# The Guide to Grid Systems.

Grids can change your entire workflow. Have you ever stared at a blank screen and wondered how on earth you were going to find the right position for all of the elements for your design? You may have a layout plan already established, but where on this blank artboard are you supposed to place everything?

Grids have been used throughout history, though mostly never called "grids" as such. Look at some of the first printed books and you will see a series of columns dividing the text into blocks. Look at any line of printed text in a book to see one of the earliest forms of griding in the form of a baseline that aligns the bottom of the text together.

Grids are the building of a matrix of intersecting vertical and horizontal (and sometimes diagonal) lines to form a grid system. Using grids, designers can make sure elements are aligned properly but also find opportunities to align certain items together to form unity.

Grids can be used on just about anything. Some special types of grids exist just to provide a template to design aesthetically pleasing icons, for example.

This is a standard icon grid which consists of a series of intersecting 45 degree lines to form a center point. Designs that adhere to this basic grid form tend to be more orderly and symmetrical.

Basic Grid Terminology

We are going to review several different grid types throughout this section. They all have similar characteristics and feature the following terms (see below).

Flowlines

Flowlines are the lines that run horizontally across the grid. They help the reader follow content.

Margin
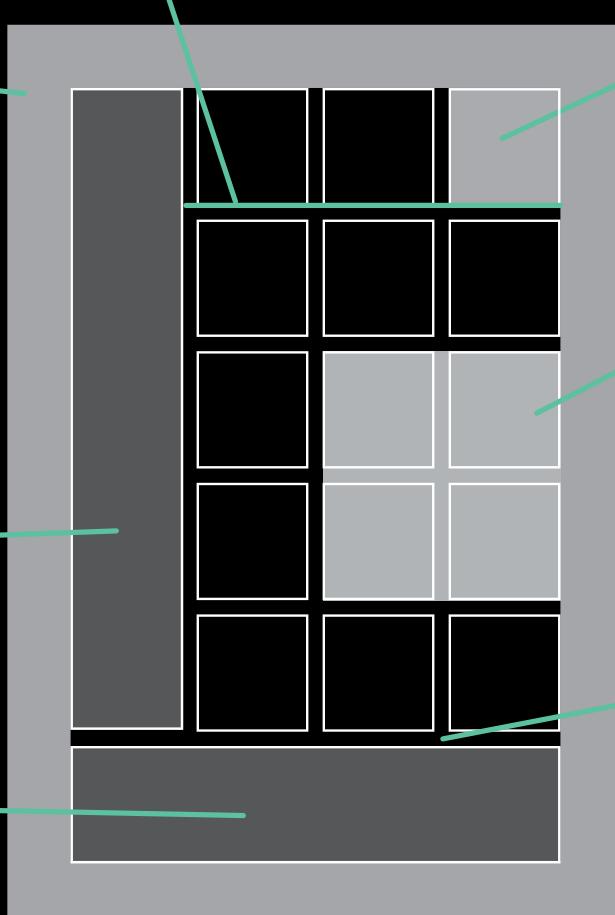
The thick border that runs along the outside of a grid or document. Wider margins provide more "breathing room" for edges, bends, folds and provides a nice whitespace for the overall document.

Columns

Columns run vertically downward from the top of the margin to the bottom. Very helpful in magazine and editorial layouts to find placements for paragraphs, headlines and text.

Rows

Rows contain the areas that run horizontally across the page.

Modules

Modules are the boxes or areas created by the vertical and horizontal lines of a grid.

Spatial Zones

Spatial zones consist of several modules to create blocks and content areas to give you a guide on placing photos and blocks of text. This can be large or small depending on the content.

Gutters

Gutters are areas between the columns and rows. It is nice to keep these the same width throughout to maintain consistency in your design.
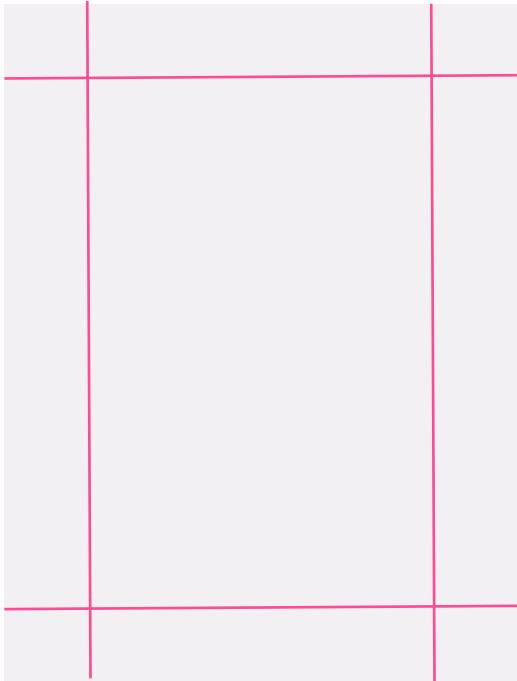
Manuscript Grid

a.k.a. Block Grid or Single Column grid

This grid is great for books and long, continuous placement of text. Manuscript layouts consist of one center block that divides up the page and creates a clear margin, text area, header and footer. This is the most basic form of a grid and found in word processing documents as basic guides for creating margins.

Margins that are naturally created by the intersecting grid lines

Space created for the headers and titles.

fetched the day before. Mr. Langham climbed up it and gave a cry of disgust.

