

Elements of design

LINE



A line is a mark between two points. There are various types of lines, from straight to wiggly to curved and more. Lines can be used for a wide range of purposes: stressing a word or phrase, connecting content to one another, creating patterns and much more.

SHAPE



Height + width = shape. We all learned basic shapes in grade school - triangles, squares, circles and rectangles. Old or lesser seen shapes can be used to attract attention.

There are three basic types of shape: geometric (triangles, squares, circles etc.), natural (leaves, animals, trees, people), and abstracted (dots, stylizations, graphic representations etc.).

VALUE



Value is how light or how dark an area looks. A gradient, shown above, is a great way to visualize value - everything from dark to white, all the shades in-between, has a value. Use value to create depth and light to create a pattern, to lead the eye, or to emphasize.

COLOR

Color is used to generate emotions, define importance, create visual interest and more. CMYK (cyan/magenta/yellow/black) is subtractive. RGB (red/green/blue) is additive.

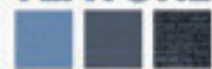
Some colors are warm and active (orange, red); some are cool and passive (blue, purple).

There are various color types (primary to analogous) and relationships (monochromatic to triad) worth learning more about as well.



Created by Paperkit Design, www.paperkit.com

TEXTURE



Texture relates to the surface of an object; the look or feel of it. Concrete has a rough texture; drywall has a smooth and subtle texture. Using texture in design is a great way to add depth and visual interest. Printed material has actual, tactile texture while screen material has implied texture.

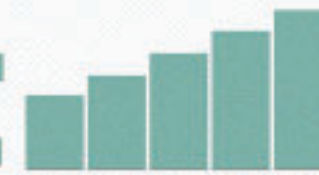
ELEMENTS OF DESIGN

quick reference sheet



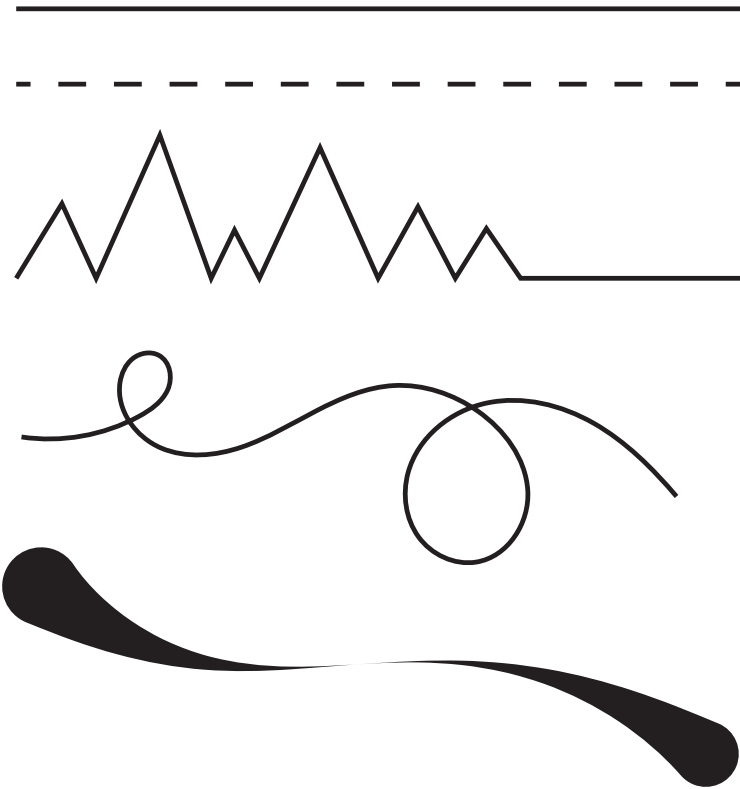
Space is the area around or between elements in a design. It can be used to separate or group information. Use it effectively to give the eye a rest, define importance, lead the eye through a design and more.

SIZE



Size is how small or large something is: a small shirt vs. an extra large shirt, for example. Use size to define importance, create visual interest in a design (via contrasting sizes), attract attention and more.

SPACE



Line

One of most important element of design, line defines a subject's form or shape on a flat, two-dimensional surface. Lines can be thick or thin, smooth or jagged, rigid and mechanical or organic and hand drawn.

The quality of a line has the ability to express psychological characteristics of a composition to an audience.



Positive and negative space

The shape that is created as the white space flows around the forms on a page is referred to as “ground or negative space.

White space on a page helps the eye to flow through a composition and can help to develop visual interest in a composition



Scale, proportion, size

Scale refers to refer to the size of elements in a composition.

Proportion refers to the relative size of objects in relation to each other.

