

Isometric

Art 101

Draft 1

Welcome to the Plastic Pen Guide to Isometric Art!

Isometry plays a huge role in my visual language. It's one of the *cornerstones* of my art style, and I always love returning to it. Its intuitive nature makes setting up scenes a breeze with this technique.

In this book, I'll walk you through the **advantages of isometry** and teach you the **basics to build your own workflow**. From technical details and file set-up to creating striking concepts, you'll learn how to create stunning illustrations. The process has a gentle learning curve, perfect for both beginners and advanced artists!



There's also some *homework* included here and there if you're eager to put your learnings into practice. Look out for tasks marked with this icon!

If you have any questions along the way, please reach out to me through my social channels or email anytime!

Enjoy the book!

A stylized, handwritten signature in black ink. The signature is fluid and cursive, with a long horizontal line extending from the bottom right. It appears to be the signature of the author, likely 'Plastic Pen'.



A timeless trend: What makes Isometric Art special?

Isometric art is a fantastic way to showcase scenes and objects in a *unique and captivating* way. No wonder it's been used by artists from ancient China to the Bauhaus movement up to modern video game graphics!

It's not only easy to understand and handle, but also *incredibly fun to work with!* Before we dive into the theory, let's explore when and how isometric art shines, and why it's a great addition to your artistic toolkit.



It's easy to handle! No need to worry about tricky perspectives.



Play the cuteness card! Make your art charming and engaging.



Tell stories! Perfect for informative and narrative-rich illustrations.

Let's look at these three key reasons a bit closer on the next page!





IT'S EASY TO HANDLE!

Isometry gives your art a **three-dimensional look** without the hassle of managing vanishing points. Perspective drawing can be one of the trickiest aspects to learn, but with isometric art, you can skip it and *jump straight into the fun!* **It's as straightforward as working in 2D** – hooray for simplicity!



PLAY THE CUTENESS CARD!

Who can resist adorable and fun-looking art? While this doesn't mean that your art can't be serious or dark, isometry is perfect for giving viewers a **delightful bird's eye view** over a scene. It gives the impression of Lego sets or old school strategy games that many people adore. **Use this to your advantage** to captivate your audience!



TELL STORIES!

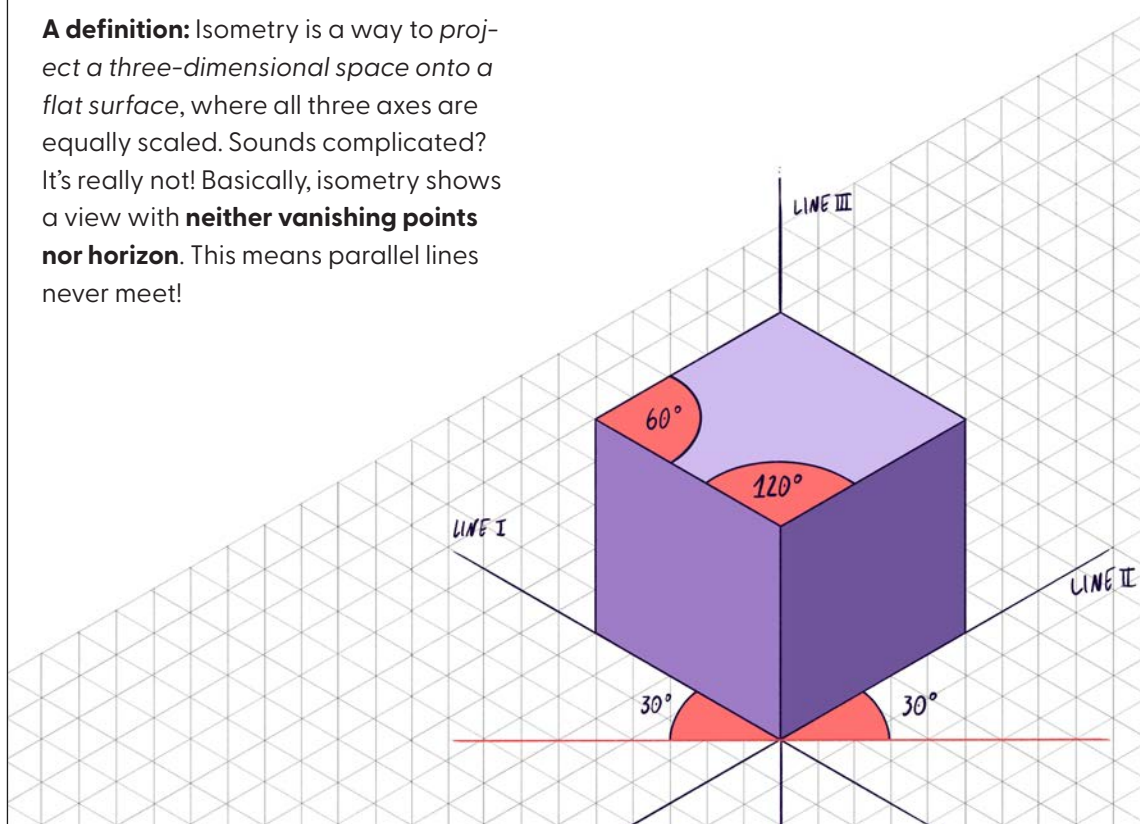
As a freelance artist, I offer more than *just* beautiful illustrations – I **combine art with information** design. Isometric art is incredibly powerful for this purpose. You can not only give viewers a **comprehensive overview** of a scene, but help **explaining complex concepts on a visual level**. Brands love using isometric art to explain their operations, processes, and products – it makes information clear and engaging.