"You haven't cleaned the shelf at all! But here is the payment I left for you to find. I thought your mother would love to share it with you."

He brought down a large box of chocolates—but he didn't give them to Tom. Tom felt so ashamed of himself that he couldn't even *look* at the old man.

"And now for the last payments," said Mr. Langham. "Come along. Did you put the new straw into the nesting-boxes?"

"Yes, sir," said Tom.

"But I suppose you were too lazy to pull out the old straw first?" said Mr. Langham.

"Yes, sir," said Tom, in a very low voice indeed.

Mr. Langham took him into the hen-house. He pulled out both the new and old straw from the first box—and there lay a bright new sixpence! He did the same with the last box—and there were three new pennies, round and shining. Mr. Langham picked them up and put them into his own pocket.

"You can go," he said to Tom. "I will tell the Scoutmaster why I gave you no payment. Boys like you shouldn't be Cubs and promise to do a good deed every day. Look at the bad ones you did

yesterday! You shouldn't be allowed to be in the Cubs. You had better resign at once."

Tom was horrified. What would the Scoutmaster say? What would his mother say? And the boys? He caught hold of Mr. Langham's arm.

"Sir, listen! I like being a Cub. It's fun. I'm sorry about those jobs. Please, please, sir, give me some more jobs to do and I'll do them well, without any payment at all—and I'll take a shilling out of my own money-box to pay into the Scout's Fund."

"How am I to believe a deceitful boy like you?" said Mr. Langham.

"I don't know. But please do, sir," begged Tom. "I tell you, I *want* to be a Cub. I can't bear to be turned out."
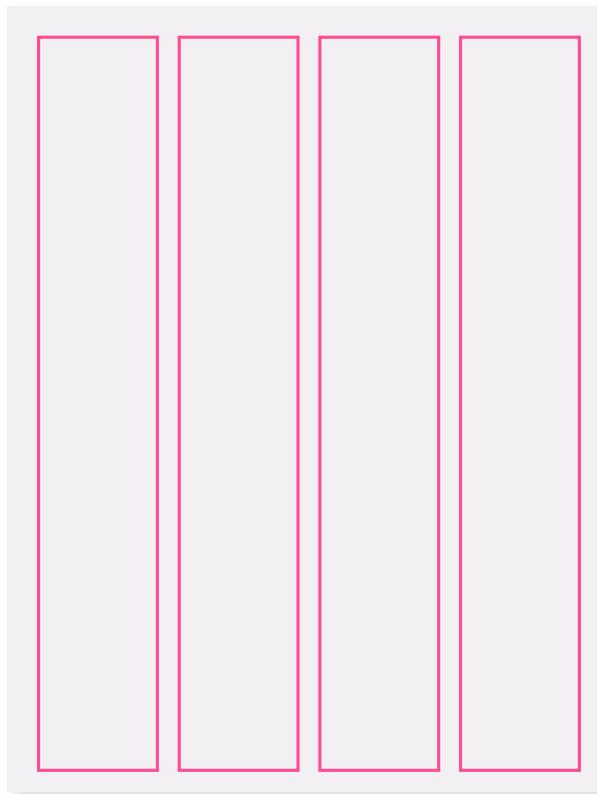
"Yes—but the thing is—do you want to be a *good* Cub—and later on a first-class Scout?" said Mr. Langham. "That's what matters."

"Yes, I do. And I will, if you'll give me a chance," said Tom. "I couldn't bear anyone to hear about this—and how I didn't find any of the payments. Think of some more jobs for me, sir —hard ones, long ones. I'll soon show you!"

Well, Mr. Langham *did* think of some—and they *were* hard and long ones—with no payment at all.

Column Grids

Perfect for magazine layouts and spreads or anything that has a mixture of photos, quotes and text. Column grids allow you to create space to break up type and photos. These can be 2, 3, 4 or even 12 columns depending on the complexity of your layout.


Newspapers may feature many narrow columns. This example of a newspaper ad I helped to layout early in my career is called a "double truck" ad. It consists of two consecutive full pages of content each containing five columns.

Using grids to form my column widths helped me to make sure each column was the same width throughout. The lines created from the columns can also provide guides for where to place photos and other elements to keep the design orderly.

Modular Grids

The most flexible grid available, modular grids allow for lots of mixing of type, photos and design elements. You can have a variety with which modules are chosen for element placement. These are great for posters, flyers, magazine covers and designs that require more creative arrangements. They can also be used for arranging a list of items or photos that need the same spacing or have the same order.

The spacing, or the gutter, between columns and rows can be generous or tight. In figure A the spacing is tighter. In figure B it is much more loose and provides more padding between spacial zones.

Caption here

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,

The main headline story here

Lorem ipsum dolor sit amet, ne mazim periculis mel. Ut ponderum atomorum explicari mel, ei sit mutat regione. Et nec saepe sadipscing, purto graeco nam ex, velit mollis gubergren nec id. In qui putent eripuit elaboraret, duo intellegat adolescens in.

Viderer fastidii in sit, suas percipitur cum id. Prima vocent ullamcorper vel id. Et duis comprehensam eam, eum cu stet doctus, vim atqui scripserit ad. Eos id semper petentium, te vel tibique perpetua, dicam fierent omittam in his.

