start with the Hog equivalents of the Synthetics I've listed.

I'll leave you to choose your brushes and enjoy finding out what effects you can achieve. But do have a doodle! This is never time wasted. It allows you to understand how your brushes perform and what marks can be achieved, before you spend money on new ones and get to on your next minor masterpiece.



OIL MEDIUMS

Traditionally, a mix of linseed oil and turpentine has been used to thin oil paints and help it flow more easily when painting. Turpentine (known as a solvent) is also used to clean brushes and the palette.

A lot of artists find the odour of turpentine unpleasant and it must be handled with care. Traditional linseed oil extends the drying time of the paint (which is already slow to dry), so it can become impractical for many leisure artists. As a result, many other mediums for oil painting are now available, each with specific properties, and this can be very confusing for the newcomer.



ALKYD GEL



LIQUIN



OIL MEDIUMS

If you are new to oil painting we recommend using just three products to get started:

LOW ODOUR THINNERS OR ZEST-IT (SOLVENT)

This has a much lighter and less offensive smell than turpentine. It can also be mixed with a little paint to provide a very thin, runny liquid, which is ideal for sketching the initial outlines of the picture. This sketch will dry quickly.

Alternative, more environmentally friendly, solvents now exist and one of the most popular is Zest-It Oil Paint Dilutant and Brush Cleaner. This is completely non-toxic and made from citrus fruit acids.

DRYING LINSEED OIL (MEDIUM)

This adds transparency, lustre and gloss to the paint and also improves the flow. The drying version of linseed oil, along with alkyd medium or Liquin (see below) speeds up drying times. Mixed with just a little paint, it also creates a clear glaze when required.

ALKYD MEDIUM OR LIQUIN (MEDIUM)

These two mediums, available in either a liquid or gel-like consistency reduce the drying time of paint by at least half. A pre-mixed bottle of of drying linseed oil and either alkyd medium or Liquin is very useful to keep to hand for all of your oil paintings. As a rough guide use a ratio about three quarters linseed oil and one quarter ally medium or Liquin.



LINSEED OIL



LOW ODOUR THINNERS



DRYING LINSEED OIL



FAT OVER LEAN PRINCIPLE



The term 'fat over lean' is unique to oil paints and confuses many aspiring oil painters.

It relates to the oil content of the paint layer and not just to putting thick or fatter layers over thinner ones, as you might think.

In simple terms, 'fatter' layers of paint (i.e. those with a higher oil content) should be put on top of 'leaner' layers (those with less or no added oil) and generally speaking, not the other way round.

There are two main reasons for the 'fat over lean' principle:-

- 1. Layers of paint with little or no oil added (lean) tend to be quicker drying and less flexible. If they are painted on top of oilier (fat) layers, which dry more slowly, they could crack. The top layer of paint is dry, while the layers underneath are still wet and moving about.**
- 2. Oil-rich colours tend to dry with a sheen, which makes it more difficult for leaner layers to adhere to them.**

The portrait here gives a good idea of what could happen in extreme circumstances. If you ever look closely at old paintings in galleries, you will find many instances of paint cracking and damaging the surface.

* Photo courtesy of kellepics/pixabay.com



FAT OVER LEAN CHART

This chart shows a typical situation where several paint layers sit on top of each other, correctly applied. Note the increasing proportions of oil medium (the orange areas) as each layer is added. In this case, we have assumed this is a mix of drying linseed oil and alkyd medium or Liquin, and a touch of low odour thinners.

