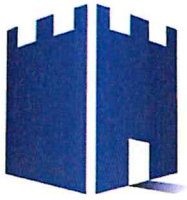


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OUT OF LESSON WORK
TERM 1
DESIGN AND
TECHNOLOGY
YEAR 11



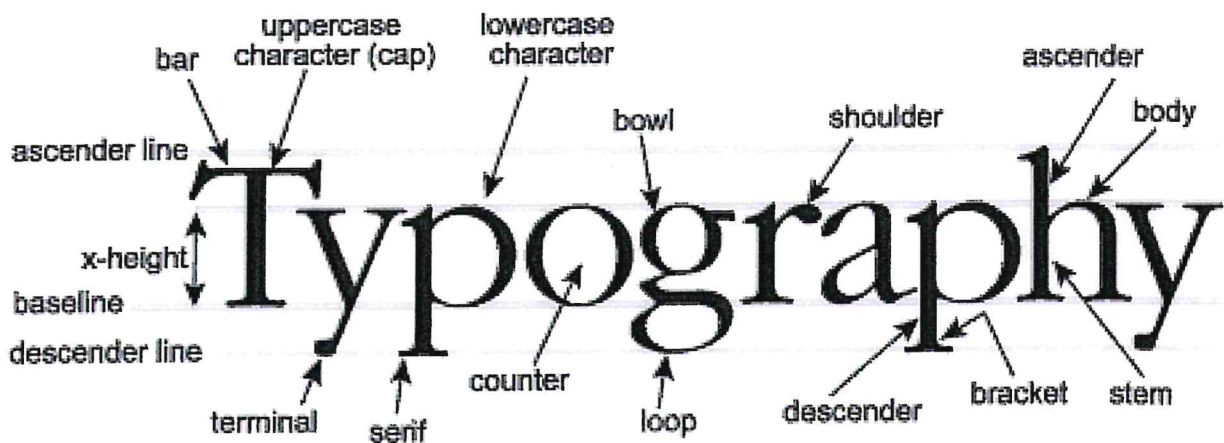
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Graphic Design

Principles and Elements

Revision Tasks





NCFE

GRAPHIC DESIGN

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

3D Typography

TYPOGRAPHY: The arrangement of letters (type) involves selecting a font type (type face) and the size of the font. Graphic Designers, Urban Artists, Comic Book Artists and Typographers also take the following into consideration:

Kerning - The adjustment of spacing between two specific characters. The letter spacing in a word can sometimes add meaning to a word or create interest.

LOVE

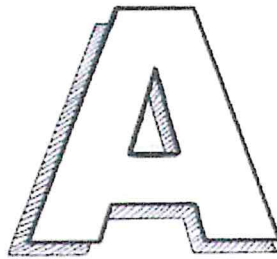
In this example, the kerning (spacing) between the letters (characters) O and V is so tight, the letters appear connected, reflecting the meaning of the word, love.

Urban Artists make strong use of kerning and colour in their typography, creating works of art from letters.

Depth Effects - They also use various techniques to give their lettering depth or 3D effects. There are 3 main techniques to make your word 'pop off' the page.

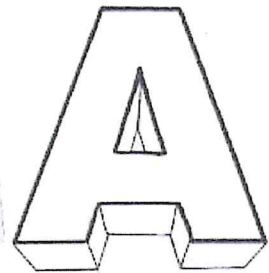
Drop Shadow -

This gives the appearance that the letters are hovering above the surface.



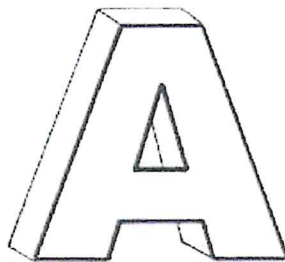
Vanishing Point -

This method uses a 'vanishing point' to create the shape of the 3D. If you followed all the edges of the 3D they would all disappear to one central point.



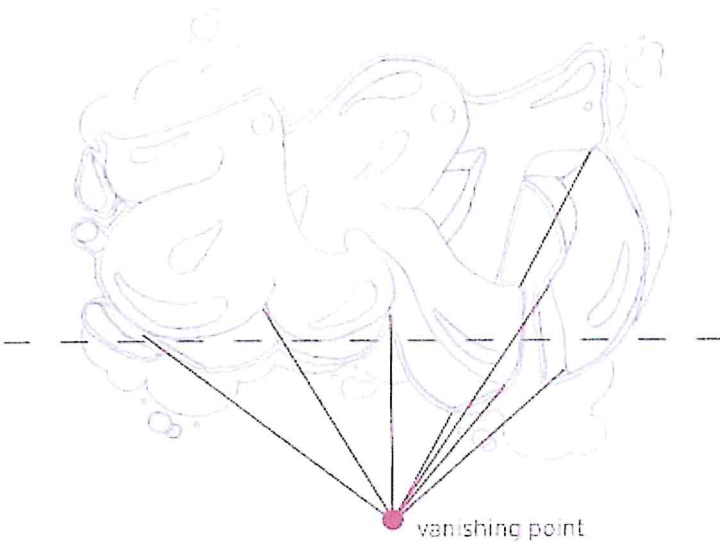
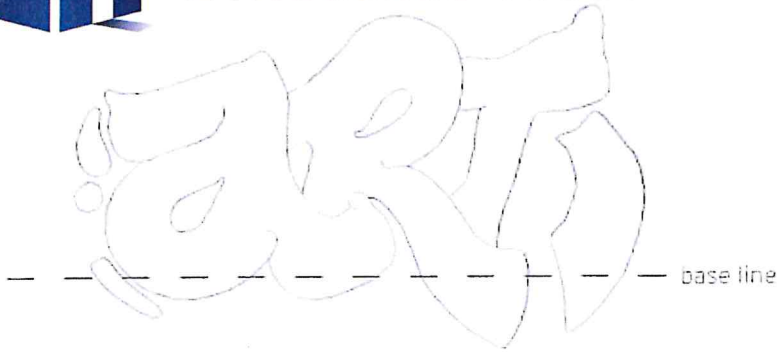
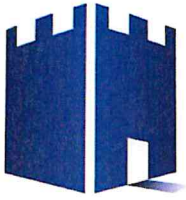
3D -

This method has all 3D edges coming off the surface of the letter on the same angle, at the same depth.



TASK:

- Create a Typography piece of your name, practicing the vanishing point method to create depth.
- Consider the spacing (kerning) of your letters, patterns and colours.
- You might also add some illustrations which represent your interests and likes.



Step One - On your page, in landscape layout, draw a very light line where you want your letters to sit. This is called the base line. Calculate how many letters are in your name along with how wide you want them and mark this out.

Note: Some letters are wider than others so take this into consideration. Consider the Kerning of your letters.

Step Two - Mark out a vanishing point on the page either above or below your lettering. Using a ruler draw very light lines from each corner of your letters to the vanishing point. This will help you achieve accurate angles for the 3D shadowing of your letters. Then choose the depth of your 3D (how much you want it to appear to be 'popping off' the page), and make all of your 3D sections the same width.

Once you have done this add patterns and shapes to your artwork, and add a simple background.

Step Three - Add colour to your artwork. Refer to the colour wheel below to aid you in making colour selections. The shadow for the letters is usually a darker, analogous colour to the letter or a darker shade of the letter. To make your artwork stand out use a key line and select a complementary or dissimilar colour.