Altera labore no sit. Alia bonorum usu eu, vel ei patrioque theophrastus. Cum quis animal at, cum no diceret ornatus. Et saepe dolore propriae ius. Cu duo doming fabulas instructior, no vim dico nominati. Melius maiorum dolores ne vim, movet iisque constituto cu quo, vim ei nisl molestie reprehendunt. Te mel timeam splendide adolescens, insolens recteque repudiandae mel an.

Ex nam semper essent omittantur, usu decore explicari iracundia cu, ad nam mazim complectitur. Ferri sapientem similique qui id, id oratio volumus disputationi sed. Agam eirmod corpora ex mel. Sale eleifend ut mei, nec ut assum affert.

Caption Here

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,

The main headline story here

Lorem ipsum dolor sit amet, ne mazim periculis mel. Ut ponderum atomorum explicari mel, ei sit mutat regione. Et nec saepe sadipscing, purto graeco nam ex, velit mollis gubergren nec id. In qui putent eripuit elaboraret, duo intellegat adolescens in.

Viderer fastidii in sit, suas percipitur cum id. Prima vocent ullamcorper vel id. Et duis comprehensam eam, eum cu stet doctus, vim atqui scripserit ad. Eos id semper petentium, te vel tibique perpetua, dicam fierent omittam in his.

Altera labore no sit. Alia bonorum usu eu, vel ei patrioque theophrastus. Cum quis animal at, cum no diceret ornatus. Et saepe dolore propri-ae ius. Cu duo doming fabulas instructior, no vim dico nominati. Melius maiorum dolores ne vim, movet iisque constituto cu quo, vim ei nisl molestie reprehendunt. Te mel timeam splendide adolescens, insolens recteque repudiandae mel an.

Ex nam semper essent omittantur, usu decore explicari iracundia cu, ad nam mazim complec-titur. Ferri sapientem similique qui id, id oratio volumus disputationi sed. Agam eirmod corpora

" Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,

FIGURE A   **FIGURE B**

Notice how both layouts try different arrangements. Also notice the visual hierarchy, with one leading photo followed by a smaller secondary photo.

Hierarchical Grids

These are mostly used for the web, where fixed grid layouts will not work. The gutters and margins can change in size throughout depending on the space of the browser.

Hierarchy comes from a Greek word meaning "superior", "ranking" or "order". These grids follow an order of importance, with the most important items larger and toward the top and with less important items further below and smaller in size.

This kind of grid is a perfect fit for a website layout or mobile app design where the most important items need to be shown higher up in the layout.

Notice the featured news item shows a bigger importance by not only being bigger, but being shifted to the upper left side of the web page, an area that has greater visibility than the lower right.

BBC NEWS

Sign in | Home | News | Sport | Reel | Worklife | Travel | Future | Culture | More ▾ | Search 🔍

Home | US Election | Coronavirus | Video | World | US & Canada | UK | Business | Tech | Science | Stories | Entertainment & Arts | Health | In Pictures | More ▾

World | Africa | Asia | Australia | Europe | Latin America | Middle East

Biden vows 100m vaccinations in first 100 days

The US President-elect says he can't promise to end Covid quickly, but he can change its course.

🕐 23m | US & Canada

▶ **Fauci: US mass vaccinations could be days away**
• **Safety data on Pfizer jab released by US**
• **Tracking the global pandemic**

'State-sponsored' hack hits US cybersecurity firm

FireEye says tools used for testing clients' security have been stolen, without naming the culprits.

🕐 15m | US & Canada

French Alps helicopter crash kills five

The aircraft was on a rescue mission with six people on board when it went down in the Savoie area.

🕐 2m | Europe

France seeks long jail terms over Paris massacre

Fourteen people are on trial but three more are being tried in absentia for the January 2015 murders.

🕐 8h | Europe

Saudi prince denies sending hit squad to Canada

An exiled Saudi spy accuses Crown Prince Mohammed bin Salman of trying to have him assassinated.

🕐 5h | Middle East

▶ 1:42

The man saving monkeys in the Colombian Amazon

Jhon Jairo Vasquez rescues and rehabilitates primates who have fallen victim to hunters.

🕐 8h | Latin America & Caribb...
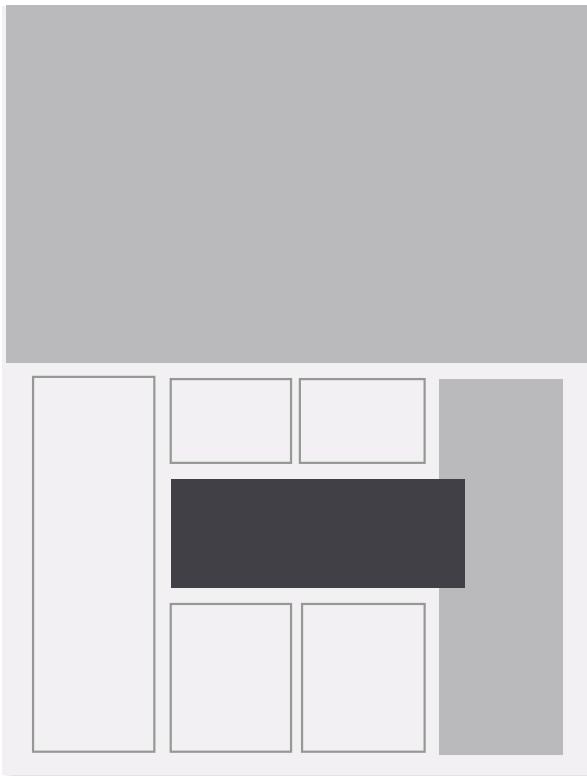
US Army leaders fired over abuse of women soldiers

The US Army launched an investigation into the base after soldier Vanessa Guillen was killed there..