What is Isometry?

Ready for a quick theory lesson? *Don't worry*, I promise to keep it short! Let's dive into some **basic principles of isometry**—spoiler alert, it's not actually a perspective! (I know, I call it perspective too, just to keep things simple. Sorry, math nerds!)

A definition: Isometry is a way to *project a three-dimensional space onto a flat surface*, where all three axes are equally scaled. Sounds complicated? It's really not! Basically, isometry shows a view with **neither vanishing points nor horizon**. This means parallel lines never meet!

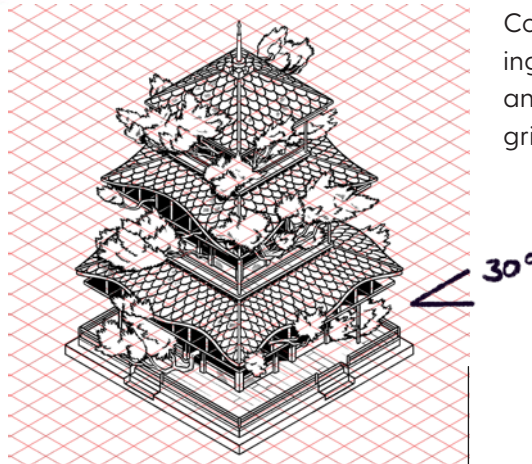
Take a standard isometric grid: it has **lines going in three directions**, with diagonal lines at 30° rotation, and vertical lines completing the grid. If you draw a cube, the left and right corners have a 60° , the upper and lower ones a 120° angle, adding up to the full 360° .





DIFFERENT GRID HEIGHTS

You'll find that most isometric grids use the 30° raster from the previous page. However, if that angle looks too steep for your scene, you can reduce it. This gives a *lower, ground-level* view. Apart from that, it does the same trick, and it can be a nice variety to the standard grid! There's also a view often called *2:1 Isometry*, it uses a 26.565° angle.



Comparison of drawings using a 20° (left) and a 30° isometric grid.

SCALING AND DISTANCE BETWEEN OBJECTS

When working with isometry, remember that object scales always stay the same. There's no difference in distance, which can feel strange at first since we naturally want to downscale distant objects.

The right workflow: software, files and resolution

You can create isometric art using **both traditional and digital tools**. For traditional methods, you can use isometric paper sheets or a lightbox. However, my workflow is **fully digital 2D**, so we'll focus on that in this tutorial.

CHOOSING THE RIGHT SOFTWARE

You can use any drawing software you're comfortable with, but some support isometric grids, making them especially helpful. There are lots of apps I did not try yet, but here are **four 2D based ones** I can personally recommend:

PIXEL-BASED TOOLS

PROCREATE (IPAD)

My go-to iPad app. It features a 30° isometric grid with drawing support, making it super easy to set up and use.

CLIP STUDIO PAINT (PC, MAC, ANDROID, IPAD)

Ideal for PC work. While it doesn't have a built-in isometric grid, you can download useful plugins like this one.