Size only takes on meaning when compared to other objects of different sizes.



Scale

Another way to talk about scale is to consider the size and scale of elements within a design or pattern.

Changing the size of elements within a composition changes the overall impact and look of a piece of art.



Unexpected Scale

When objects are shown as overly exaggerated or reduced in size, this effect is called “unexpected scale.” Unexpected scale is often used in advertising in order to draw our attention to a product.

Large and small scale forms can be combined together in a composition to create a dramatic effect.

Unexpected Scale

This VW ad from the 50's was a perfect example of unexpected scale, and it works amazingly well.

Small is made even smaller by the vast space around it. The supporting headline which is short and simple reinforces that feeling.

Think small.

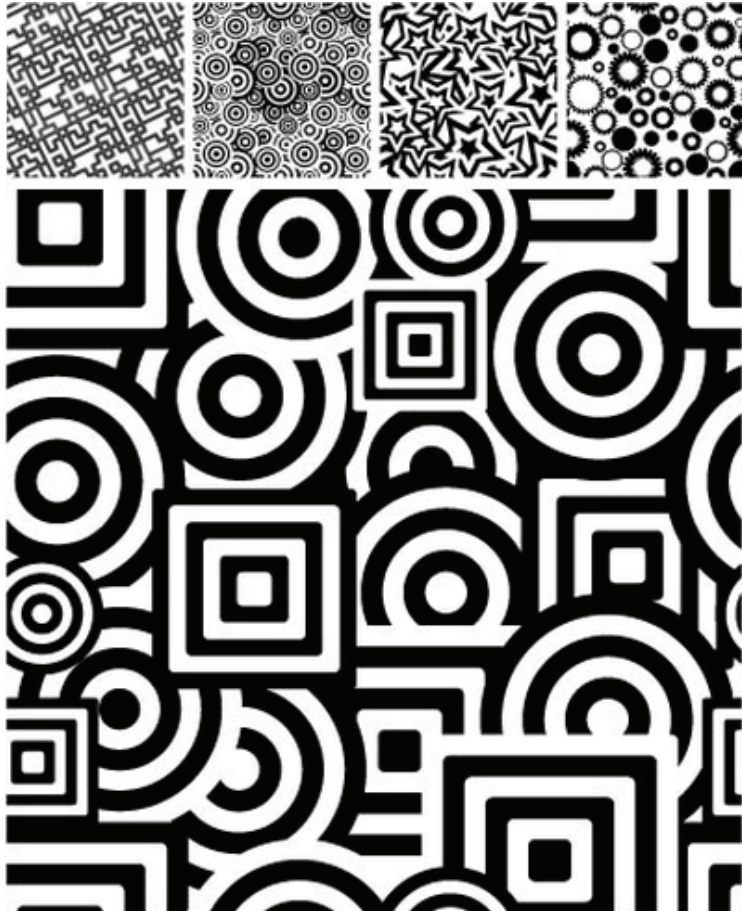
Our life can't be much of a novelty any more.
Or a couple of dozen college kids don't try to squeeze inside it.
The guy at the gas station doesn't ask where the gas goes.
Nobody even notices at our stops.
In fact, some people who drive our life

never don't even think 32 miles to the gallon is going any great guns.
Or using five pints of oil instead of five quarts.
Or never needing anti-freeze.
Or racking up 40,000 miles on a set of tires.
That's because once you get used to

some of our accessories, you don't even think about these any more.
Except when you squeeze into a small parking spot. Or renew your small insurance. Or pay a small repair bill.
Or trade in your old VW for a new one.
Think it over.

Unexpected Scale





Pattern

Pattern is often associated with printed fabrics, such as plaids, and polka dots. Pattern is defined as a repetitive design, with the same motif appearing over and over again.

Texture



Texture is the tactile quality of a surface. It can be actual or implied in 2 dimensional form. Texture can be rough or smooth, solid or porous, coarse or polished.

Pattern and texture work together to create a sense of visual interest.



Balance

Balance refers to the distribution of visual weight within a composition.

Lack of balance disturbs the harmony of a composition. A work that is unbalanced visually creates tension.