🕐 3h | US & Canada

bbc.com/news
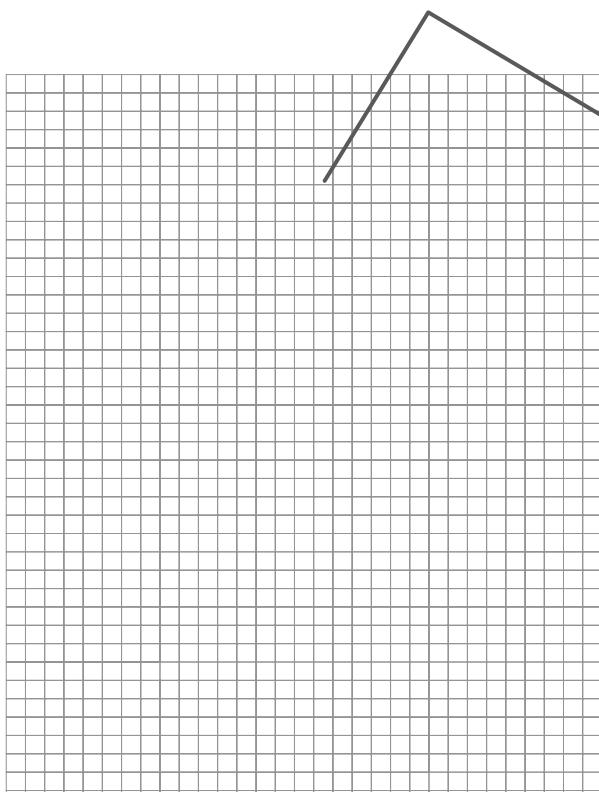
Combining Grid Type

Composite Grids

Using modular and column grids elements.

Create "plans" for your layout by using grids before any final photos or text is placed in your design (this is called Blocking).
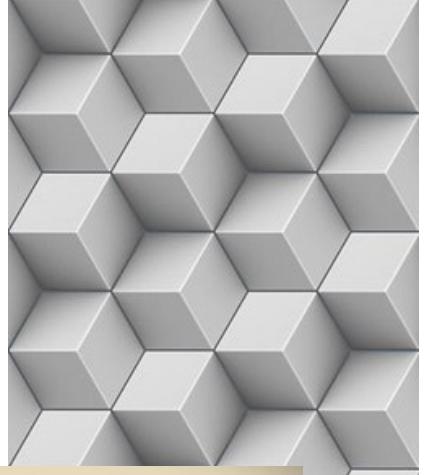
This ensures there is order and a reason for each element placement. This can also help you decide which elements are more important than others, how much room you may have for photos and final text, and for determining how many photos you may need to find.

Blocking our layout using a tight (no gutters) modular grid and creating our column grid using our modular grid as a guide.

THE MAIN STORY HEADLINE HERE

" **NOMINATI. MELIUS MAIORUM DOLORES NE VIM, MOVET IISQUE CONSTITUTO CU QUO,**
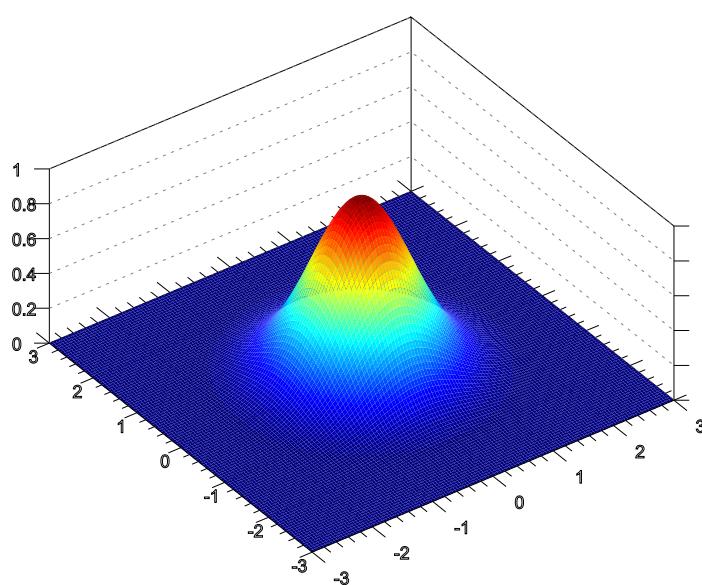
In most design programs you can go to VIEW-> then go down to GRIDS to turn on a modular basic grid. You can edit your grid spacing in the main settings or preferences area of the program.