Link

VECTOR-BASED TOOLS

ADOBE ILLUSTRATOR

My longtime favorite for vector work. I've prepared a file with 30° and 20° isometric guidelines, which you can download and customize to fit your needs.

AFFINITY DESIGNER (PC, MAC, IPAD)

A hybrid tool supporting both pixel and vector layers. It's great for iPad drawing with various isometric grids, though it currently lacks drawing support. The PC version offers full grid angle control and grid snapping.

MY RECOMMENDATIONS

With the current versions (May 2024), I personally suggest using Affinity Designer on desktop, and Procreate on the iPad if you want to be more flexible with a mobile device.



You can download my Illustrator and PNG files of three common isometric raster files here: iso101.grossehalbuer.com

coming soon! :)

They're particularly helpful in any software without a grid function, and you can also print them!



FILE SETUP: RESOLUTIONS AND DIMENSIONS

The **dimensions** are up to you, but keep in mind that isometric art always needs a bit of *breathing space*. Due to the grid's nature, you often don't get to *fill* a square space evenly with your drawings. Too *extreme* dimensions are often tough to handle, so I'd suggest starting with a square canvas if you're unsure.

For the **resolution**, I'd suggest to always go for at least 4K pixels. This makes handling little details much easier, and you won't be annoyed if you decide to actually print your artwork afterwards and realize that you can only put it on a stamp.

Untitled Canvas Cancel Create

Width	4000 px
Height	4000 px
DPI	300
Maximum Layers	61

With 4000px on the shortest side of your canvas, you're safe for most digital use cases.

Width	250 mm
Height	250 mm
DPI	300
Maximum Layers	116

If you use print sizes like mm or inch, don't forget to set the DPI to 300 or more to create enough pixels!

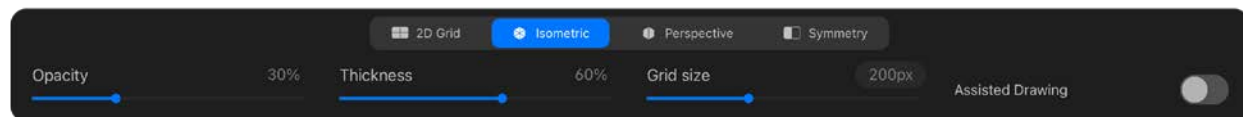
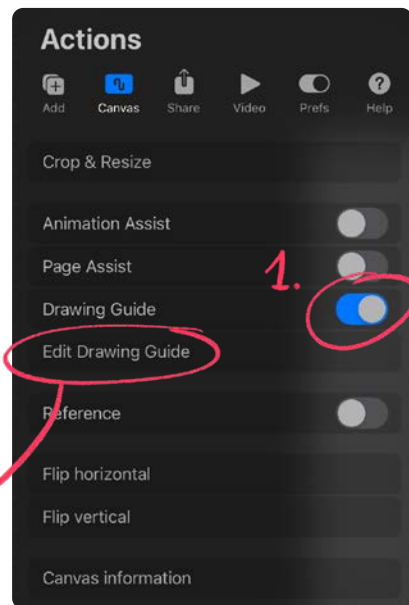
FILE SETUP: ADD A GRID

For my workflow example, I'm going to stay in Procreate. While functions and options may look different on other apps, the functionality is mostly the same.

After creating a new file, tap Actions -> Canvas and turn on the *Drawing Guide*. You'll first see a grid with squares, so we go into *Edit Drawing Guide* and tap *Isometric*.



Follow the how-to on this page and set up your file, so you're ready to start drawing!



The **Opacity** and **Thickness** are visual options. You can adjust them to whatever feels ideal to you in terms of contrast. The grid won't be visible when you export an image.



Special task: Are you using a software that I didn't have on my list, but that's worth checking out? Write me, I'd love to take a look!

Here's a trick for setting up the grid size: use a number that your canvas size **divides** through. This way, your grid will align to your canvas size and you can figure out the layout much better.

Turning on the **Assisted Drawing** makes your line snap to the grid. More about that later!

**THANKS FOR READING THE
FIRST PART!
FOUND AN ERROR OR GOT
SOME FEEDBACK? PLEASE
LEAVE A COMMENT AND
SEND ME A DM! :)**