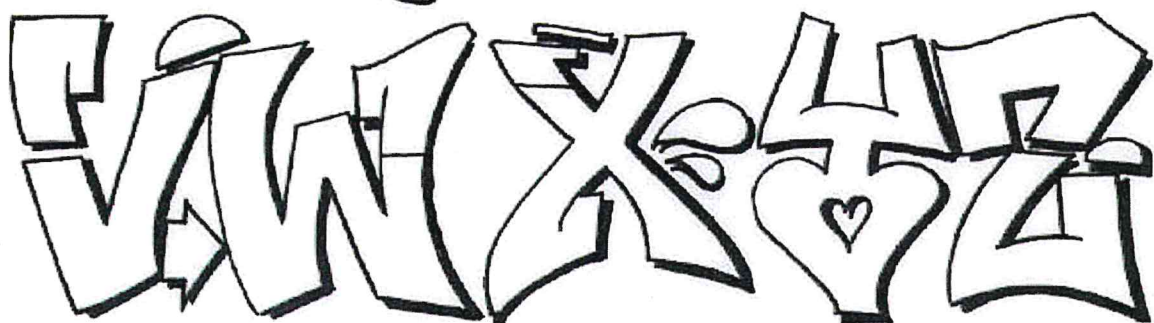
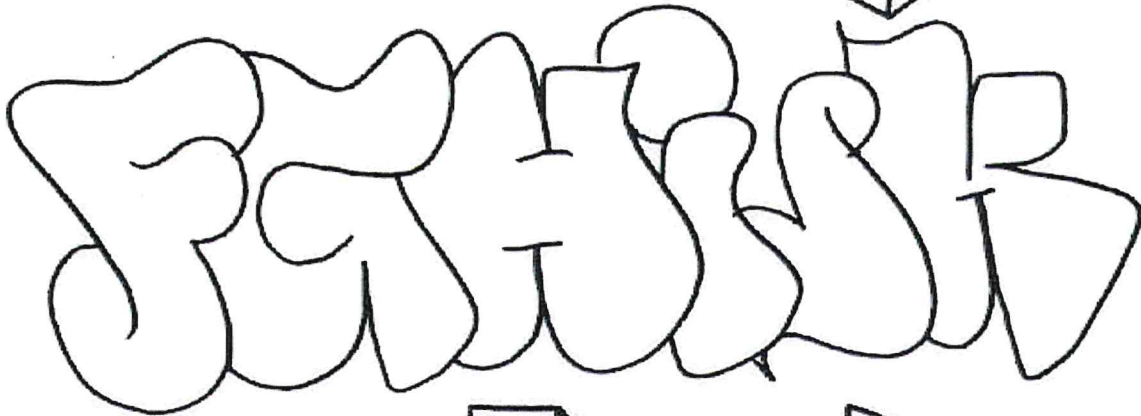
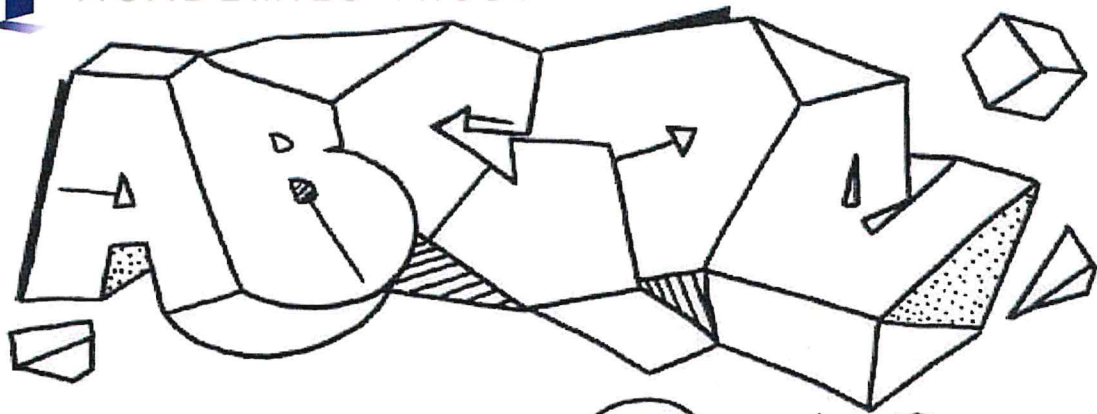


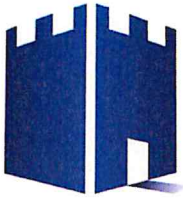
Key Line - Refers to the second line outside the outline.

Analogous Colour - Colours which are next to each other on the colour wheel.

Complementary Colour - Colours which are opposite each other on the colour wheel.

Materials used: HB Pencil, Ruler, Inoulak Striker Set, Inoulak Fineliner.





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GRAPHIC DESIGN

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Typography Design

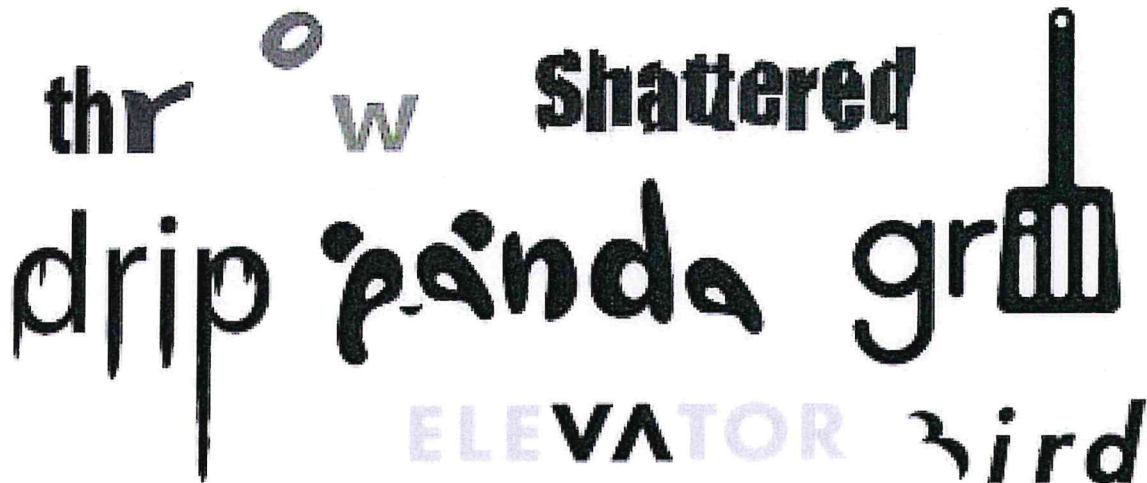
Typography Design

Graphic designers often use stock fonts that are downloaded from the web but sometimes they need to design their own typography to communicate a message to their audience in an interesting way.

Task:

Using a pencil and plain paper, try to design your own typography to represent some of the words in the box below. You should spend between 5 and 10 minutes on each!

Here are some examples...



Ghost

Chase

Spooky

Train

Sizzle

Happy

Rain

Squash

Posh

Parallel

Torn

War

Cheese

Backwards

Angle

Pour

Confused

Magic

Blite

Eat

Kiss

Liquid

Steal

Book

Drop

Cycle

Grab

Cat

Teeth

Smart

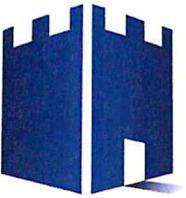
More of a challenge? Try these...

Justice

Opposite

History

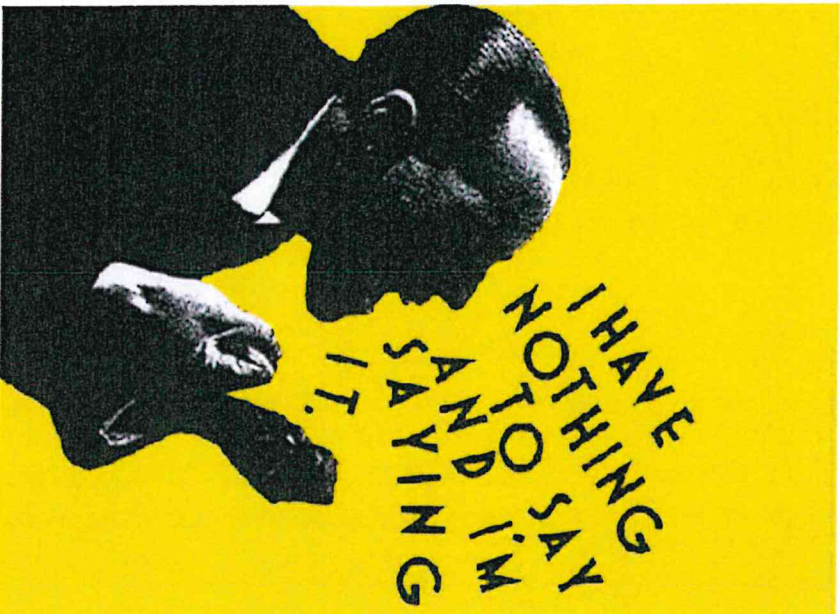
Prejudice



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DESIGNER STUDY: Alan Fletcher



What is the purpose of this piece of design work?

IN THE BOX BELOW: Produce a copy of part of this piece of design, or produce your own version of the work

The materials/techniques I have used in this artist study are:

THE ELEMENTS OF DESIGN

Typography Colour

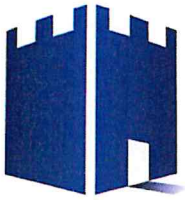
Shape / Image

Composition Contrast

Size Line

Which Element of Design has been used the most successfully in your opinion? Explain why.

Who is the target audience?
Explain how you know



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Graphic Design

PROJECT FOCUS:

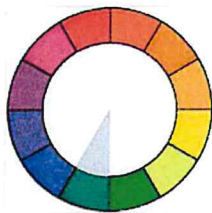
Elements of Graphic Design

LESSON FOCUS:

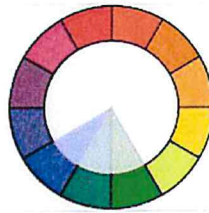
Colour Schemes

- A Colour scheme is a set of colours (colour combination) that is used in a design or an art-work to achieve certain goals.
- Colour schemes are used to create style, appeal, and an aesthetic feeling

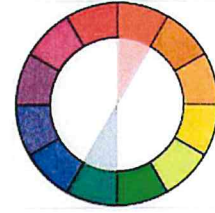
COLOR SCHEMES



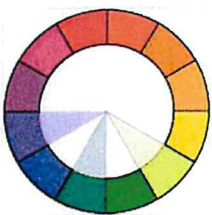
monochromatic



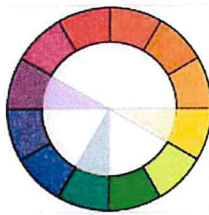
analogous



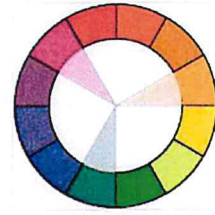
complementary



triadic (split 1)

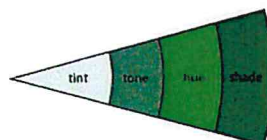
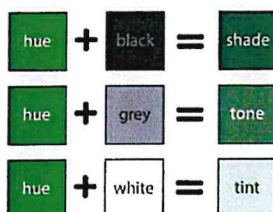


triadic (split 2)



triadic (split 3)

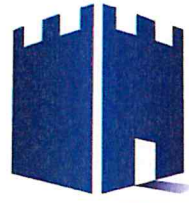
STEPS



Color schemes include all value variations of the hues: shades, tones, and tints.