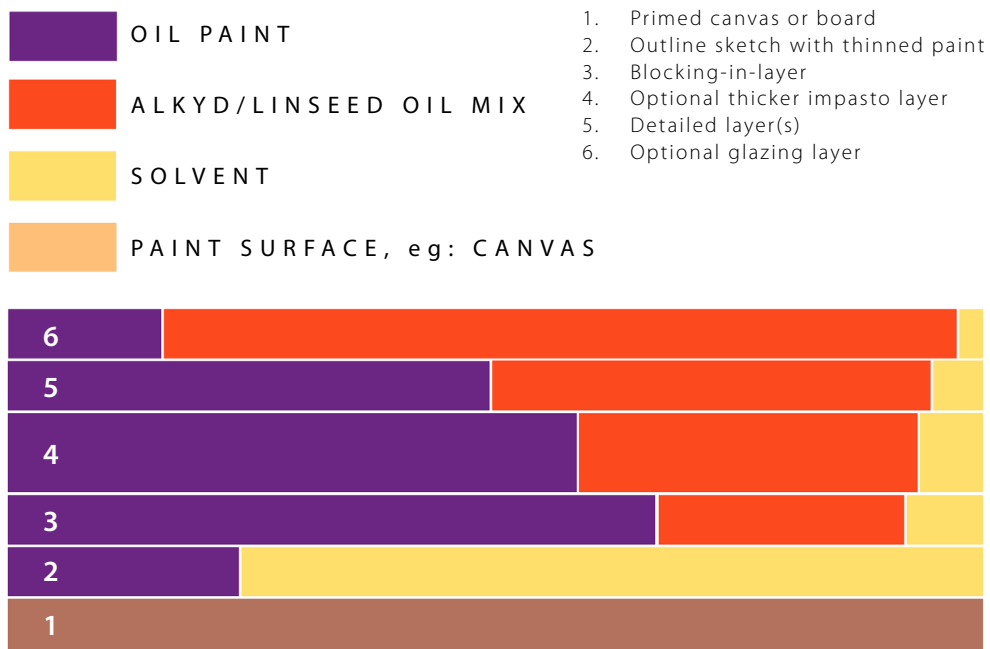
The first thin layer of paint, with no oil medium and lots of solvent, would be regarded as the 'leanest' layer. This would typically be the outline sketch.

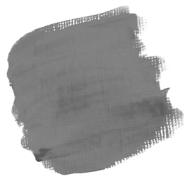
As each layer is added, a higher proportion of oil medium (the fat) is added to the paint to ensure that layer dries a little more slowly than the one beneath.

Some colours will dry quicker than others, due to the properties of the pigment. For example, earth colours such as umbers and ochres will dry quickly, as will cobalts, whereas most reds, quinacridones and cadmium colours will take more time. Don't worry about this - just stick to the general rule of thumb of adding more oil to subsequent layers.

PAINTING 'ALLA PRIMA'

When very thick, impasto layers of oil paint are used, they take much longer to dry thoroughly. However, if you paint 'alla prima' (adding layers on top of each other while they are still wet, in a single session) then you don't need to worry about cracking. You are effectively painting one layer, which should dry at a consistent rate.





PAINT SURFACES

Oil paintings can be produced on a wide variety of surfaces. The best known is stretched canvas over a wooden frame. However, canvas panels glued to a heavy card base are more economical and widely available in a variety of sizes.

Wood panels too are popular - chipboard, ply, masonite (hardboard) or MDF - or even thick card are all suitable, once primed (see next Section).

The oil paint needs a toothed base to adhere to, so non-porous surfaces such as acrylic, glass, metal or porcelain, for example, are generally not recommended. However, it may be possible to prepare these with a primer that etches itself into the surface and thus provides a 'key' or 'tooth' for the paint.

For the newcomer to oils though, it's probably best to stick to one of the more traditional surfaces mentioned at the beginning of this Section.





PAINTING & PREPARATION



Most oil painting surfaces need priming. This is usually done with gesso, which works equally well for both acrylics and oils. One or two coats are usually sufficient.

Priming a paint surface, whether canvas, wood panel etc. seals the fibres and prevents the paint from soaking in and disappearing. The fibres of an unprimed canvas could be damaged eventually by the solvents/oils in the paint mix.

Most canvas boards and pre-stretched canvas panels come ready primed, so you only need to decide if you want a white surface or tint it with dilute acrylic or oil paint, before starting on the painting itself.

Incidentally, you can't paint with acrylic paint on top of an oil paint layer as the oily surface will prevent the acrylic paint from adhering properly. In addition, the oil paint under-layer will dry slowly, while the acrylics on top would dry much quicker, probably cracking.