Specialized Grid Types
Isometric
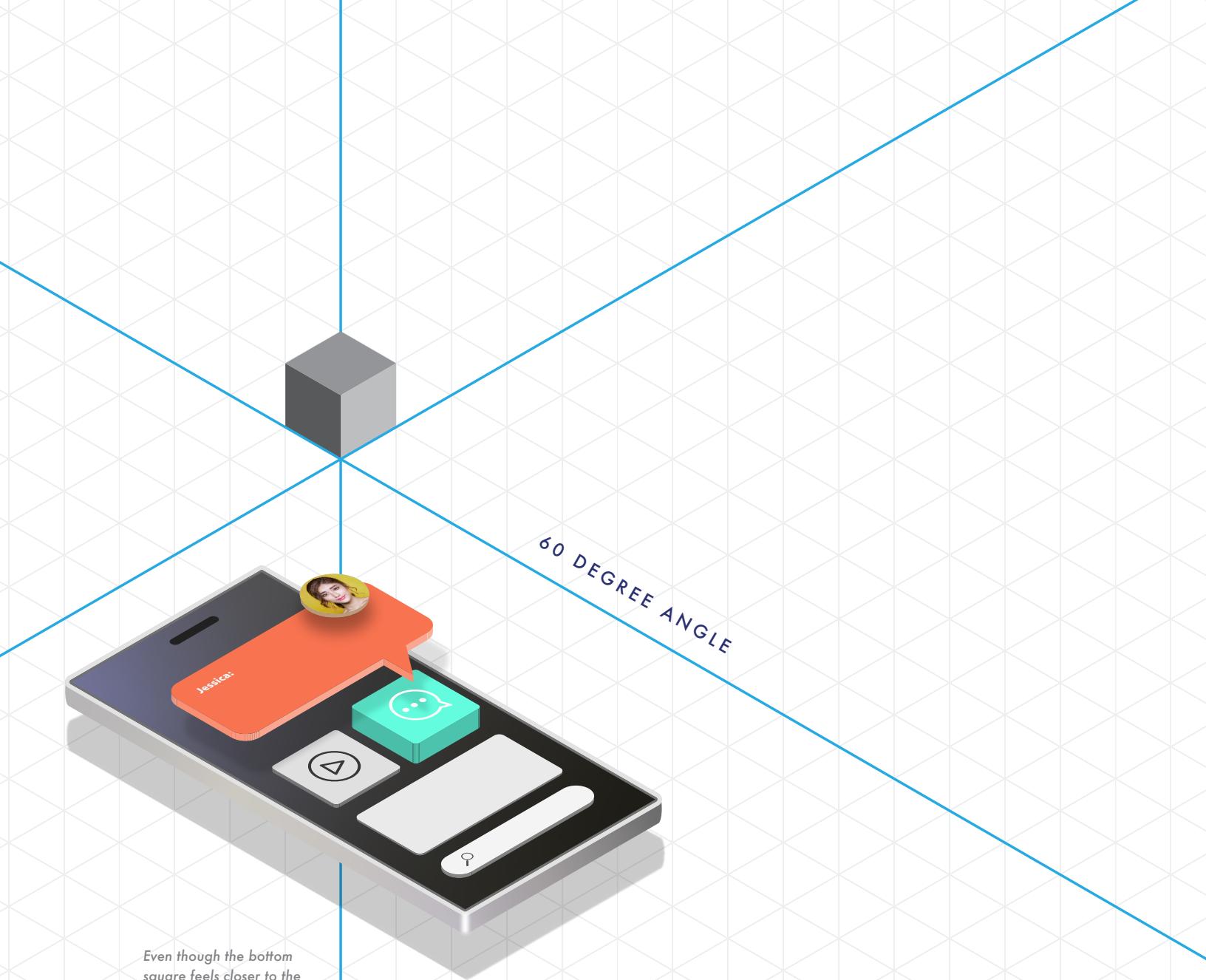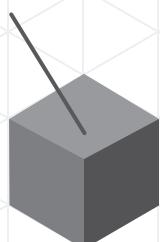
Using modular and column grids elements.

Isometric grids are "axonometric" projections, which, simply put, are used to represent 3D objects in a 2D space. This means there is no vanishing point or distortion when looking at an isometric grid. This makes them perfect for engineers who want to create maps, plans and buildings and be able to view angles equally. They also make them great for visualizing information like the graphic seen here to the left.

Isometric grids have become really popular in design in recent years mostly for illustrations but also for layout and product mockups.

Even though the bottom square feels closer to the viewer, it still maintains the same size as the square that is further back in the grid. This is because there is zero distortion with this angle relative to location. This makes isometric grids great for comparing sizes across large areas.
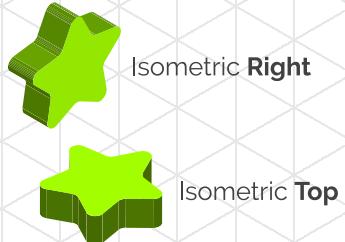
How isometric grids are constructed.

Isometric grids are fairly easy to create. They consist of equality spaced vertical lines. You can replicate those lines and then rotate that grouping by 60 degrees to create the first intersecting series of lines. Lastly, you duplicate the lines you rotated by 60 degrees and rotate that set by 60 degrees to form the third set of intersecting lines.
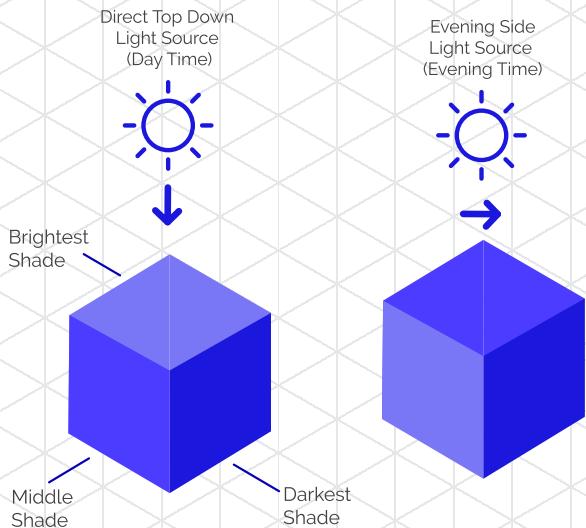
All three of these lines come together to form the isometric grid you see above.