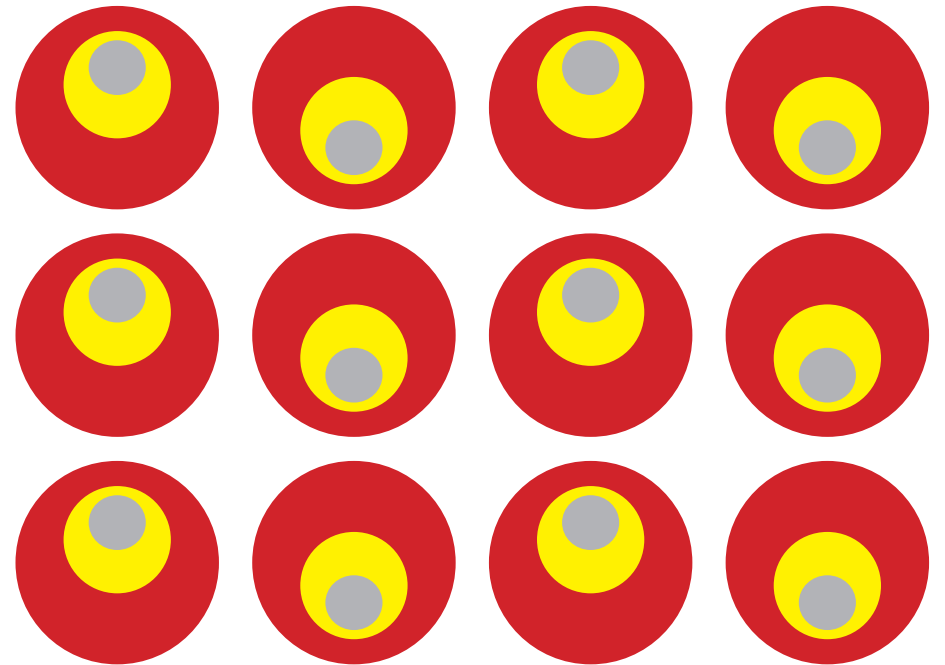
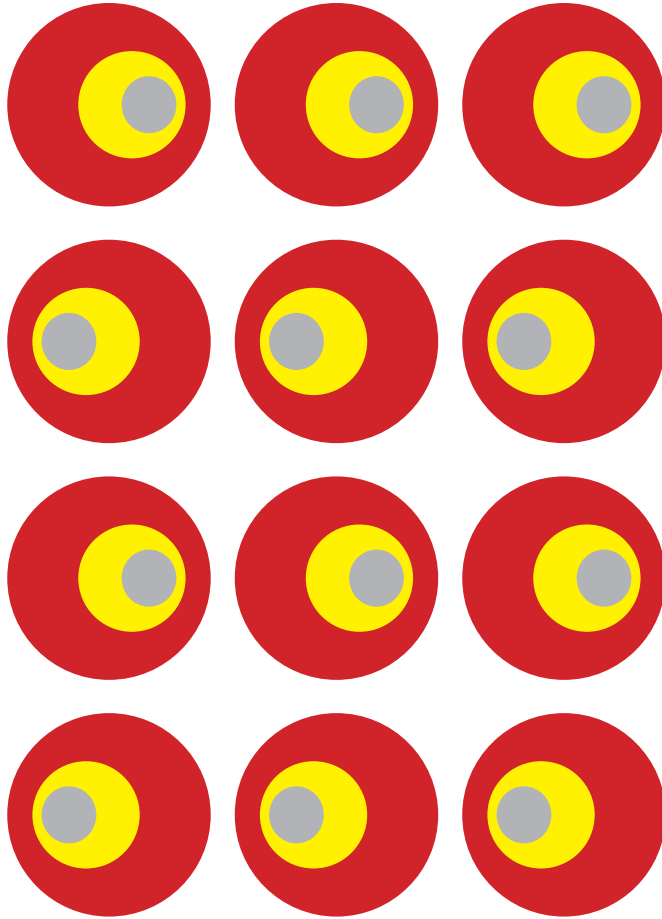


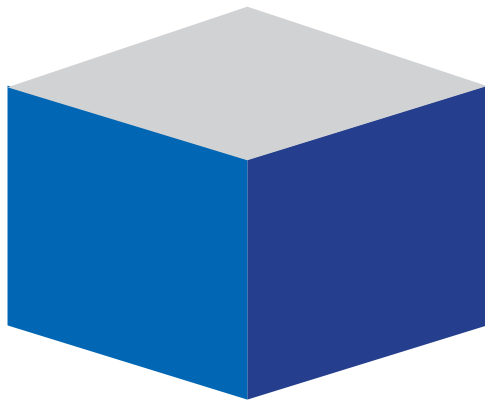
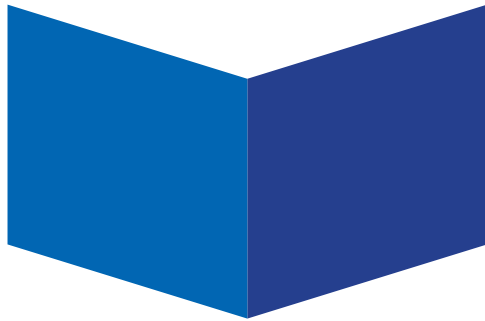
Rhythm

Rhythm is the repetition of design elements at regular intervals. This helps to give a composition visual harmony by creating unity in a layout.