Colour Schemes

Sets of colours that work together to create harmony and contrast.



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Achromatic

Only consists of black, white & grey



--	--

Monochromatic

One colour in different levels of brightness



--	--	--	--

Analogous

Three colours next to each other on the colour wheel - a primary colour in the middle creates contrast



--	--	--

Complementary

Two colours opposite each other on the colour wheel



--	--

Split Complementary

Three colours - one primary, and two secondary that are opposite the primary in the colour wheel



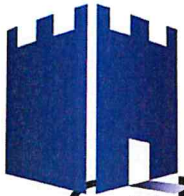
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Triadic

Three colours in a triangle on the colour wheel - all opposite each other



--	--	--



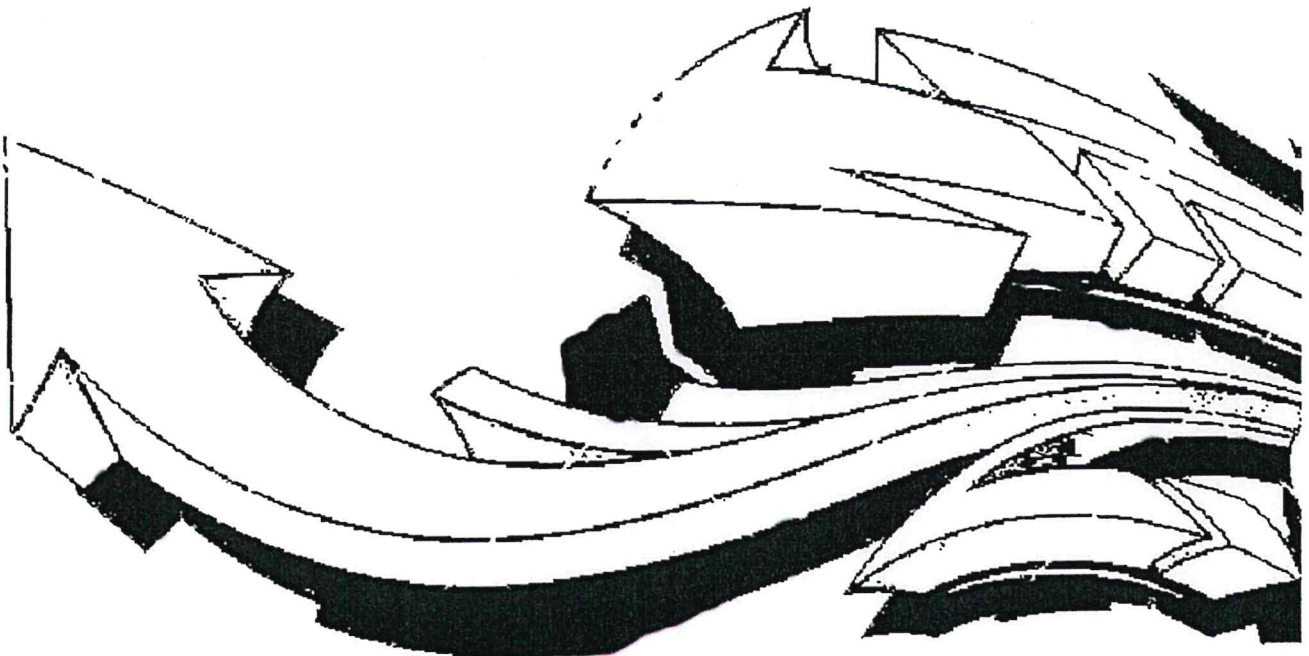
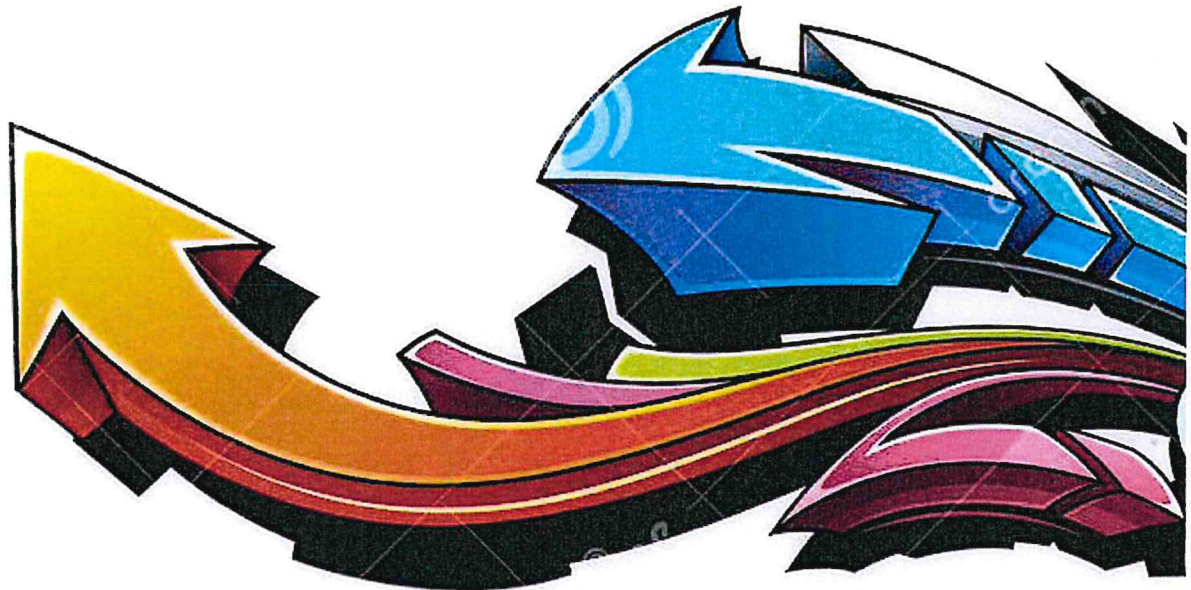
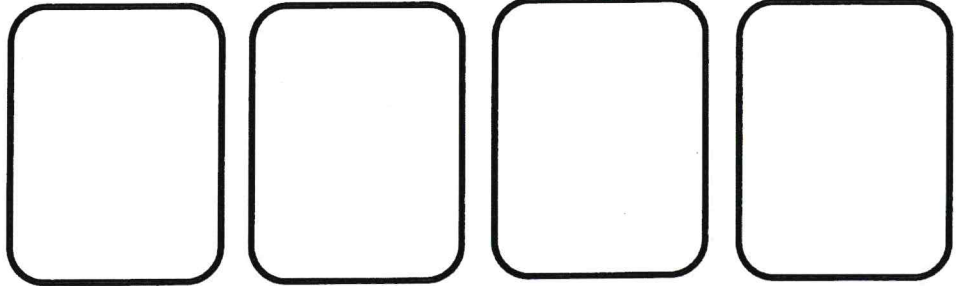
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Colour Fades

Using coloured pencils, add colour to the outline below that shows colours blended smoothly into each other. Use the boxes to practise and test blending before adding them to the outline.

Colour Tests





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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Colour Palettes

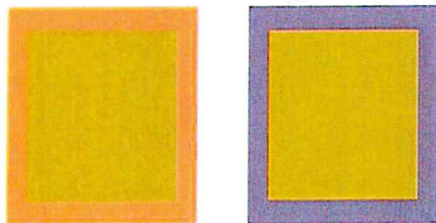
Most basic **colour schemes** are constructed using mainly harmonious colours with just one of two complementary colours added for contrast.

Colour schemes are sometimes known as **colour palettes**.



The colours we see are influenced by:

- the colours that they are next to, and
- the surrounding colours in the space we are in.



Are these two middle yellow squares the same or different colour?

Colours also look different if viewed in natural or artificial light, or a combination of the two.

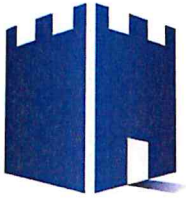
The colour we see may not be exactly the same as someone else sees.