However, it's perfectly possible to block in your basic image using acrylics and then, once thoroughly dry after a few hours, to complete the work in oils.

Many artists operate this way to save time. It works because the oil paint still has the tooth of the canvas to cling to, as the acrylic paint and gesso primer will have settled quite deeply into the fibres.





VARNISHING

Many artists like to varnish their oil paintings upon completion. Varnishing can create an even sheen on a painting, where various patches have become duller and the paint has sunk further into the surface. It can also enrich colours, especially darker ones.

Although gloss varnish is popular, you can buy a matte or satin varnish for a different effect.

Dirt and dust from the atmosphere settles on a painting over the years. This will sit on the varnish layer rather than the paint, which can be removed and re-applied, bringing the painting back to its original lustre.

APPLYING VARNISH

When applying varnish, use a wide brush and horizontal brush strokes. Use back and forth strokes that overlap slightly, to avoid ridges and tidemarks, which will be difficult to hide unless you remove all the varnish and start again.

Avoid the temptation to go over an area once you've varnished it as the partially dried coat will drag and become unsightly. If you've missed a small area, let that coat dry and go over it again, this time varnishing from top to bottom, to cover the area you missed.



* Photo courtesy of Mike/pexels.com





VARNISHING

For most oil paintings, varnishing should not be considered for at least six months after completion, or twelve months if heavy impasto layers have been used.

To protect the painting in this period, or if you need to exhibit it shortly after completion, use re-touching varnish. This gives an effective temporary protection, an even gloss and can be painted over if you need to make amendments to the picture. It can be removed with solvent before applying a more long lasting varnish later on

Use the spray version of retouching varnish as this will drop gently and evenly onto the picture, thus avoiding any risk of dragging any not-quite-dry paint with a brushed varnish.

VARNISH EFFECTS



GLOSS VARNISH

SATIN VARNISH

MATTE VARNISH

ORIGINAL OIL PAINT



GLOSS VARNISH



RETOUCHING VARNISH



COLOUR MIXING TERMS



PRIMARY COLOURS

There are three primary colours which cannot be created by mixing other colours. They are: red, blue and yellow

SECONDARY COLOURS

Secondary colours are mixed from two of the primaries. They are green (blue + yellow), orange (red + yellow), purple (red + blue)

TERTIARY COLOURS

The six colours created by mixing a primary with a secondary i.e. blue + green to create a blue-green or turquoise

COMPLEMENTARY COLOURS

Colours opposite each other on the colour wheel. For example, orange is opposite blue on the colour wheel and so become each others' complementary colour. Complementary colours are said to enhance each other when placed next to each other. When mixed with each other they have the opposite effect, creating a dull, neutral tone.

Complementary colours include: Orange and blue, Yellow and purple, Green and red

HUE

This is the brightest, most vivid version of a primary, secondary or tertiary colour. So red for example, with no other colour mix with it and undiluted is a hue. Painting only with hues would result in a very bright and garish painting.

TINT

Adding white to a colour to lighten it, creates a tint of that colour.

SHADE

Adding black to a colour to darken it, creates a shade of that colour. In acrylic painting, adding a colour's complementary to it has a similar effect (i.e. adding purple to yellow has a similar effect as adding black to the yellow). You could also mix a black colour by mixing the three primary colours together and then add that black mix to another colour (sparingly) to create a shade.

TO NE

Adding back and white to a colour, creates a tone of that colour. Obviously black and white make grey and so a tone is greyer version of a colour. These are also referred to as pastel colours, or neutral colours. You'll use tones a lot in your paintings because the bulk of any subject matter is made from them. You can then use shades for shadow areas, tints for highlight areas and a touch of bright hues where you really want the colour to zing.

VALUE

This is the lightness or darkness of a colour. While it might seem obvious that blue has a darker value than yellow, a very light blue might be lighter than a dark yellow. The best way to judge the values in a photograph or painting is to make it back and white. This will make it obvious which colours are darker and lighter than others.