ISOMETRIC
GRIDS
THE BASICS

Isometric **Right**
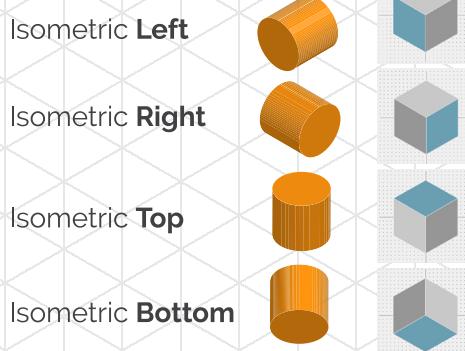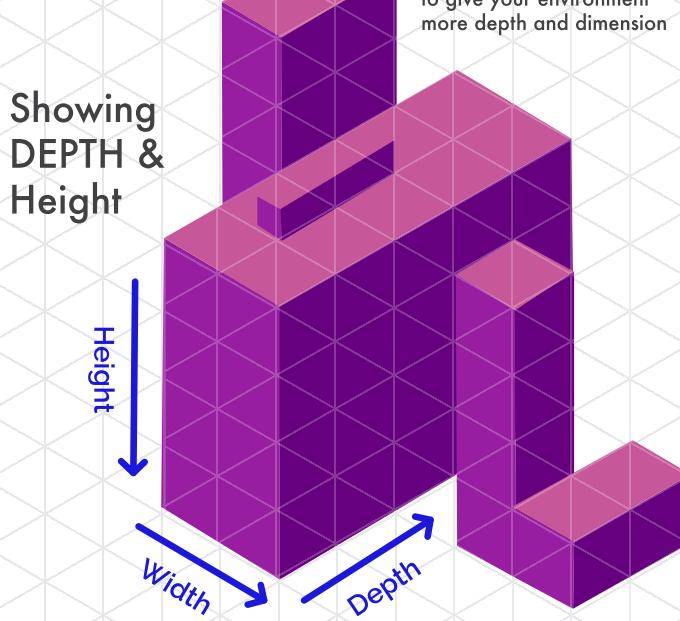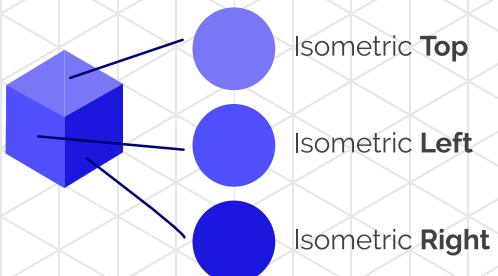
Isometric **Top**

Light Source
Highlights and Shadows

Direct Top Down
Light Source
(Day Time)

Evening Side
Light Source
(Evening Time)

Brightest
Shade

Middle
Shade

Darkest
Shade

Isometric Direction
There are 4 main Isometric Planes

Isometric **Left**

Isometric **Right**

Isometric **Top**

Isometric **Bottom**

Layer overlapping objects
to give your environment
more depth and dimension

Color Choices
Stay consistent throughout your
entire design with your color choices

Isometric **Top**

Isometric **Left**

Isometric **Right**

Showing
DEPTH &
Height

Height

Width

Depth
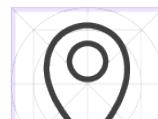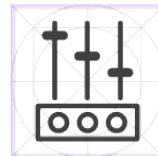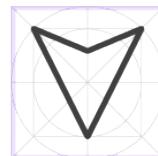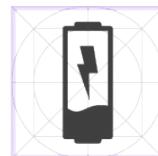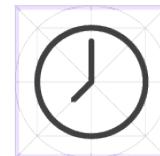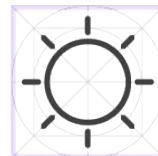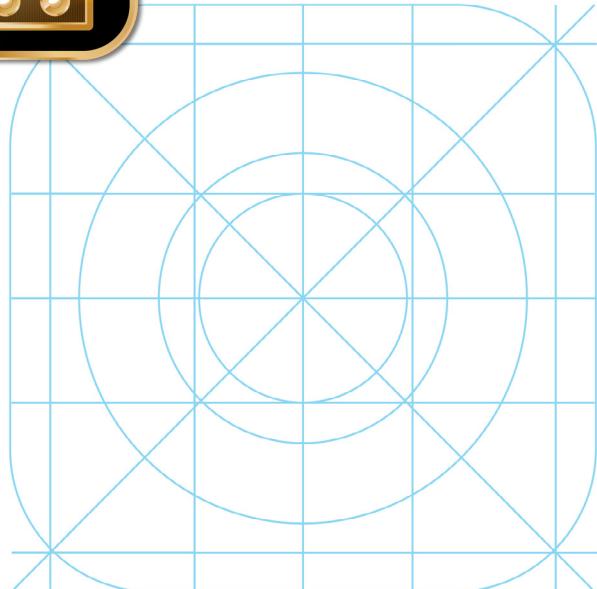
Icon Grids

Icons need a center balance.