There are various ways to create a colour scheme:

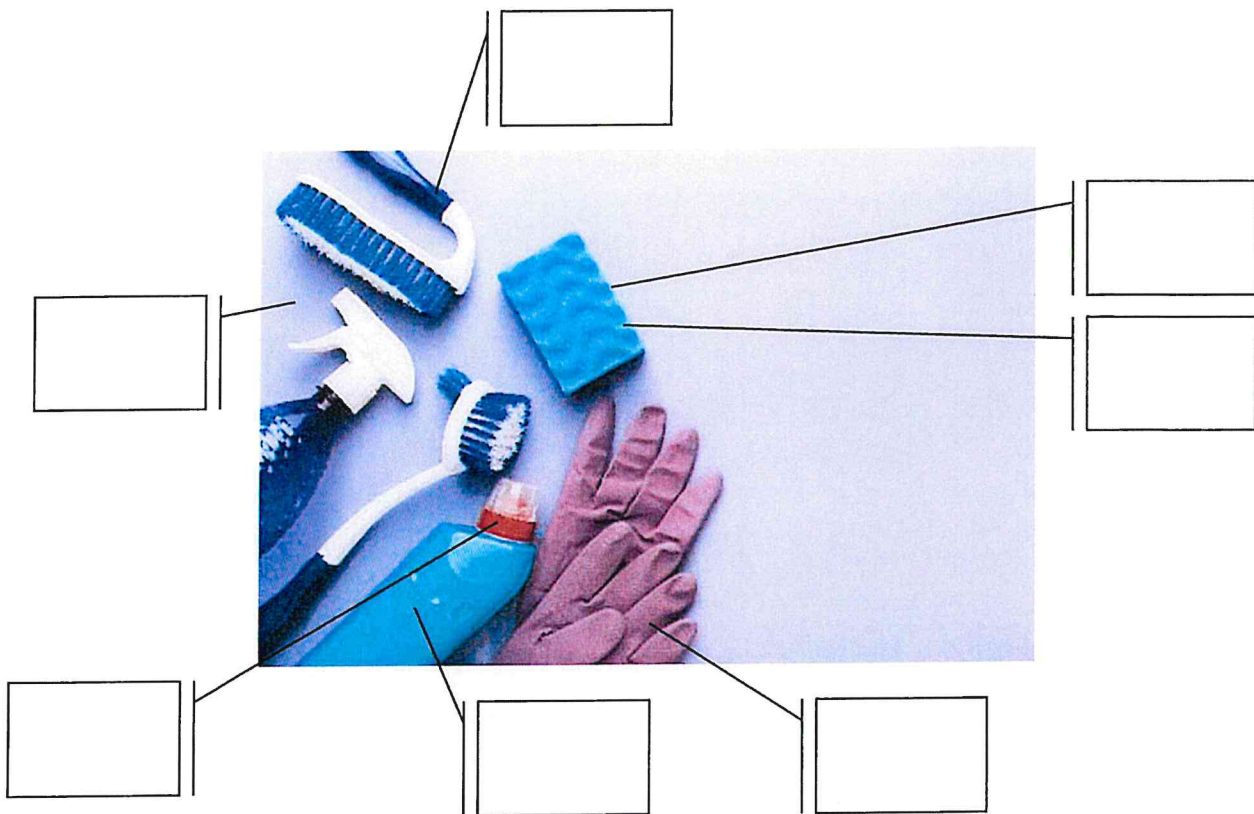
- Choose the colours yourself
- Analyse an existing colour scheme from a picture or photograph
- Use a computer program or app to select a ready-made scheme



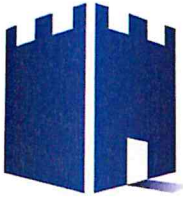


TASK:

- Identify the colour palette in this image, fill in the squares of colour



Describe the colour schemes used in this image using the key words from the previous information sheet.



TASK:

- Fill in the colour scheme from the image
- Using the colour schemes and your knowledge of colour palettes, design 2 alternative colour schemes for the seaside poster design.



Colour pallet:

--	--	--	--	--

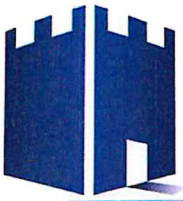


--	--	--	--	--

Colour scheme choice:

--	--	--	--	--

Colour scheme choice:



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Graphic Design

PROJECT FOCUS:

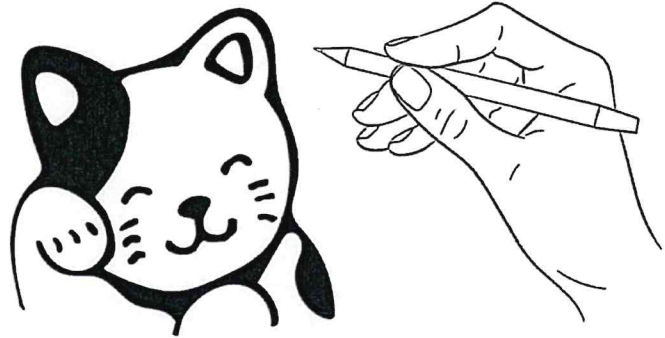
Elements of Graphic Design

LESSON FOCUS:

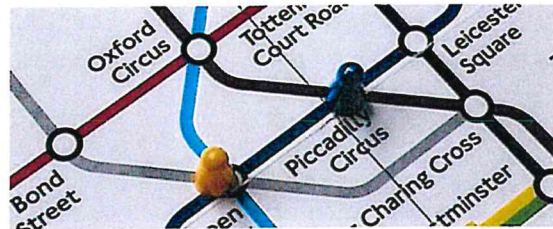
Element of Line

Line is a basic element in design; a long, thin mark on a surface.

It can describe the edge of an object, follow a route or **delineate** the boundary between different things.



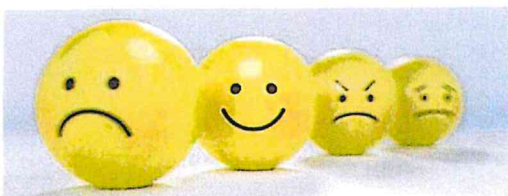
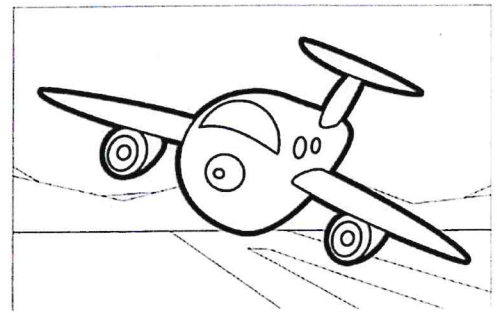
Lines can be used in graphic design to convey information, a sense of movement or a feeling.

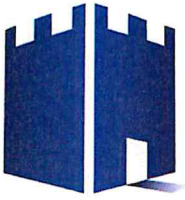


To **underline** something is to say it is more important. Look at the images to the right and see how some parts of the image seem more important.

How are lines used to express feelings?

Where do you notice lines separating elements?





Lines can come in lots of different thickness, can be smooth or grainy. Look at the lines to the right, how would you describe the differences between them?



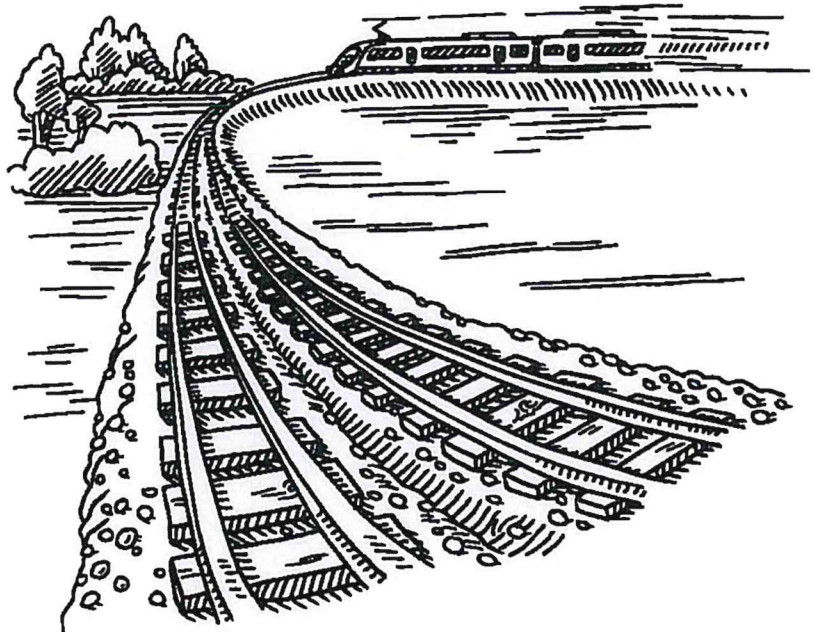
Are any of the lines described by these words:

Spidery Bold Faint

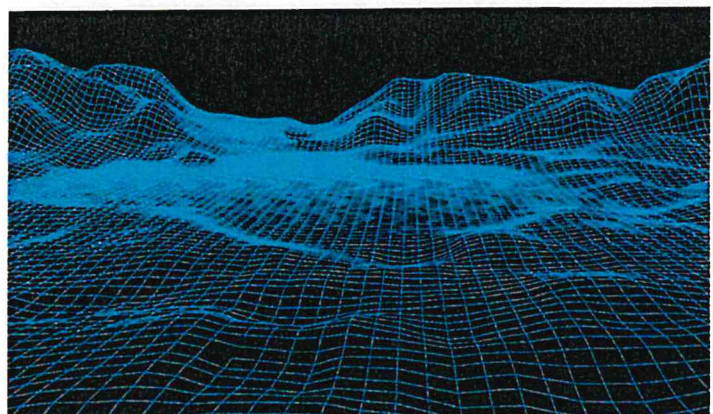
Angry Happy Calm

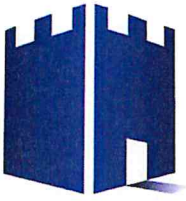


Lines can lead the eye, as we follow the thread along its path. A classic example is the 'railway tracks' that help lead us to an imaginary horizon.