Examples include the repetition of similar shapes, colors or textures.

Rhythm





Dimension

Simple shapes that have a direction change, along with difference in colors to imply light and shadow add dimension.

Drop shadows add dimension as well and also rank you as a novice.



Direction

The lines and forms that lead the viewer's eye through a composition are referred to as direction.

Direction can help to create flow and to direct how information is processed.

Direction



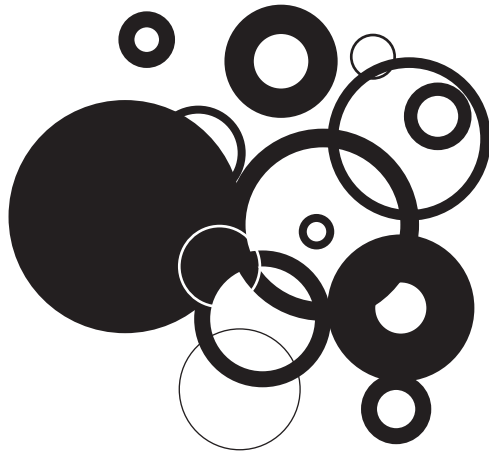
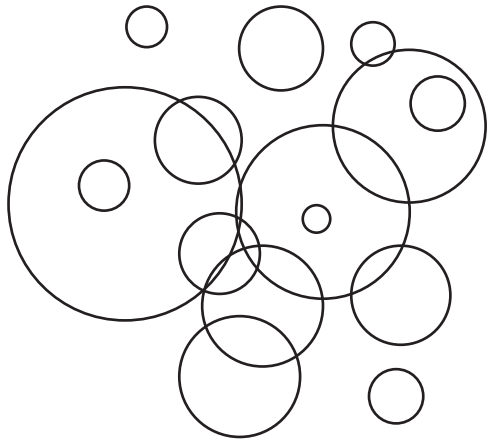
Arrows and points can also imply direction.



Objects that appear to shift or show progression can also support movement or change of direction



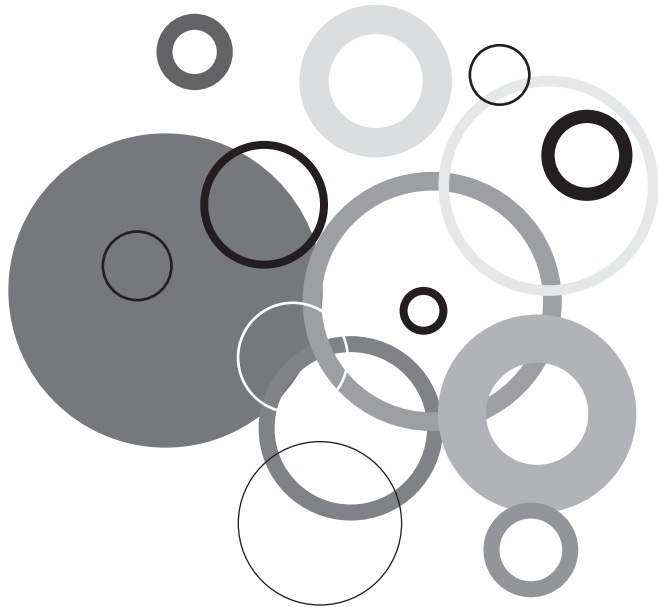
Items in perspective form direction. Closer to us, things appear bigger, farther away they appear smaller.



Weight

Weight refers to the contrast in thick and thin lines within a layout.

Variation in visual weight can add interest to selected areas of a composition and can help draw the viewer's eye through a piece of art, emphasizing important areas of information and de-emphasizing others.

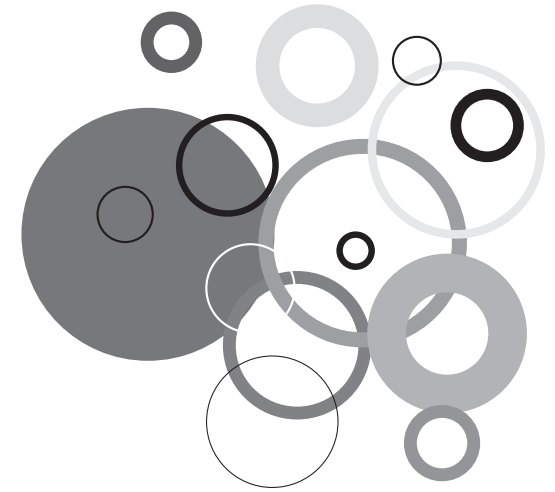
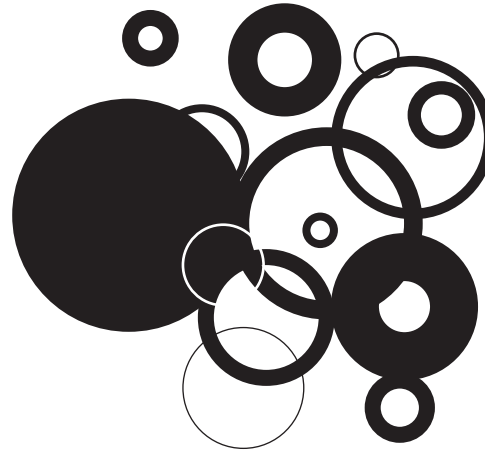
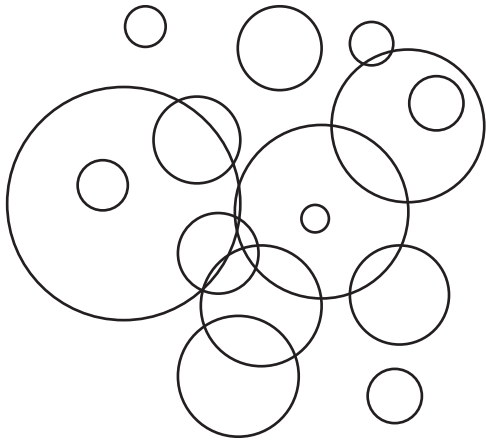


Contrast/Value

Contrast can also refer to any variation between elements within a composition, such as difference in weight, size and texture of a composition.

This also brings the feeling of dimension with elements in front of — and behind — others.

Contrast/Value



Contrast/Value





Balance

Balance refers to the distribution of visual weight within a composition.

Lack of balance disturbs the harmony of a composition.

A work that is unbalanced visually creates tension.



Symmetry

Symmetrical Balance is when elements are arranged in a mirror image of one another on the vertical or horizontal axis of a page. Also known as “formal balance. This type of balance is often seen in the architecture of buildings.

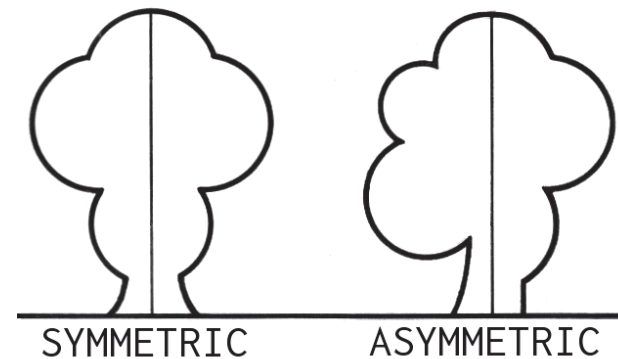
This is the most familiar type of balance to the viewer.

Asymmetry



Asymmetrical balance occurs when elements in a design are not arranged as mirror images on a page. Also known as “informal balance.”

Can be created through the use of value, texture and size of elements within a composition.



Placement

Forms placed near the edge of a page can also draw more visual attention than forms placed directly in the center of a page.



Direction

Forms or images facing into the page bring you into the layout.

Having forms or images facing out brings the attention away from the center of the page.

Direction

People facing away from the center bring your attention to the direction their eyes are looking.





Direction

People facing away from the center bring your attention to the direction their eyes are looking. So when they are looking out of the page, you tend to follow their eyes.

The same concept is true with product images, graphics and charts.

We want people to look the direction we look, or at least keep them involved with the design. Human nature makes us look the way others are looking.



Direction

The direction an image, graphic or chart is pointing is very important.

Up is optimistic, uplifting.

Right is progress, a new direction.

Down is negative, not progressive.

Left is retreating, old, yesterday.



Direction

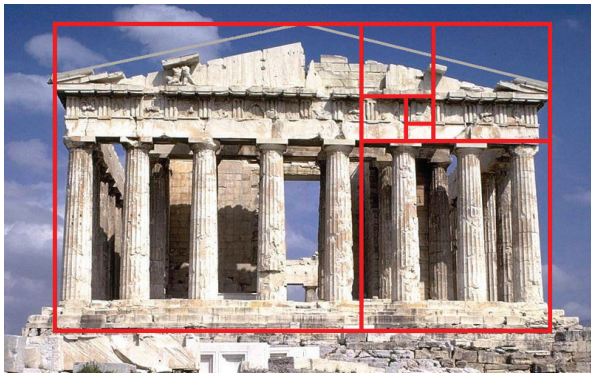
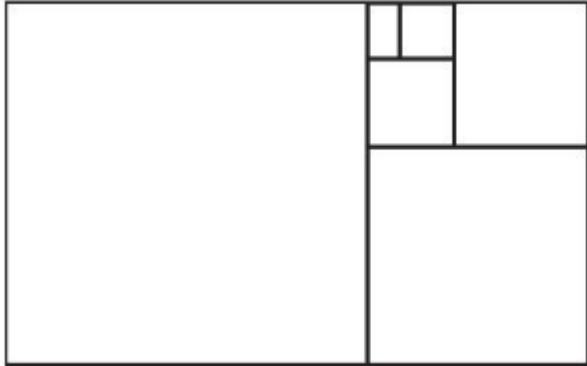
The wrong direction can send the wrong message or lead the viewers attention away from the main purpose of the ad or logo.





Rule of Thirds

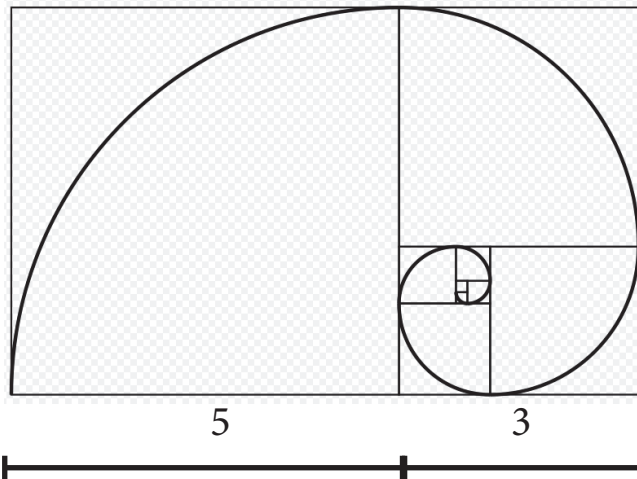
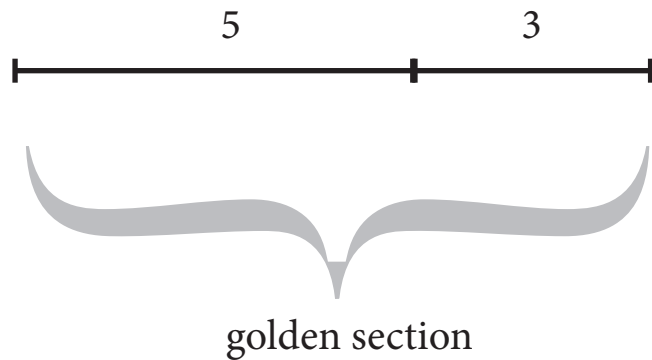
The Rule of Thirds refers to the idea of dividing a composition into thirds based on a grid. The most important elements of the composition fall on the lines in between to create a strong composition. A slightly off center balance is more visually interesting and harmonious than an evenly centered composition.



Golden Mean

The Golden Mean or Golden Ratio is the relationship between sizes that is pleasing to the human eye. This concept was first recognized by the ancient Greeks, and examples of the golden mean can be observed through Greek artwork and architecture.

Some sources claim that the golden ratio is commonly used in everyday design, for example in the shapes of postcards, playing cards, posters, wide-screen televisions, photographs, and light switch plates.



Golden Section

The golden section is a line segment divided according to the golden ratio: The total length $a + b$ is to the length of the longer segment a as the length of a is to the length of the shorter segment b .

In mathematics and the arts, two quantities are in the golden ratio if the ratio of the sum of the quantities to the larger quantity is equal to the ratio of the larger quantity to the smaller one.

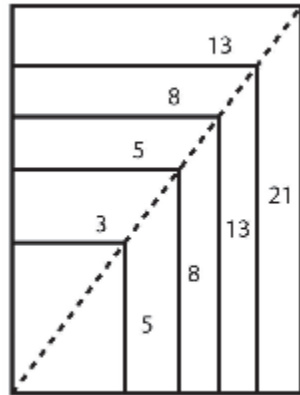


Fibonacci Sequence

Ever notice that the number of petals in a flower is often one of the following numbers: 3, 5, 8, 13, 21, 34 or 55?

Notice the two series of curves in the yellow flower, one winding in one direction and one in another; the number of spirals are not the same each direction. Pinecones have this.

The number of spirals in general either 21 and 34, either 34 and 55, either 55 and 89, or 89 and 144? Pineapples have 8 spirals in one direction and 13 in the other...



Fibonacci Sequence

All these numbers are part of the Fibonacci sequence: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, etc. (where each number is obtained from the sum of the two preceding).

In design, this sequence is illustrated by the size of the boxes in this ratio.

Fibonacci Sequence



We see it in every day life, right at our finger tips and in our daily interaction with the world.

The same 3:5 ratio is readily apparent.

Grid Systems

The Grid System

The ultimate resource in grid systems.

"The grid system is an art, not a guideline. It permits a number of possible uses and each designer can look for a solution appropriate to the particular style. But one thing seems here to use the grid: it is an art that requires practice." Josef Müller-Brockmann

Articles

Musings on the Relationship Between Grids and Guides

An article that takes a look at the relationship between the grid and the use of guides.
05.Feb.2011

Regulatory Policy Newsletter

An article outlining the redesign of EPA's quarterly publication and its grid.
05.Feb.2011

Grids: Reconcile Structures of Design

Grids, along with visual hierarchy, typography, color theory, rhythm, etc., are the basic transactions of design, and yet they are widely ignored by the industry.
11.Nov.2010

Tools

GuideGuide

A column, row and margin guide panel for Photoshop CS4 & CS5.
05.Feb.2011

Modular Grid Pattern

A web app and Photoshop extension that aids in creating modular grid systems.
05.Feb.2011

Six Column Sandbox

A CSS grid framework that's based on a baseline of 1.4x the paragraph ascender, 160px columns, with gutters of 20px.
11.Nov.2010

Books

Ordering Disorder: Grid Principles for Web Design

Choosing the order and layout of content is often the difference between a dull web page and one that provides both the big ideas and the details of grid-based design.
11.Nov.2010

Universal Principles of Design

Universal Principles of Design is the first comprehensive, cross-disciplinary encyclopedia of design.
04.Nov.2009

Designing for the Web

A Practical Guide to Designing for the Web book with the explanations of the core principles of graphic design in relation to the web.
08.Oct.2009

Templates

960px Grid Templates

A collection of 960 pixel-wide column grid templates ranging from 2-columns to 16-columns, for both Adobe Photoshop and Fireworks.
11.Nov.2010

The Golden Grid Template

A PSD template based on the CSS framework The Golden Grid by Vladimir Gorev.
02.Mar.2010

Photoshop 4 Column Grid

A new 4 Column Photoshop grid template for a 1024x768 screen resolution by Ray Guzik.
08.Jun.2009

Blog

The Columnist

Every grid becomes a narrative concern layout and user typographic hierarchy.
05.Feb.2011

Grid-A-Licious 2.0

A beautiful grid-based theme for WordPress.
05.Feb.2011

Bon Graf Pads

A range of beautifully crafted grid layout pads printed on acid free 100gsm uncoated paper and made in Australia.
11.Nov.2010

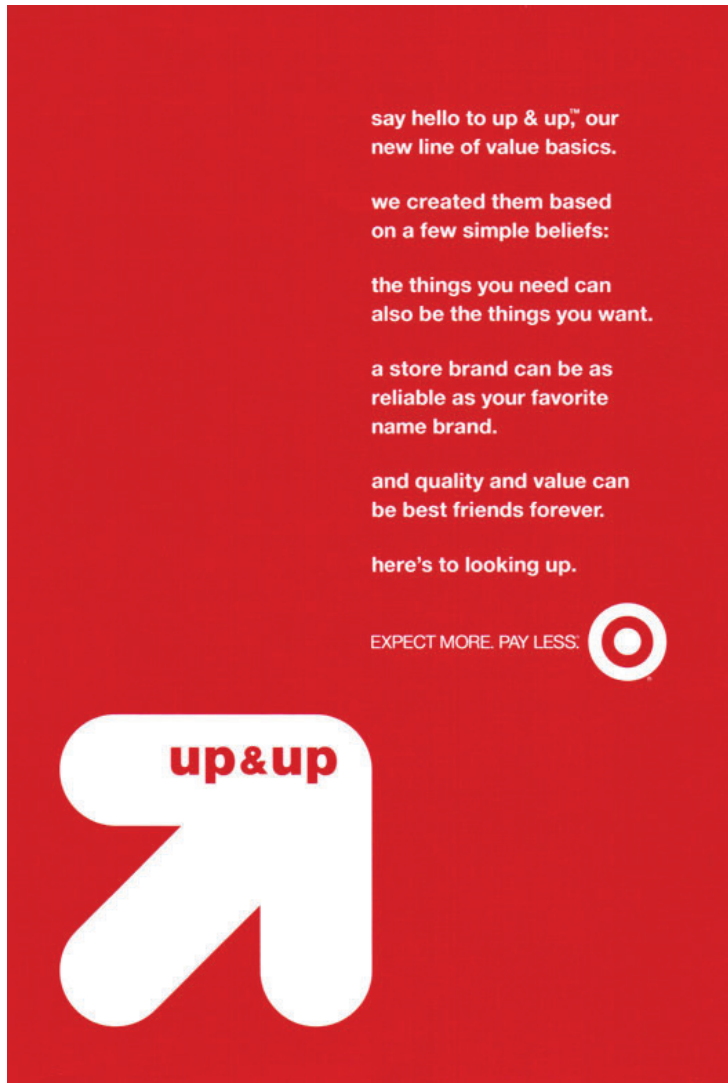
A grid system is a rigid framework that is supposed to help graphic designers in the meaningful, logical and consistent organization of information on a page. Rudimentary versions of grid systems existed since the medieval times, but a group of graphic designers, mostly inspired in ideas from typographical literature started building a more rigid and coherent system for page layout. The core of these ideas were first presented in the book Grid Systems in Graphic Design by Josef Müller-Brockmann.

See more at: grid-based.com

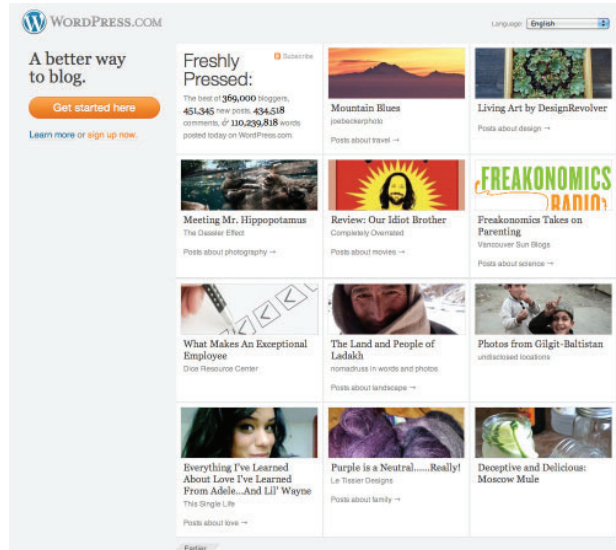
Grid Systems

This Target ad is a simple, clean, elegant and efficient use of the grid. The message comes across without any questions and flows nicely and quickly so your eye can easily follow and your brain can make sense of it.

The arrow points you to the logo and copy. Up and to the right makes it feel reassuring, trusting.



Grid based design



Grids are structure imposed on chaos. They are a harmonious and reliable system for presenting information. Grids offer an effective design approach for site layouts and assist in communicating site's main messages clearly to the end user. They created ordered hierarchies, proportional relationships, and clear visual paths for the eye to travel. Learn to achieve balance, symmetry, and place emphasis on important content all through the use of the grid.

See more at: www.thegridsystem.org



Creating a Grid Structure

Grid units are the primary locations on your page where you will place text and images. They determine placement not necessarily size. That is, if you have a graphic image that is larger than your grid unit, it doesn't mean you can't use it. You would use your grid units to help resize the photograph—ideally to fill 1, 2, 3 or more grid units and then to place that image on your page.



Motorcycle Roads and Trips in the northwest

Many of the country's best motorcycle rides fall within the borders of Washington (WA) state. The state is blessed with a vast diversity of breathtaking scenery including the Pacific coast, the Olympic Peninsula, the Cascade Mountains, the incredible Columbia River basin, and the arid rolling hills of eastern Washington. Although areas west of the Cascades are generally heavily populated, many outstanding motorcycle roads abound if you know where to look. The Cascades offer great mountain motorcycle riding along with wonderful destinations like Mt. Rainer and Mt. St. Helens State Park. To the south the areas around the Columbia river are home to endless magnificent winding motorcycle roads.

Pure Alpine scenery just minutes from downtown Los Angeles. Fresh air, trees, mountains and blue sky all day long.

Lots of twisting mountain roads, sweeping curves and switchbacks climbing up to approx 7000 ft. The road is in excellent condition.

Applying content to a grid structure

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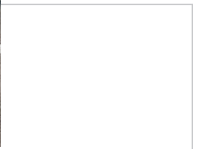
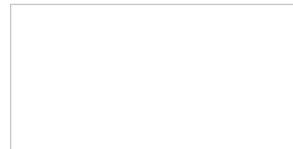


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