Icons mostly exist as a set or series of small graphics that are required to fit into a dimensional small space.

A grid has been developed that goes a step further than a standard grid to help an icon be centered and balanced. Adapting an icon set to the same grid can also help you create consistent cohesive icons that look like they belong together.

The spacing between the circles and lines are determined by the Golden Ratio. That subject we turn to next.
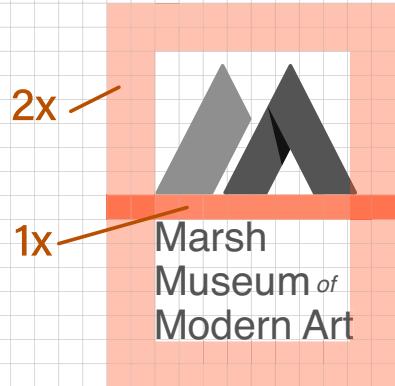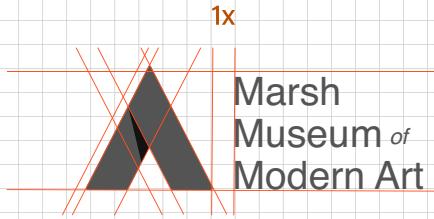
Using Grids

A simple social media graphic.
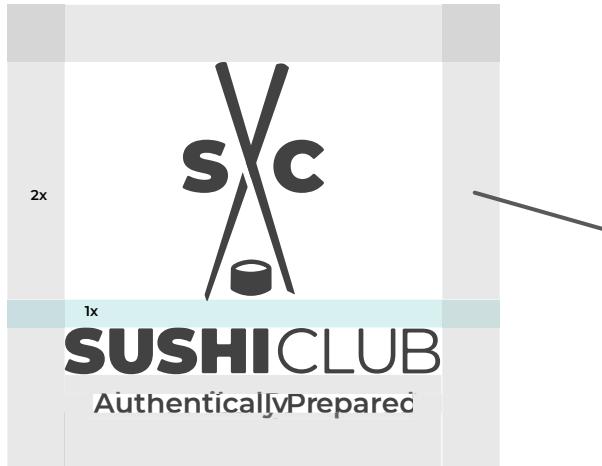
This is a simple modular grid with margins. I am using the grid not just to find out where to place elements but where to frame certain parts of elements, like the central part of the logo or a person's face.

In this case it all about finding the right balance. We have equal weight on both sides with the face and Popsicles commanding similar attention. Because of their close proximity they work in concert to become one focal point.

1x

2x

1x

Marsh
Museum *of*
Modern Art

Marsh
Museum *of*
Modern Art

Grids in Logo Design

2x

1x

SUSHICLUB

Authentically Prepared

You can apply grids to any design project including logo designs to find the right spacing between your logo type and mark.
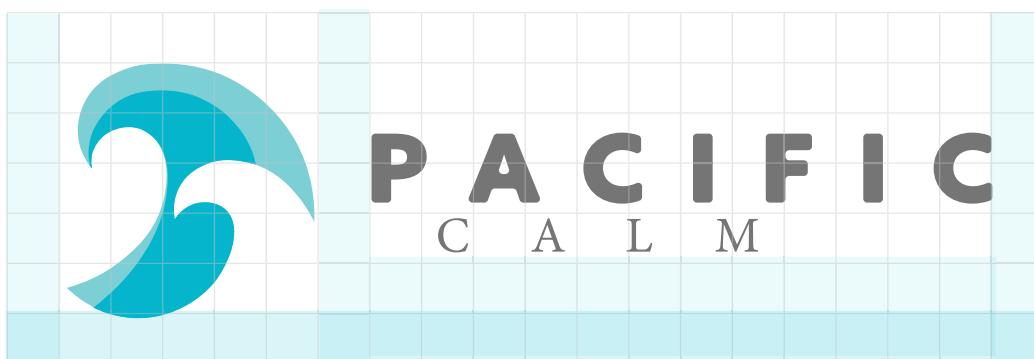
Create spacing rules.

Establish the spacing between elements of the logo but also the spacing recommended for the areas outside of the logo.