Lines can also follow contours, helping to describe the rise and fall of mountains in this computer generated wireframe drawing.



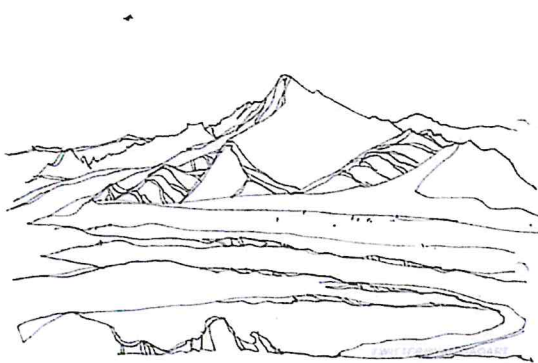


PONTFRACT

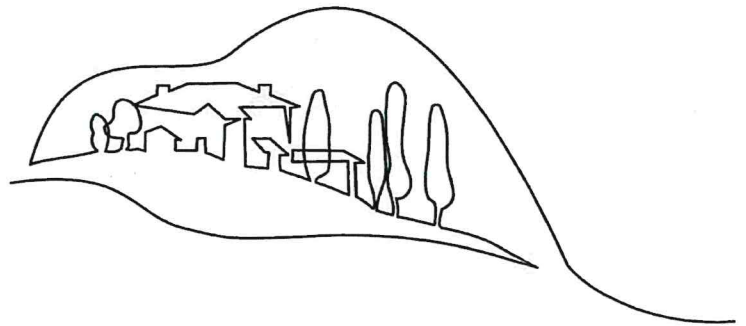
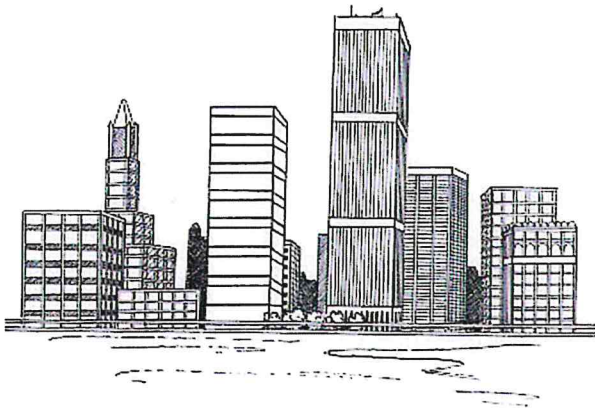
ACADEMIES TRUST

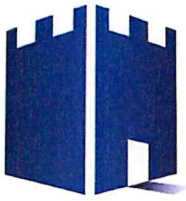
TASK:

- Design and make a simple A4 line cityscape or landscape.
- Use the example images to help. Your cityscape or landscape can be imaginary but must include different line types



DUNHWANG 8-13





PONTEFRACT

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NCFE

Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Line and Tone

Often, line and tone work together in graphic design to create images.

Working together, they can make complicated images or information easier to read.

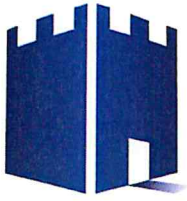


Line and tone have been used from the earliest human designs. Tools were used to scrape and carve lines in rock, while natural minerals were used to make 'earth tones' of browns, reds and yellows.

Line and tone are used in many ways by different cultures.

(Note that colours can have tones too!)





Line and tone are often used in graphic design to create bold, contrasting images. These are easier to see from a distance and stand out on a computer screen or magazine page.



Two of the images here use shades from white-grey-black to bring out elements of the picture.



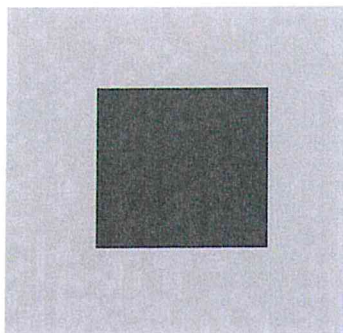
Successful graphic design produces information and images that are clear, attractive and easy to read and understand.

By using line and tone in a thoughtful and careful way, these objectives can be met.

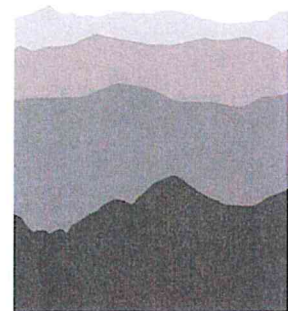
The stronger the differences in tone, the stronger the contrast, the bolder the image. Reducing tonal contrast makes an image softer and less clear.



When putting different tones together, they sometimes appear to 'float' above or 'sink' below each other. Looking at the two examples here, does the smaller square look nearer or further from you than the bigger square?

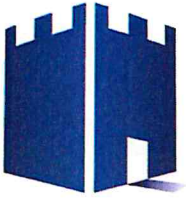


If we see a distant landscape, we expect to see some things nearer than others, as they disappear into the haze, a bit like the image here.



TASK:

- Design and draw a simple A4 tone cityscape or landscape.
- Your Cityscape or landscape can be imaginary but must include different line types and tones to add depth



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Graphic Design

PROJECT FOCUS:

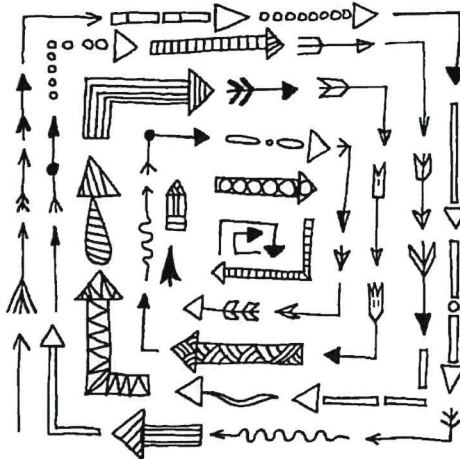
Elements of Graphic Design

LESSON FOCUS:

Experimenting with Line

Graphic designers learn how to get better results through exploring and experimenting with their tools and media.

Look at the different arrows on the right. What different directions do they communicate?



Graphic designers use many different tools for line.

Pens and pencils were used from the early days of graphic design.

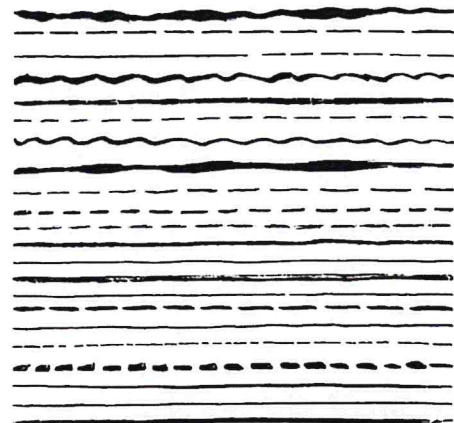
They are still important today, although the pens and pencils are often virtual tools, used on a computer screen.

Using real or virtual pens and pencils, it is possible to get a variety of marks.

How do the lines on the right look different from each others?

What words best describe each of them?

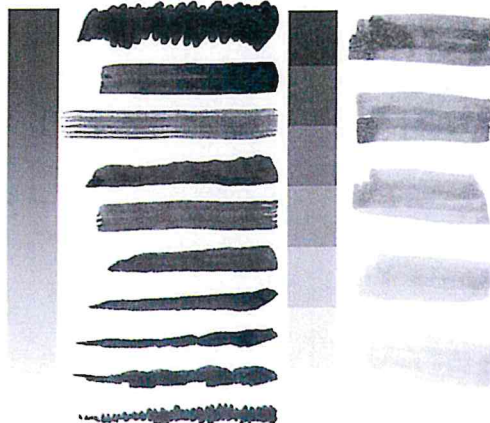
- bold pathway border
- scratchy weak strong



Using monochrome (one colour) a range of tones can be created.

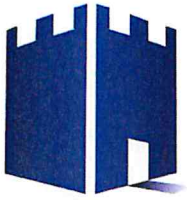
Depending on the tool used, lighter tones are made through:

- lighter pressure
- thinning the paint
- adding white or
- using colour sliders or pickers on screen.



TASK:

- On a page create as many different types of arrows as you can.
- Use light and dark tones, straight, curvy, bold and faint lines.
- Try combining different effects in as many ways as possible.
- If you have time, try giving names to different types of arrows.



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

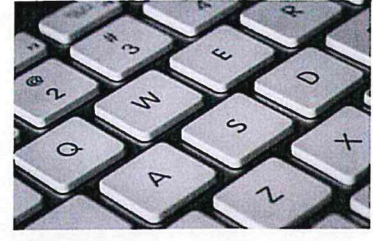
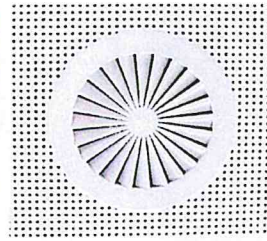
LESSON FOCUS:

Patterns in design

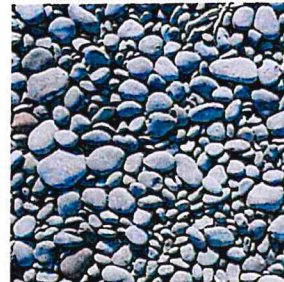
Graphic designers need to think about the space in an image and how it can work to the best effect.

Patterns can fill a space with similar (irregular) or identical (regular) shapes.

Regular patterns have a shape or 'motif' that repeats itself over and over again at set intervals. Many things in architecture and technology have regular patterns.



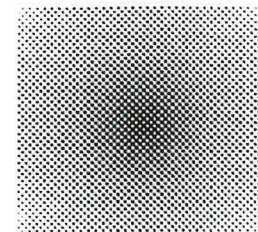
Irregular patterns tend to be from the natural world and are therefore more organic. The repeated shape often varies in size or spacing.

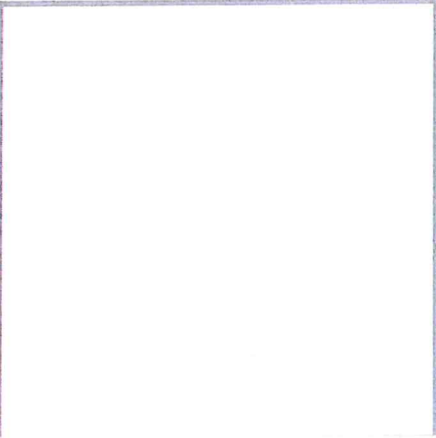
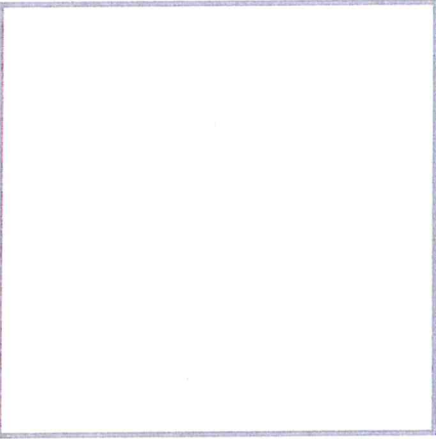
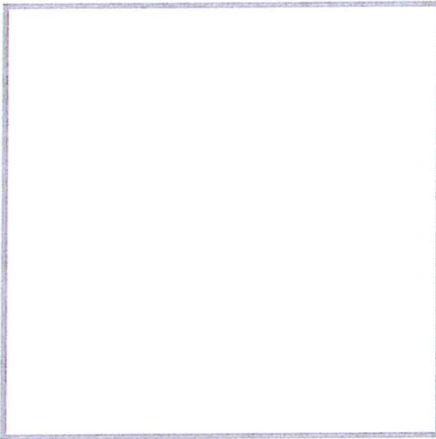
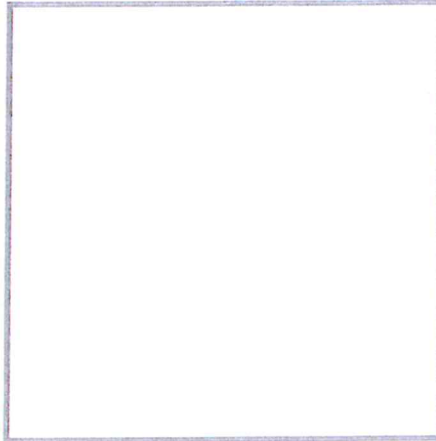
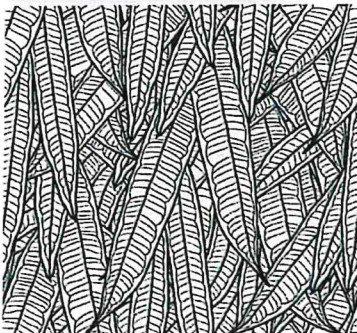
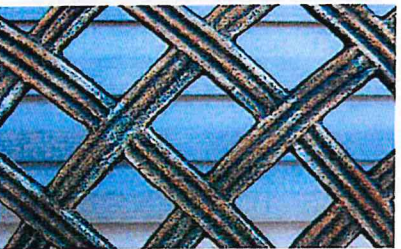


There are many applications for patterns in graphic design, as shown in these examples.

Keywords to discuss are:

- Motif
- Element
- Repeat
- Seamless
- Rhythm





TASK:

1. Draw 4 examples of patterns from the sheets
2. For each example, add notes to discuss the use of pattern. What makes them a pattern? Are they regular or irregular?

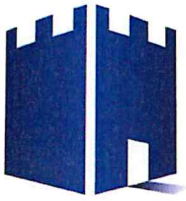
Pattern notes:

Pattern 1:

Pattern 2

Pattern 3

Pattern 4



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Symbols and Logos

A symbol is something that represents an idea or object. Symbols can take the form of words, sounds, gestures, ideas or visual images. For example:

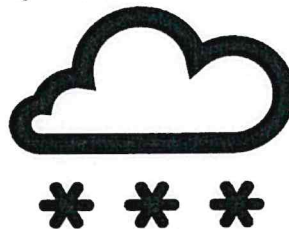
- A road sign with a diagonal line is a symbol for 'No Entry'
 - On a map, a blue line might represent a river
 - Numerals represent numbers
 - Alphabetic letters are symbols for sounds
 - Personal names represent individuals
- A red heart may symbolize love



Graphic designers are particularly concerned with using or creating visual symbols.

There are several types of visual symbols:

- Pictograms
- Icons
- Emblems

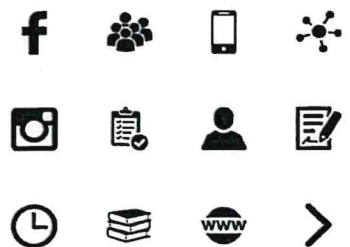


Pictograms are generally used to convey public information, such as directions, instructions, warnings, etc.

As such they do not identify organisations or businesses.

An icon is more commonly used in computing.

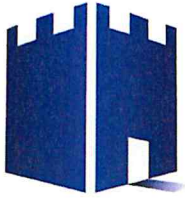
A computer icon is displayed on a screen as a navigation aid, one that can be clicked on to link directly to another screen or to open an application.



An emblem is very similar to a logo or a symbol but is not used in a commercial context.

Examples include national and regional flags, crests and coats of arms.





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The terms **logo**, **logogram**, **logotype**, **symbol**, **mark** and **trademark** are often used by the public. These words usually describe any distinctive graphic device, colour set, image, brand, name, signature, word, letter or letters that specifically identify the goods and services of a business or organisation.

The definitions on the following slides are generally understood by graphic designers.

A **logogram** is formed from the initial letters of an organisation. For example, the BMW logo.



A **logotype** is the full name of the company written in a distinctive type face. For example, the way that the words 'Google' or 'McCafé' are displayed.



A **symbol** is a simplified illustration of:

- The product or service being offered, and/or
- The use of an abstract colour, decorative shape, pattern or graphic device



©

The majority of marks combine a logogram or logotype with some form of symbol or graphic device.

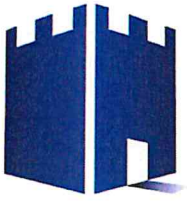
Sometimes a strapline, or tagline is also included. This is a short, easily remembered word or phrase that people will come to associate with the company or organisation.

The strapline is usually provided to the designer, who needs to ensure that it will fit with the visual design or the logo or symbol.