For example, this logo has 50 pixel whitespace around the logo required to maintain a clean look for the brand. Also the same spacing is required between the logo mark (the icon) and the logo type (the company name).
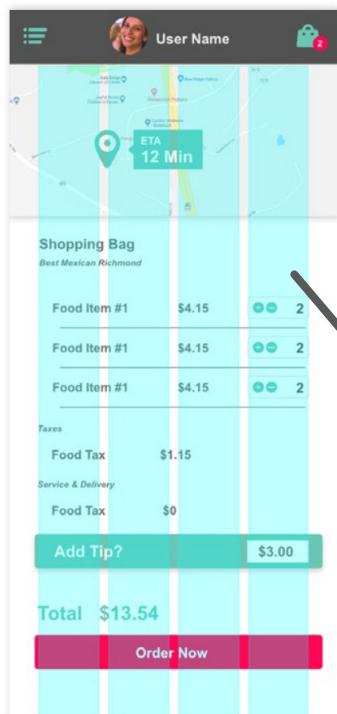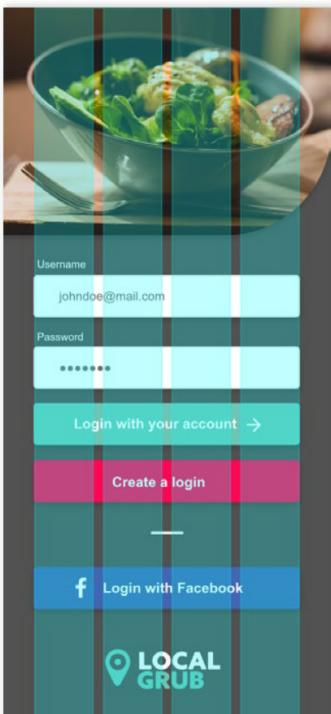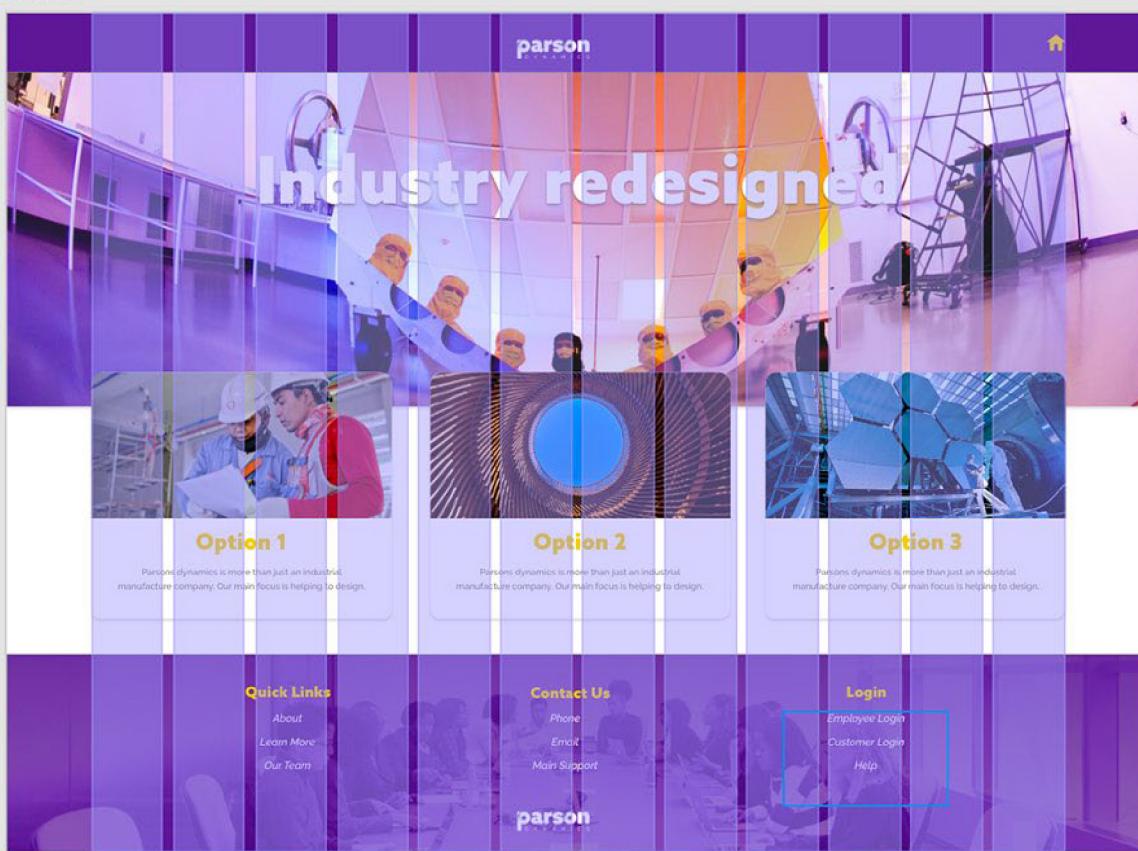
How do I know how much spacing to use?

Create a mock ad and test out spacing between the photo, logo and other design parts. This can help you see how much whitespace might be required to give it the look you desire.

# PACIFIC
C A L M

Grids for Web Layouts

For Desktop.

Above you will see a classic 12 column grid layout with a small gutter. This is traditionally seen with desktop website layouts.

This grid is a default grid in an Adobe app called Adobe Xd, which is commonly used for website and mobile app layout design and is slowly replacing Photoshop as the app of choice for this task.

Grids for Mobile Layouts.

To the left you will see a common 4 column grid layout for a mobile app design. These columns can help guide the placement of button, photos and other design elements. They can even assist in helping you know the placement of multiple columns of information like in this example to the right. The ends of the buttons line up with the shopping information above.

Diagonal Grids

Who says grids have to be left, right, up and down? What about diagonal?

Grids in Editorial Layouts

Grids are most helpful when creating editorial layouts and spreads. Not only do they keep both sides of a spread cohesive, they also keep even spacing between gutters and provide a professional organization of large amounts of information.

Cooking *Salmon* the right way

P R E *workout* MEALPLAN

P O S T *workout* MEALPLAN

option 1
NUTS + CHEESE

option 2
EXTRA PROTEIN

option 3
FRUIT ONLY

option 1
EGGS AND TOAST

option 2
EXTRA PROTEIN

option 3
MEAT FREE

...AND FOR **AFTER** YOUR WORKOUT

FULL **MENU** ON NEXT PAGE