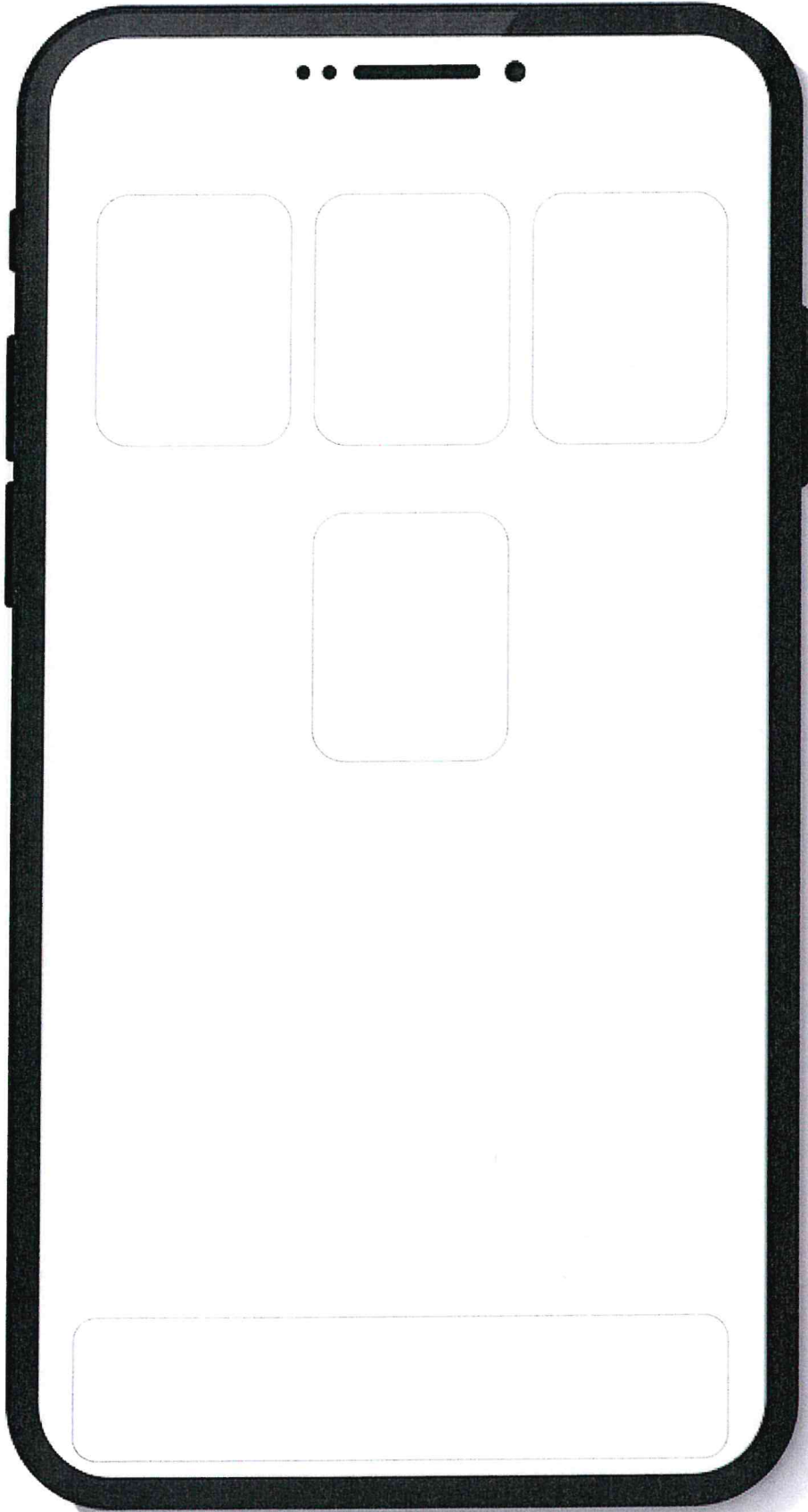
TASK:

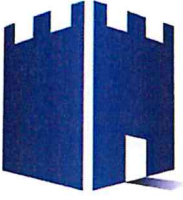
On the phone templates, design the following

- 3 icons to represent apps
- A Logogram for a google app
- A logotype—the full name of the company written in a distinctive type face
- Remmebr to use simplified shapes and colours



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BARCODES

V. Ryan © 2008 World Association of Technology Teachers

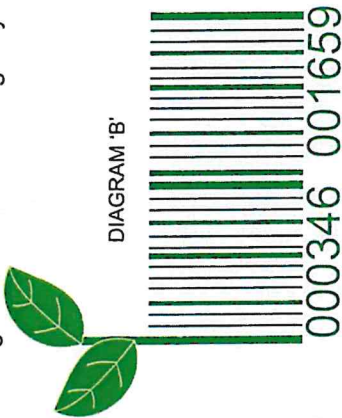
Barcodes are usually overlooked by the customer. They appear boring and are rarely part of the design work for the package. The two examples below where taken from the packaging for tea. Diagram 'A' shows the normal way of displaying a barcode, black and white strips and numbers. Diagram 'B' shows a more imaginative way of displaying the same barcode as it incorporates graphics/images relating the product, in this case tea leaves.

Do you think diagram 'B' is a more imaginative and interesting way of presenting barcodes?

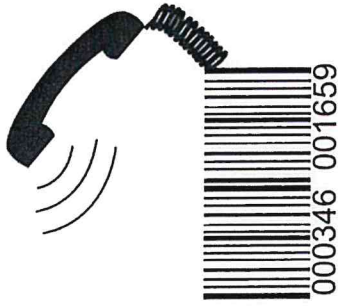
DIAGRAM 'A'



DIAGRAM 'B'

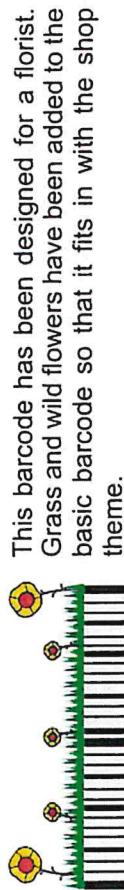


The barcode shown opposite could be used on the packaging of mobile phones. Adding an image or symbol does not alter the barcode at all, it can still be scanned at the checkout.



Designs can be added to barcodes but only if they do not interfere with the barcode lines and numbers.

What do think of the layout of this barcode?

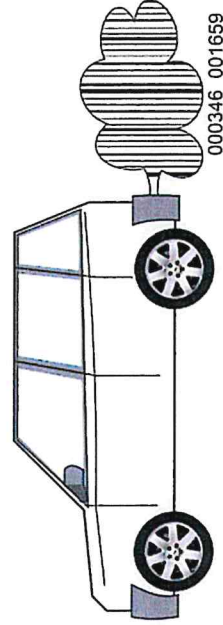


This barcode has been designed for a florist. Grass and wild flowers have been added to the basic barcode so that it fits in with the shop theme.

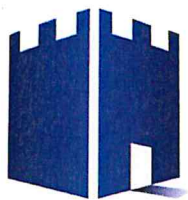
What do think of the layout of this barcode?



The barcode layout shown below has been designed for the packaging of a toy / model car. The barcode shape has been altered slightly but there is enough to scan. The barcode appears from the exhaust and the numbers are in place below it. Design your own version.

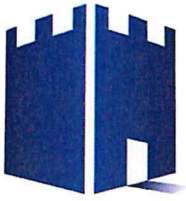


000346 001659



TASK:

- Complete the page about barcode design then
- Using your knowledge of design with line and logos, produce barcode designs for the following:
 1. A packet of vegan burgers
 2. A soft toy
 3. A mobile phone
- Explain how you have met the design criteria



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Branding



Logos and symbols are used in many ways by a business or organisation.

They are frequently printed on a letterhead, used on promotional leaflets or a website, embroidered onto a staff uniform or used as a large sign outside the premises. This is known as **corporate identity**.



The size and colour of a logo or symbol might need to be slightly different when applied to different items.

The designer needs to specify exactly what it should be like in all these different uses.

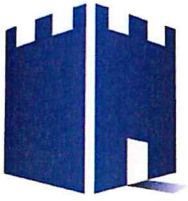


A corporate identity system needs to be closely related to the organisation's brand values.

A **brand** is more than just a symbol or logo. The brand represents the unique way in which a company or organisation is perceived as a whole—such as whether it is seen as good, poor, truthful, reliable, environmentally concerned, etc.



Think about the branding of Disney.
What do you expect Disney products to be like?



TASK 1:

You have been asked to design the following graphic items for a new local children's bookshop called Read The Book. You need to supply graphic designs for:

- A logo or symbol
- A bookmark
- A two-sided 'Open' and 'Closed' sign for the door
- A paper carrier bag
- A mug

Produce a range of drawn design idea for one of the products above.

First thoughts

Your logo or symbol could be a:

- Logogram—the initial letters of the bookshop, 'RB' or 'RTB'
- Logotype—the full name of the company written in a distinctive type face
- Symbol—a simplified illustration related to children's books or the use of a decorative shape, pattern or graphic device

That should give you plenty of starting points.

Second thoughts

Once you've sketched plenty of possible ideas for a logo or symbol, it's time to narrow things down and look more closely at just one approach.

You need to continue to be very experimental at this stage.

There are many ways you can make relatively minor adjustments that can make a great deal of difference to the effectiveness of the final design.

Try the following:

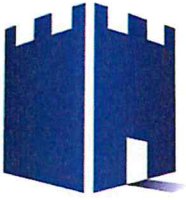
- Changing the size of different elements
- Repeating elements to make a pattern
- Overlapping shapes
- Reversing the foreground and background, positive and negative
- Adding shadows
- Using outlines
- Adding a third dimension (i.e. depth)
- Exploring different colour combinations
- Changing the typeface
- Simplifying what you've done

TASK 2:

Produce a final neat version of your logo/symbol design which could be shown to the owner of Read The Book for approval.

Modify your design as necessary and show how it could be applied to:

- A bookmark
- A two-sided 'Open' and 'Closed' sign for the door
- A paper carrier bag
- A mug



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Composition

In graphic design, composition is the arrangement of visual elements, or 'ingredients', in a graphic work.

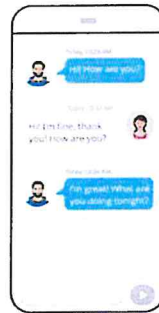
The arrangement of elements is called 'layout'.



One of the first things to think about is the space you have for a layout.

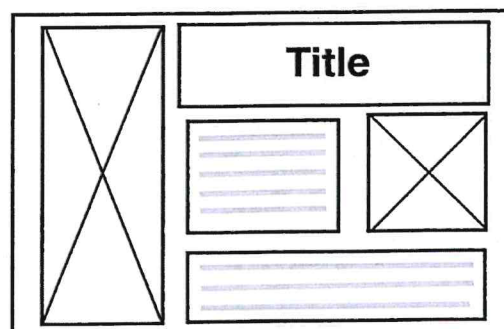
Is it a business card, a poster, a webpage, a phone screen or a large banner?

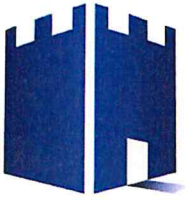
And what is the format? Is it portrait, landscape, A6, A2 or a custom size?



Suppose you have to design an A3 landscape poster for an event.

- What words need to go on? How big should they be?
- Any images? Shapes?
- What are the most important elements? Should those be much bigger?
- What is the key message?



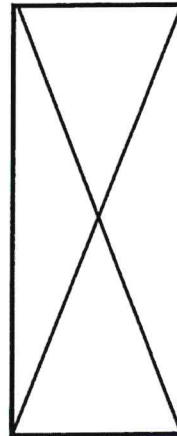


The first step is to show where the elements go, with **placeholders** for images, the title, and body text (usually with more detailed information). This is a way to quickly decide where key elements are to be placed within the image boundaries.

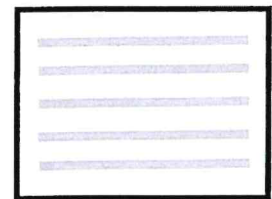
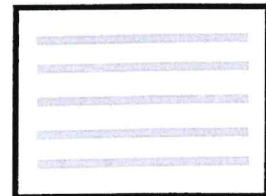
The actual pictures or text aren't included this stage, just shapes to show where they will go.



Title placeholder

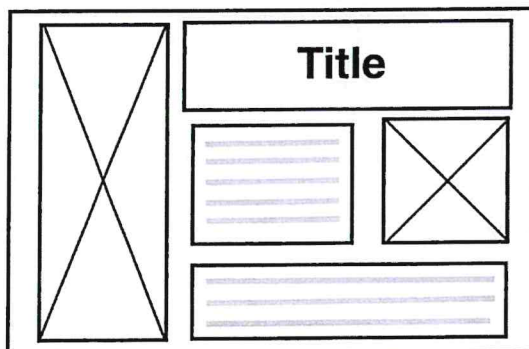
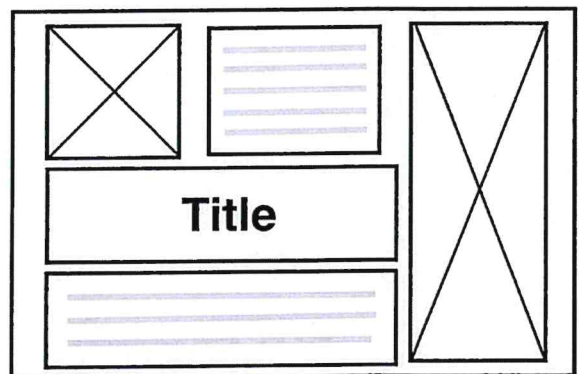


Picture placeholder



Text placeholder

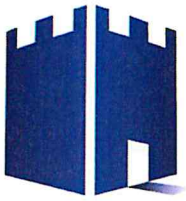
For example, here are two different layouts, using the same elements. How would you describe the different layouts? Which one might work best?



TASK :

Produce three different layout designs on A4 paper for a music festival.

- First consider what information you might need, make a list
- Then decide where this information will go
- Plan three small sketches of the layout
- Draw out your favourite final design, thinking about how that layout might suit the design best



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Focus techniques

In any graphic work, there tends to be a **focus**—a place where the eye is more likely to go. A graphic designer can encourage people to focus on one area with several techniques.

The simplest is **scale**—make one element bigger. Another is called **leading lines**—using lines to channel someone's focus to the bits you want them to see.

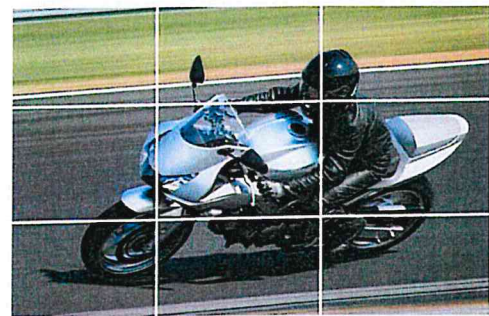


An obvious example of **leading lines** is railway tracks going to the horizon. Look at the examples here. How many leading lines can you see?



One way to create interest in a graphic image is to use the **rule of thirds**. If an image is divided into nine equal parts by equally spaced lines, key elements should be spaced along these lines.

When rule of thirds lines are placed on top of on the picture of the motorcyclist, you can see how some key elements are aligned along the thirds.



Two sorts of leading lines are present here: the more horizontal blurred background and road; and the more dynamic, diagonal line of the bike and rider, cutting from one corner of the picture to the other.



TASK :

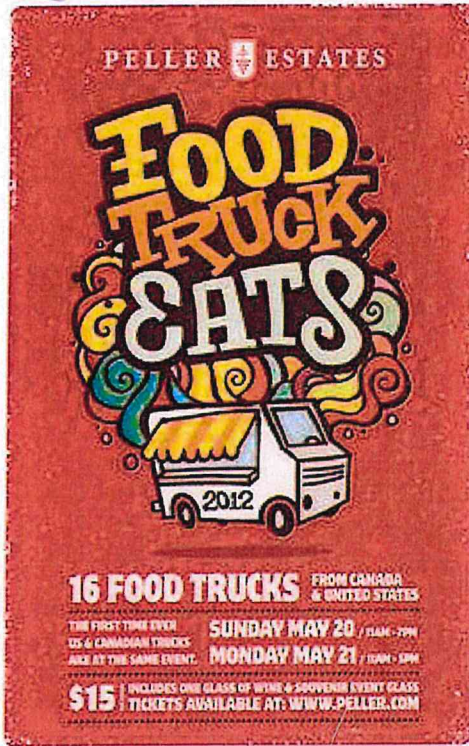
Look at the different flyer examples on the next page

1. Make some notes on the way these three techniques have been used.
2. Compare two of the images, noting how effective they are in using focus.

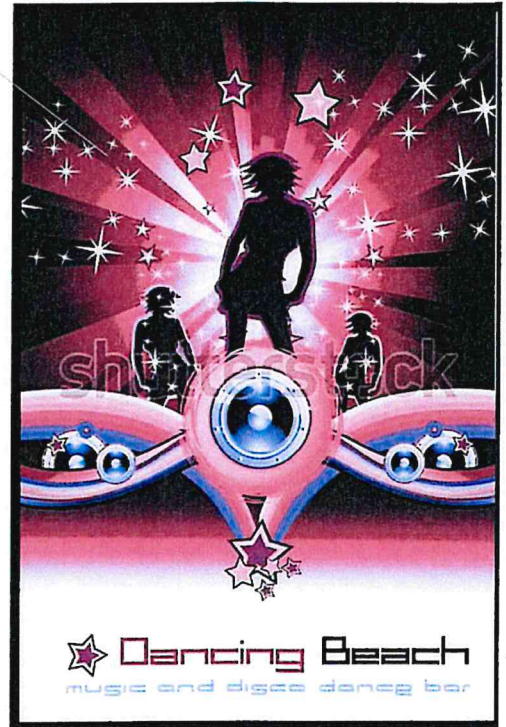


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Focus techniques:



www.shutterstock.com · 33601441

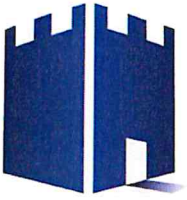
Focus techniques:



Focus techniques:

Comparison:

Empty box for comparison notes.



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Graphic Design

PROJECT FOCUS:

Elements of Graphic Design

LESSON FOCUS:

Composition

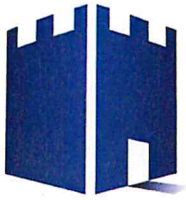
- Line
- Tone
- Form
- Shape
- Space
- Colour
- Texture
- Typography
- Pattern
- Imagery



How many of these components can you see in this image?

Which elements can you identify in this one?





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TASK :

Using the two images supplied fill in what you can see under each component.

- Compare the two images saying which elements are similar and where they differ.



Line:

Tone:

Shape:

Form:

Space:

Imagery:

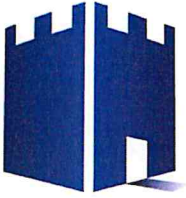
Colour:

Texture:

Typography:

Pattern:





TASK :

Using the two images supplied fill in what you can see under each component.

- Compare the two images saying which elements are similar and where they differ.



Line:

Tone:

Shape:

Form:

Space:



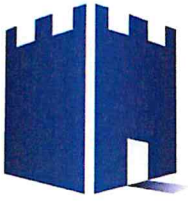
Imagery:

Colour:

Texture:

Typography:

Pattern:



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Comparing graphic design elements in two posters: