

Pixel Art in general:

1. Round off the edges. and try to add angles for interest. Avoid sharp, perfectly squared edges, they look stiff and doesn't match the style we're going for. Plus, they don't flow in animation very well.



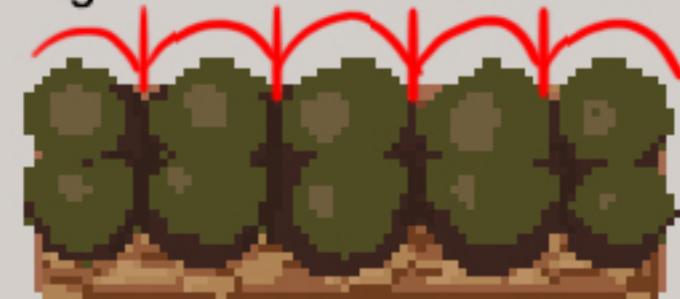
2. Avoid jagged edges. It doesn't have to be perfect, just not too uneven.



3. Add contrast and asymmetry. Avoid making assets that are just mirrored on both sides.



4. Whenever you get the chance, play with the proportion and spacing. Evenly spaced art looks boring.



✓ VARIED SPACING, DIFF. SHAPES

✗ SAME REPEATED SHAPES

Pixel Art in general:

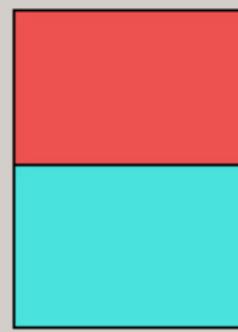
5. Please keep everything in a top-down perspective. Basically, just show the front and top in perspective. This is one of the absolute rules in this guide.



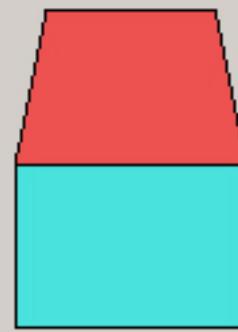
- top of the structure
- front of the structure



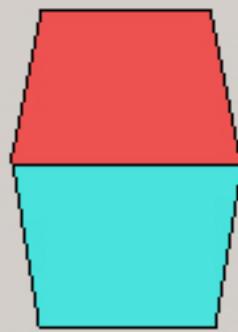
DON'T add vanishing points. Pixel art is isometric. There's some exceptions but we'll tell you upfront when these instances will be. There's no room for experimentation in this regard. Check out the cube examples below:



✓
Just enough
top and front,
isometric



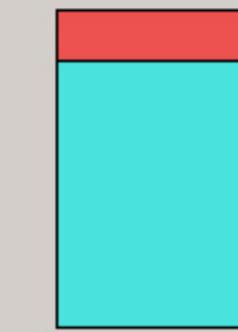
✗ Edges converging
to vanishing points



✗ Converging
to vanishing
points as well



✗ Too much
top is shown,
very little front



✗ Very little top
is shown, too
much front.

6. Variations, contrast, straight against curves; whatever you call it, don't forget to consider it in your work.



Q: Why does this house lack visual impact?



A: Its elements are basically the same shape. It's a bunch of squares stacked on top of one another.



On the other hand, we can see that this house looks better right away because of various angles, shapes and spacing. Even the roof tiling is staggered and adds to the "organic" feel of this piece.



Pixel Art in general:

7. It's all about the little details. The game being pixel art, we're limited to things like dimensions and other rendering magic but we could still bring a lot of exciting things.



X UNINTERESTING

Say you're asked to design a house. Most people would stop upon arriving on the design on the left. This is a house for sure, though it lacks the details that will make it appealing. That is a house, but it tells us nothing more.

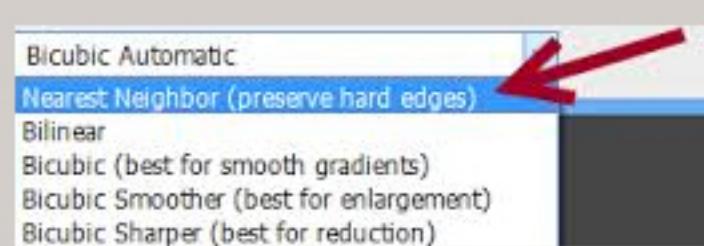


✓ DETAILS THAT ADD CHARACTER

Adding little details like some hanging plants, pies on the windowsill, and other details will tell the player that people live in that house, it's old but well-kept. Have fun and make the world live, just make sure the details are in line with the theme of the world we're making. Feel free to check with the art director or background lead artist if you have any questions.

8. BONUS 1: Scale pixel art without blurring:

Using the transform tool, change the interpolation from bicubic (or whatever your default setting) to nearest neighbor



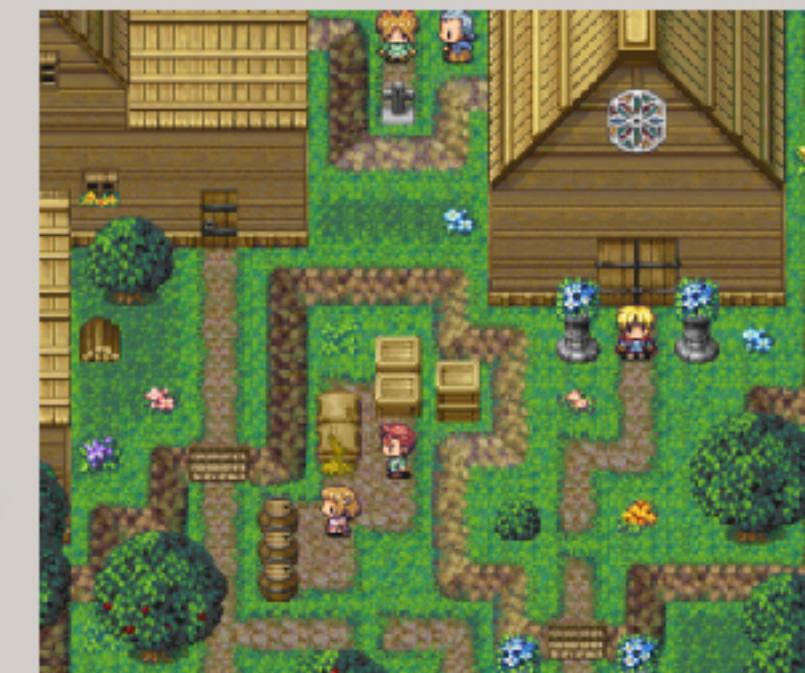
✓ SCALED USING NEAREST NEIGHBOR SETTING



X SCALED USING BICUBIC SETTING

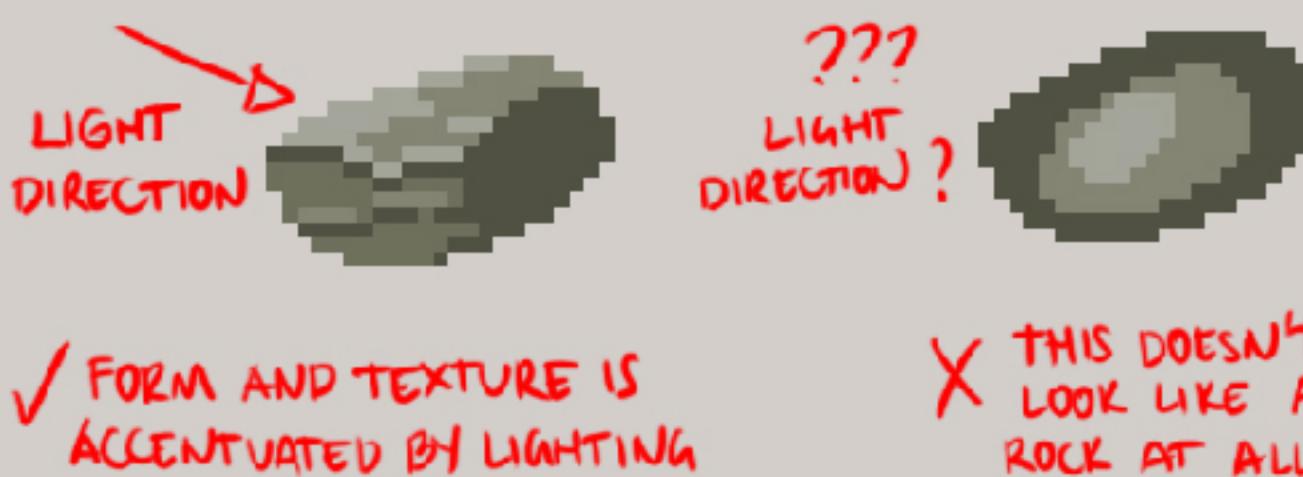
9. BONUS 2: What kind of look to avoid! Search for "rpg maker" on google images to have an idea of what we would want to avoid in our pixel art.

The pixel art on the right is not terrible, it's even serviceable. But it does the things that are written in this list that we should avoid - symmetry, lack of interest and detail, even spacing etc. If we're aiming to make a game that will excite people, we should aim to rise above the ordinary.

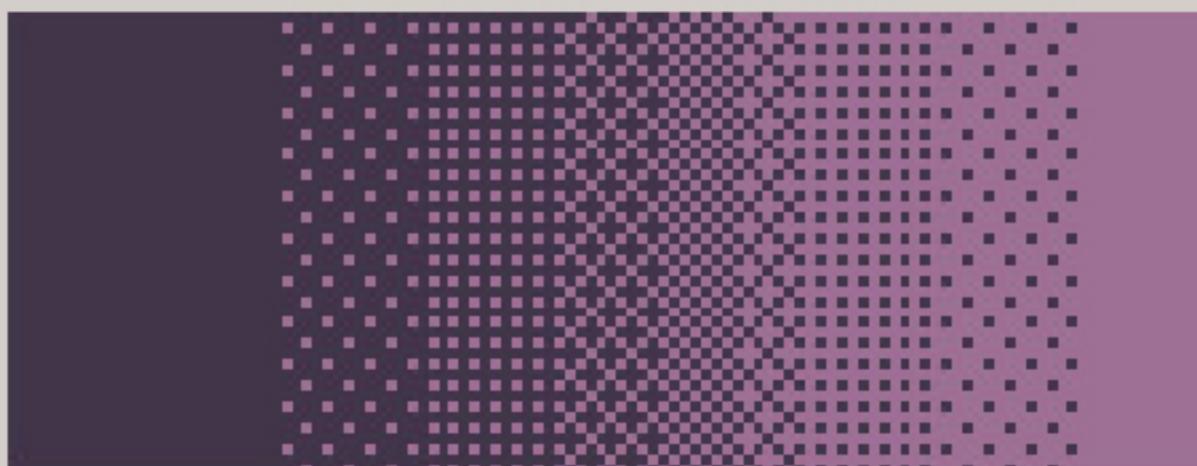


Coloring:

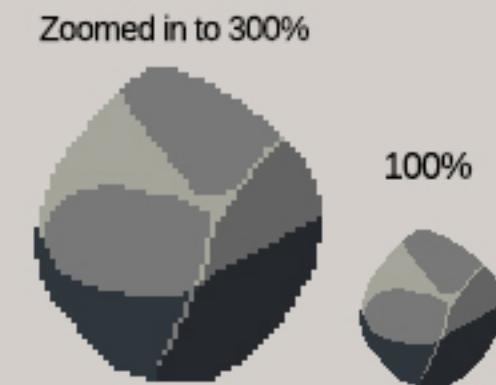
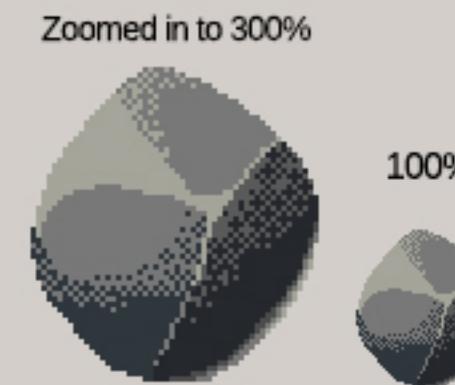
1. Avoid "pillow shading", a form of shading that only traces the contour of the shape without regard to form, planes & light direction



2. Here are some dither patterns for reference:



Use dithering to smoothen the transition of one color to another without adding a third one. It can also be used to add interest and texture to a huge blank expanse of color.

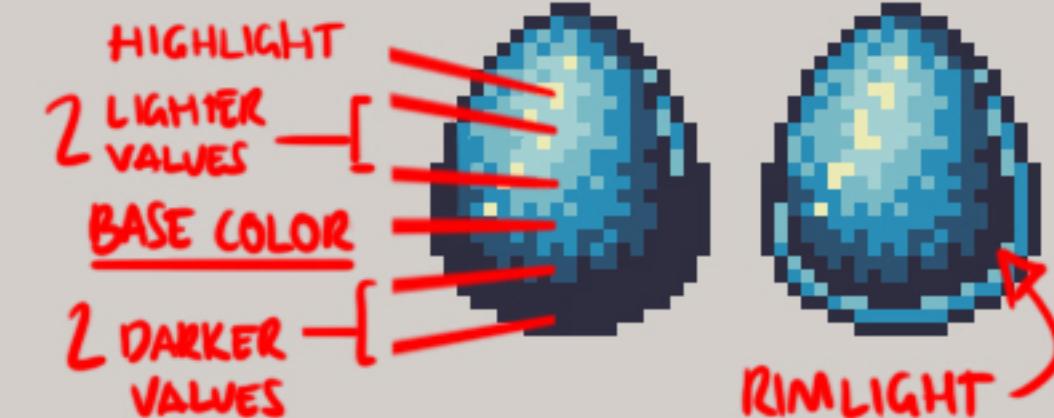


✓ WITH DITHERING;
COLOR TRANSITIONS
BETTER

✗ W/O DITHERING;
COLOR TRANSITION
LOOKS TOO ABRUPT

IMPORTANT NOTE: Use discretion when dithering. You don't have to apply it on everything. One thing you can apply it is on wide expanses of colors and bigger scaled pixel art. It tends to muddle up the images when used on smaller scaled ones.

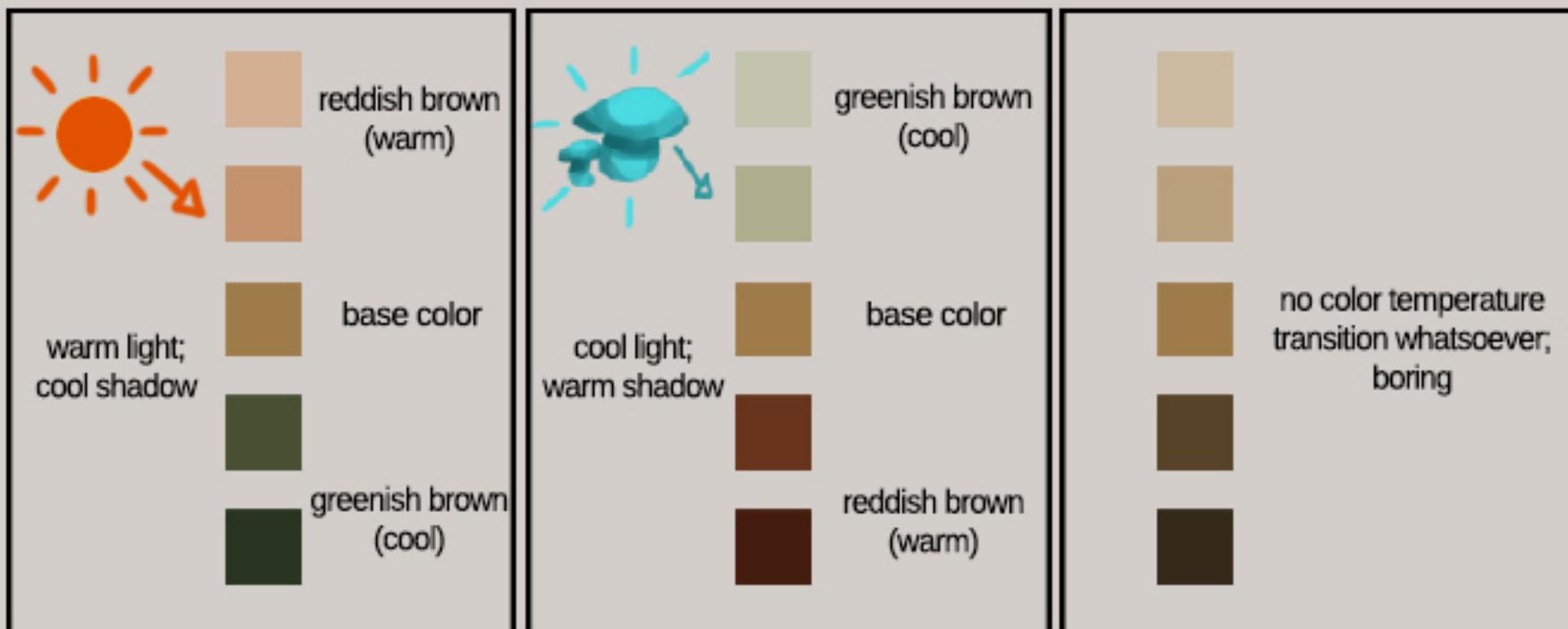
3. For color scales - we have a base color, then from there, we're allowed up to 2 colors of lighter value and 2 colors of darker value. You can also add a highlight and rimlight color if need be.



Coloring:

4. In regards to color temperatures – when our light source is of a warm color (e.g sunlight) we will have cool shadows, the opposite applies when we our light source is cool (e.g. phosphoric cave mushrooms, UV light), then we will have warm shadows.

To sum it up: warm light = cool shadow; cool light = warm shadow



note: color temperatures are exaggerated here to emphasize the point, tone it down in real application

How do we go about this? Here's an example, in this scenario, we need to create a wooden plank with warm lights and cool shadows.



base color - brown



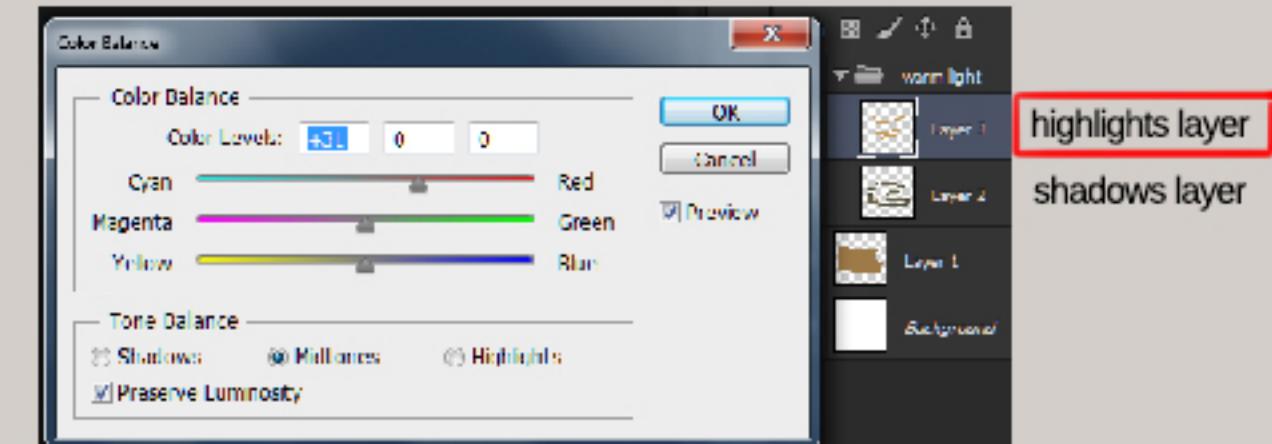
on a new layer, add the shadows - darker values of our base color



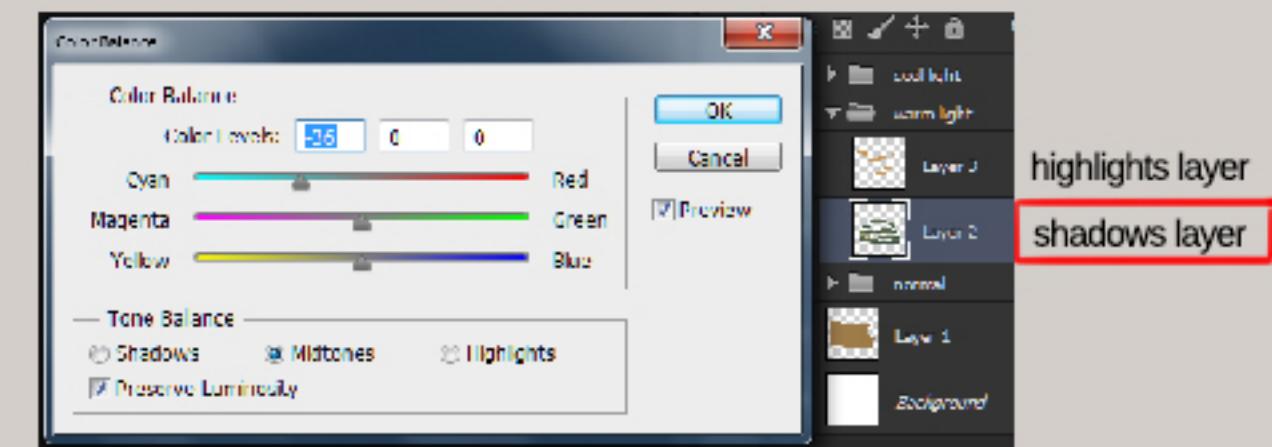
on another new layer, we can add the highlights

We use brown and lighter/darker values of brown.

We use color balance to add color temperature to the layers of light and shadow. Here I'm tinting red to the highlights layer using color balance to make it warmer.



Then I tint the shadows layer using cyan to make it cooler.



The wooden plank before our color adjustment



The wooden plank after our color adjustment



What would happen if we did the opposite (cool light, warm shadow)

Coloring:

5. Value is the measure of how light or how dark a color is.



Here's a Red color scale



*This is the same scale with color removed;
you can clearly see the values*

Values are a huge part of what makes a pixel art “read”. For clarity, please check the values of adjacent elements if they’re sufficiently apart on the scale.



Sprite A



Sprite B

The character images above are basically the same sprite, but with different values of color, why does one look so bland(Sprite A) and the other “pops” out more visually?(Sprite B)

If we convert the sprites into black and white images, we'll see the reason

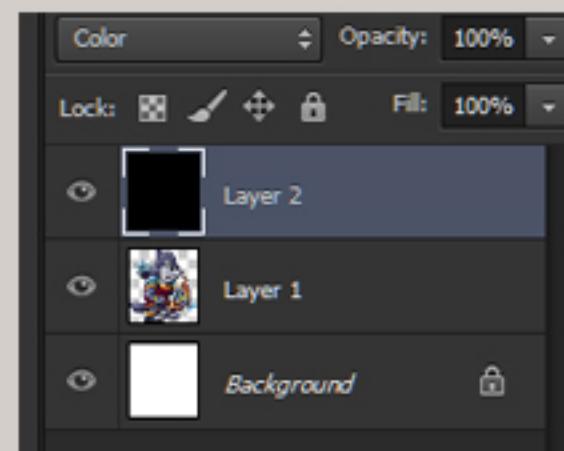


**X VALUES ARE TOO NEAR
IN THE SCALE, SPRITE
IS HARD TO RECOGNIZE**



**✓ VALUES ARE WELL APART
WITH A WIDE RANGE OF
LIGHTS AND DARKS**

How to check your values:

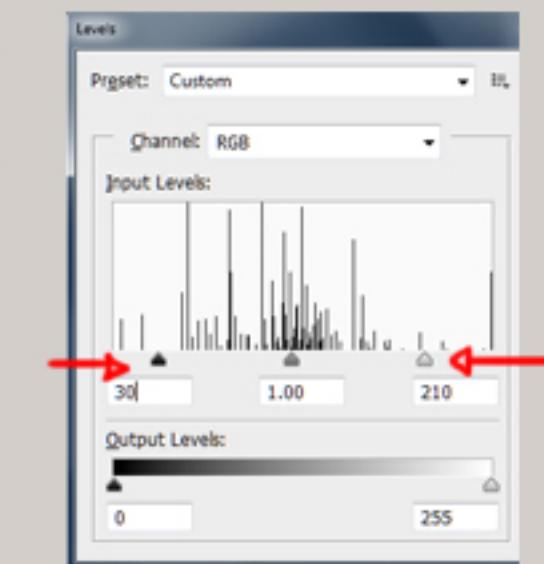


- a) add a new layer filled with black atop your pixel art then change it's blending mode to color (non-destructive method; good when you're just starting out a piece and would need to check values often)

How to fix values: If you've done everything you can to make the values clear yet it still comes out too muddy, you can use levels as a last resort:



*The sprite with
hard-to-read
color values*



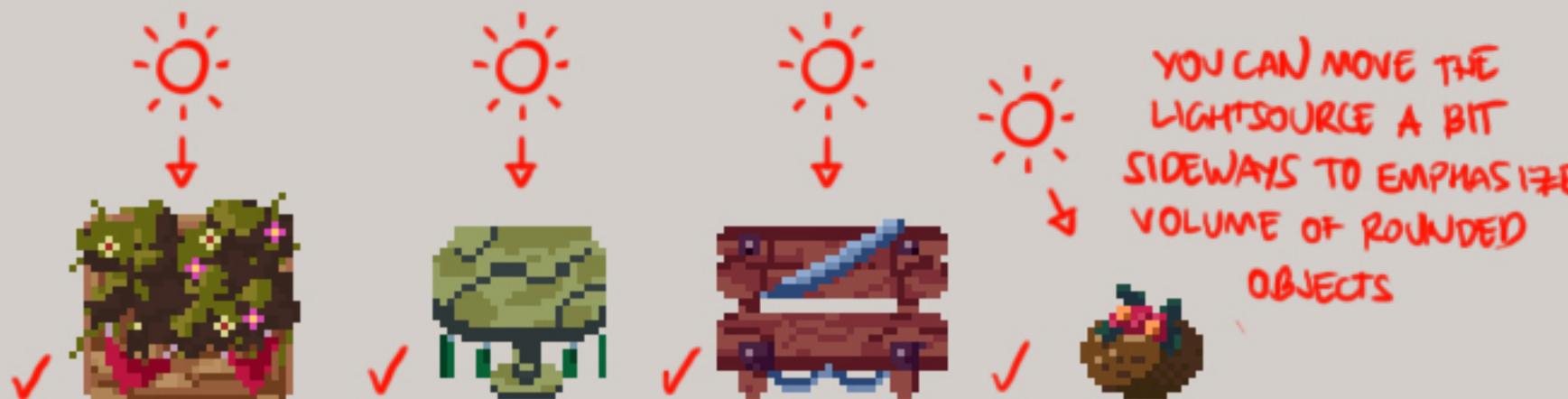
Moving the two side sliders inward would make the darks darker and the lights lighter, removing the “muddy blurred look”



*The sprite after
levels adjustment,
clearer and
more vibrant*

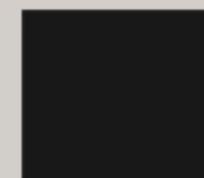
Coloring:

6. The light source is always on top. This is one of the few absolute rules in this style guide. Consistency would be key here, assets would look totally odd when our lighting doesn't match one another.



7. *Important note: This entry is only applicable for character pixel art, not for backgrounds, props and such. *

We're allowed to use one really dark(near black) color for emphasis, with the hex number of #181818. Let's name it "occlusion color".

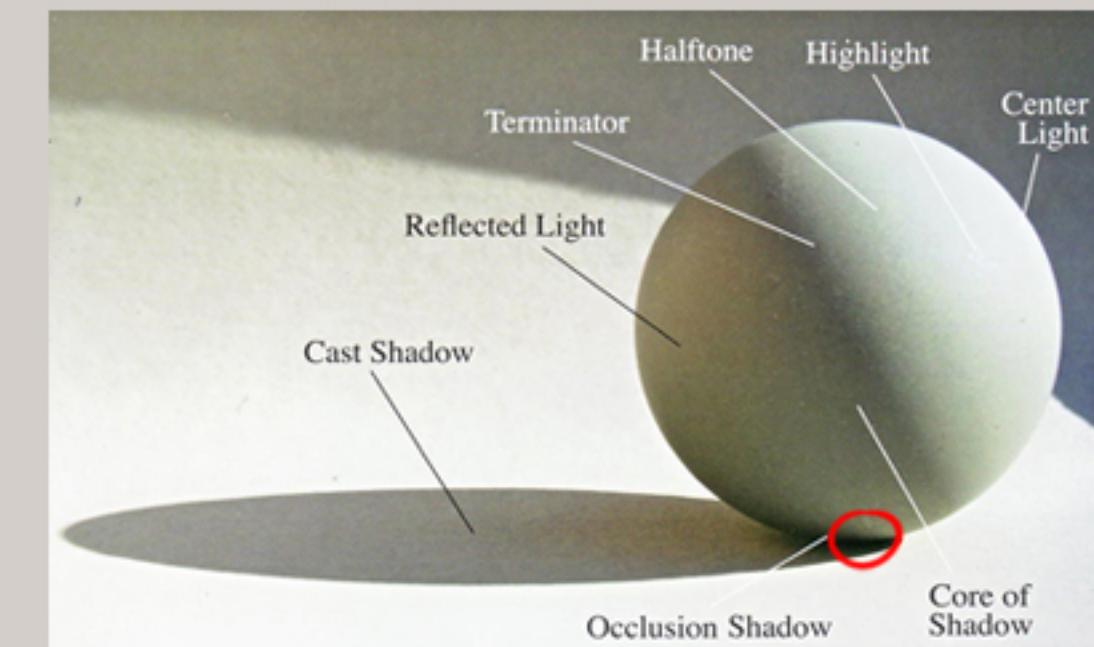


Please use it sparingly, don't outline the whole pixel art with it.



X THESE DARK OUTLINES LOOK TOO HARSH

Wherever two forms touch each other, or a form touches a floor, a dark line or accent results. You can see the effect by pressing your fingers together and looking at the little dark line where they touch. Not much light makes it to that point of contact. That dark area is called "occlusion shadow".



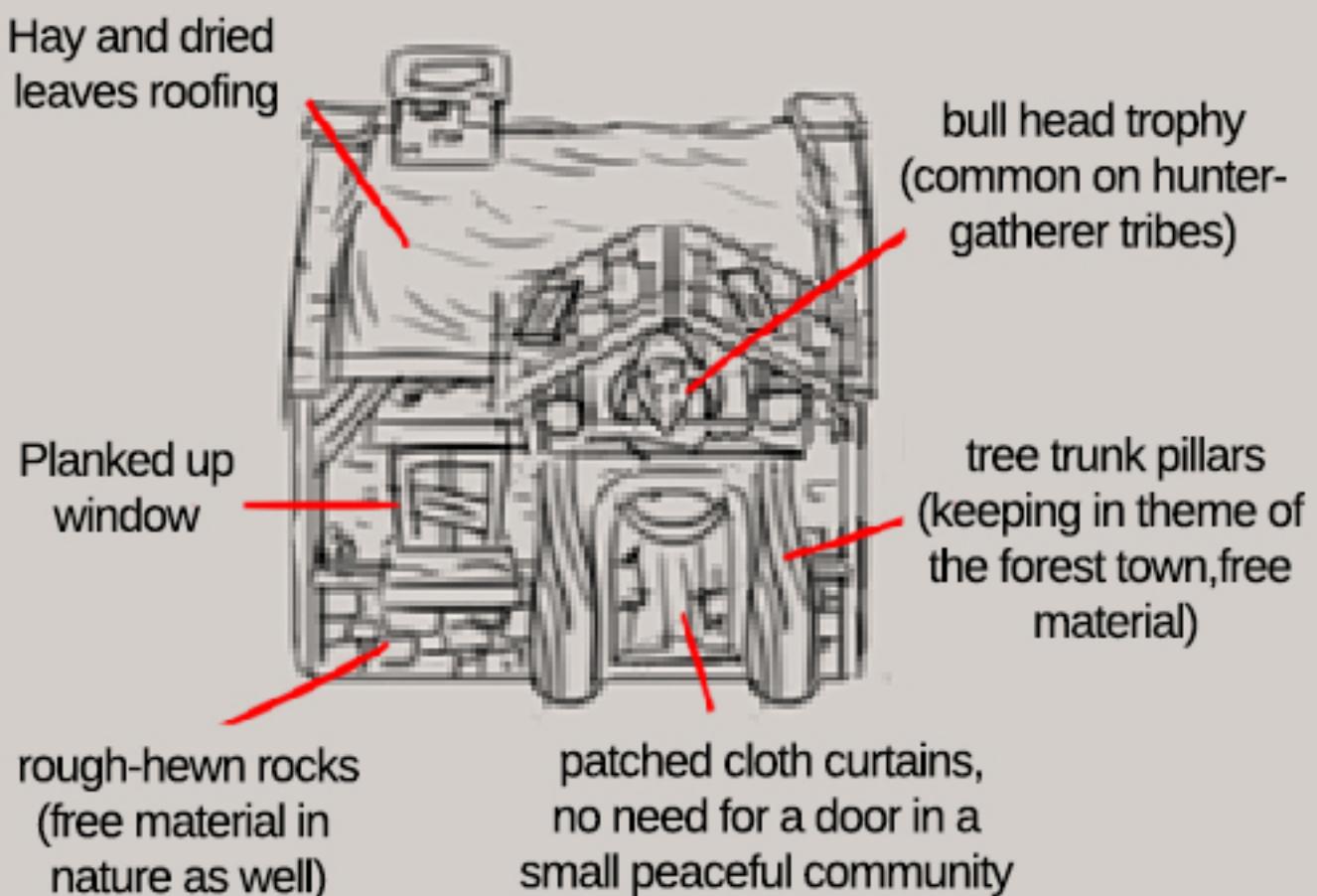
A good guideline is to use somewhat darker colors for outline emphasis but only use our "occlusion color" for occlusion shadows.



Environments:

1. Review 5th and 6th points of the “pixel art in general” portion of our style guide - perspective and variations.

2. Balance tried and true basic elements with interesting material. Play around a bit, just make sure the final piece is still nice to look at. Say you’re asked to design a house of a poor family in a peaceful forest town, here’s what we came up with:



Even though we've relayed to the player that the house is on the poor community, the design elements still make it pleasing and interesting to look at.

3. Don’t leave too much blank space on assets. Add interesting stuff that’s in theme with the environment (see point #2); don’t overdo it though.

Bridge designs for a festive town:



✗ Plain bridge, tells us nothing

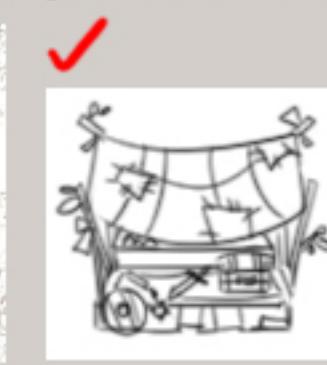


✓ Flower pots, tassels and drapery add interest to the relatively plain bridge and creates a festive feel

4. If you’re asked to do environment sketches, please make the sketch tight and useable in case someone else is assigned to translate it into pixel art.



wrong perspective,
lines are wobbly and
hard to read, would
take more effort to
re-create in pixel
art form



top-down isometric
perspective is correct,
details are readable,
ready to be converted
into pixel art

5. When making assets with separate elements, in this case a food cart with vegetables, or a house, try to keep things in separate layers.



Sizes:

1. Base tile size - 16 pixels



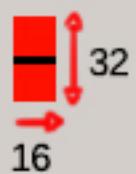
very small

2. Stage size of the game: 384x216 pixels



very small as well

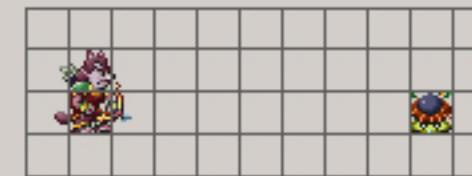
3. The size of the main characters in their normal/idle stance would be 16x32 pixels (or 1x2: one tile wide, two tiles tall)



3. NEVER go beyond this size unless they're out of their idle stance and in motion (e.g. walking, running, attacks etc)

3. For the enemy sprites - it's OK to go 2x2, sometimes bigger, smaller, and sometimes really really big(for the bosses). We'll give you the size for the idle stance of the sprite everytime you're asked to do this task.

16 x 16 TILE GRID

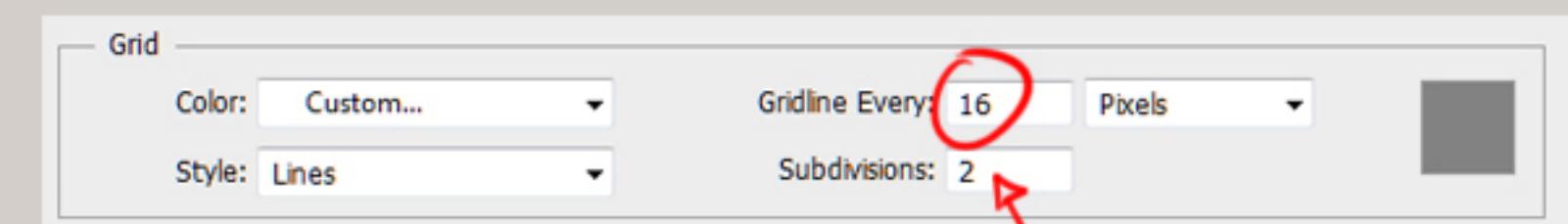


3x2 sprite 1x1 sprite

3. The environments, props and other pixel art will have various sizes. We'll give you the dimensions everytime you're asked to do the said task.

4. TIP: Setting your grid size in PS

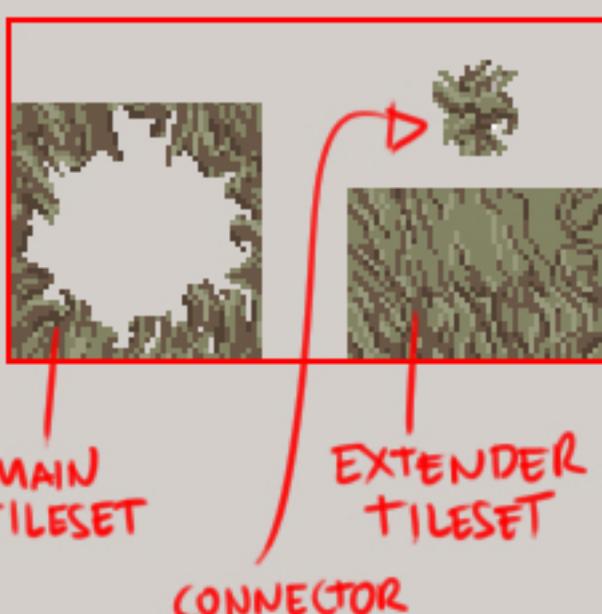
Go to Edit > Preferences > Guides, Grid and Slices



Note : Shortcut key for view and hide grid is CTRL+'

Tiles:

1. These are sample tilesets



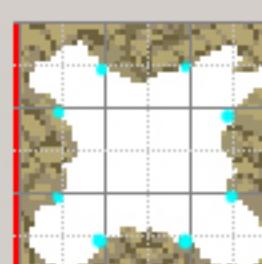
2. Take note of where the main tileset's edges connect and make it consistent



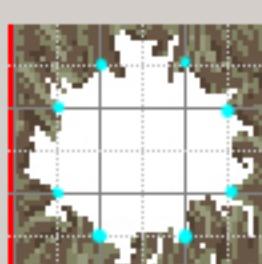
This set is connected at the edges of the tile



This set is connected at the edges of the tile



This set is connected halfway through the tile

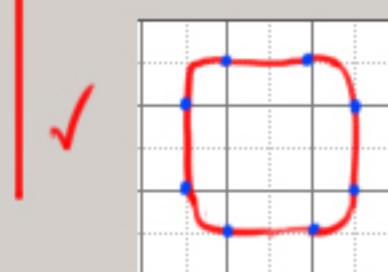
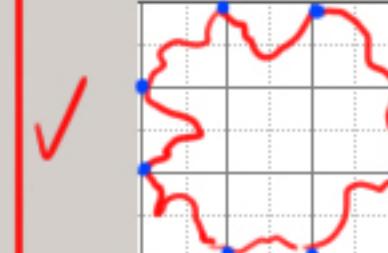
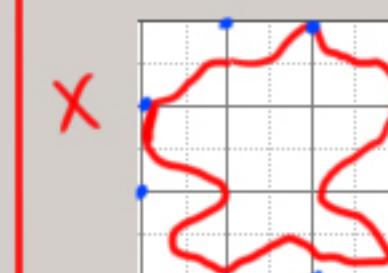


This set is connected halfway through the tile

All are in a 16x16 grid subdivided in 2

NOTE:

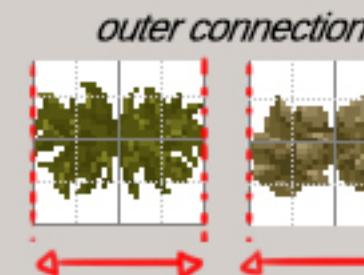
Make your tile shapes organic, especially in nature. It doesn't matter what shapes do you have on the tiles, the important thing is that the connections of the edges are consistent and there is still area for a path.



This is ok though please stay away from these boring tile shapes unless they're structures like castle paths etc.

3. Make the corresponding connector for your tileset

A. For tilesets connected at the edges, extend the connectors to the tile edges:

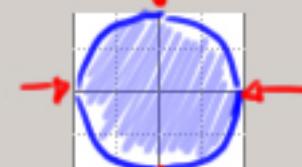


outer connection

For the inner connection, you have two options, both of which are connected to the tile edges which is the most important thing.



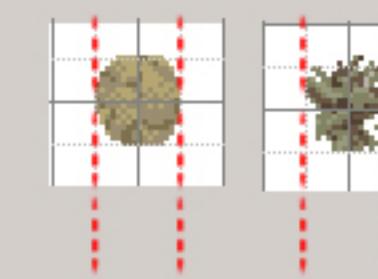
OR



EVERYTHING CONVERGES AT INNER TILE EDGES

EVERYTHING CONVERGES AT OUTER TILE EDGES

B. For tilesets connected halfway through the tile, have the connectors stop halfway through the tile.



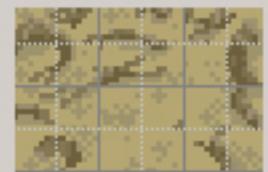
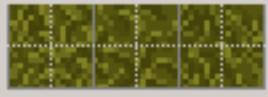
EVERYTHING CONVERGES HALFWAY THROUGH TILES

outer connection

inner connection

Tiles:

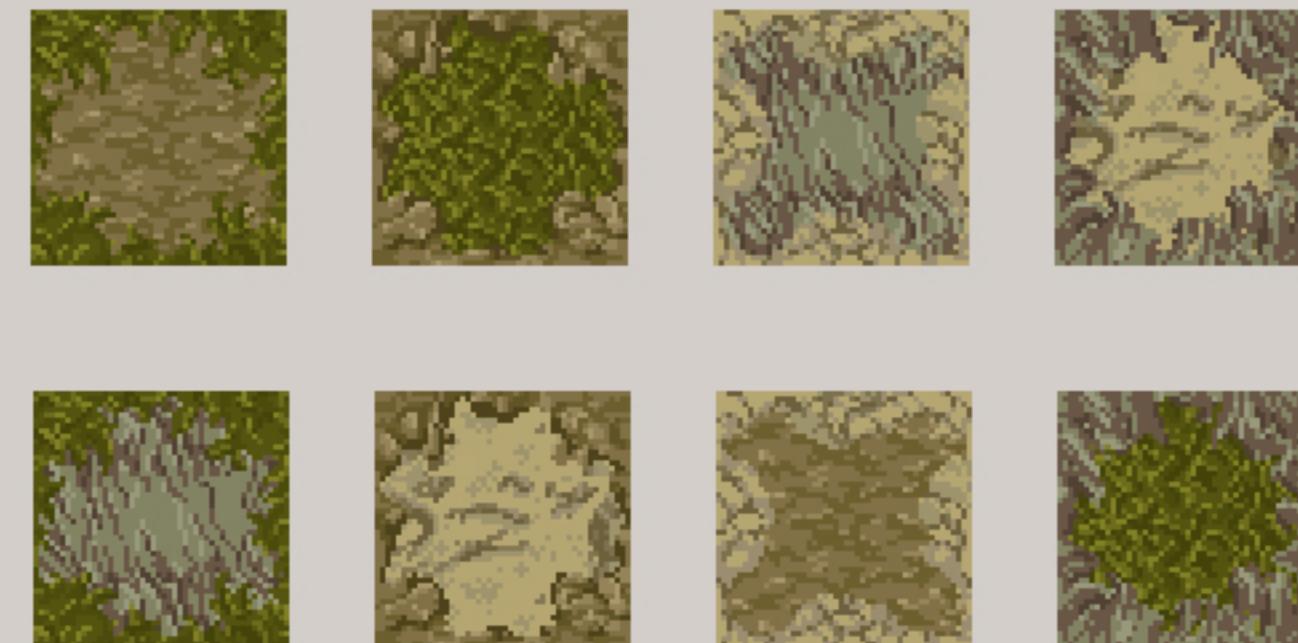
4. Extender tiles



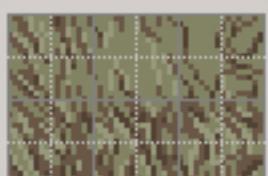
We'll have a minimum number of 3 tiles and a maximum of 6 tiles for these extenders.

If you notice the tiles that are easily distinguished visually like grass or dirt only have 3 tiles while the ones who need more tiles to be defined like wood planks and sand dunes have 6. Don't forget though, every one of those tiles should be seamless.

5. Mix and match possibilities



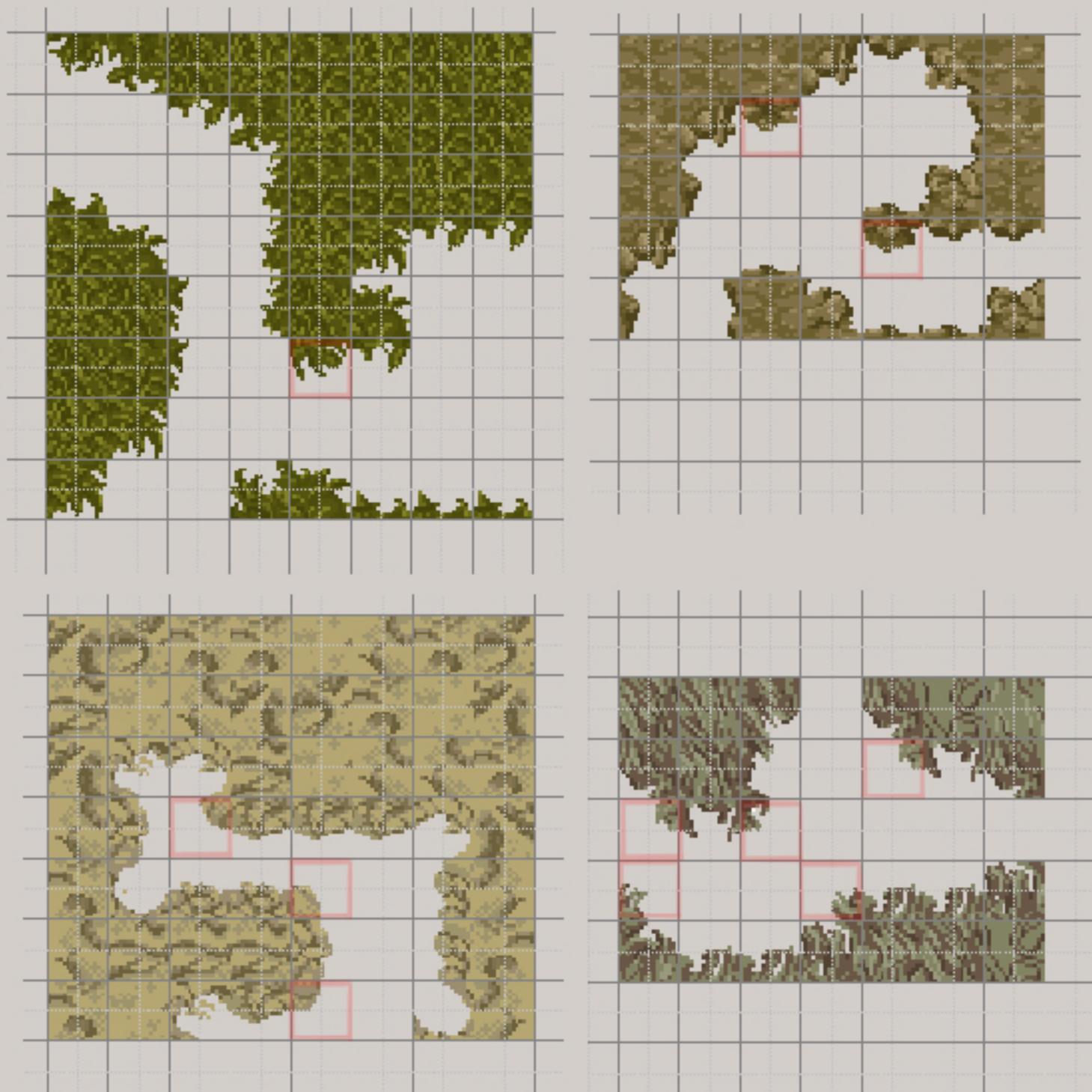
NOTE: Don't lay tiles out like this, Brian would be the one responsible for combining them. Just showing how different tiles combine to create new possibilities.



Feel free to create new textures and elements for our tiles. The more unique the better, just make sure it matches the feel of the environment it's intended to be used on and our style of lighting and color.

Tiles:

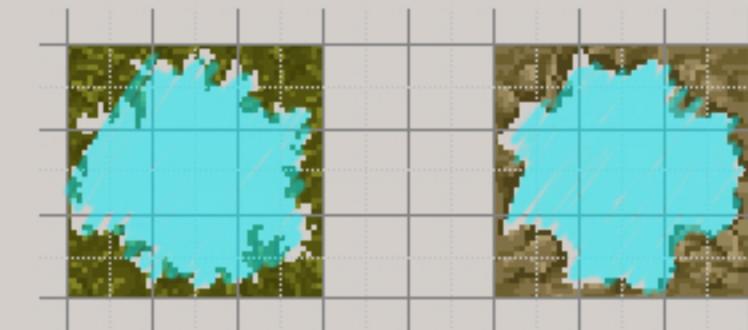
6. Sample composites



I've encased the connector tiles in faint red outline to show how they work. The rest are main tiles and extender tiles.

7. Summary

a. Main tiles are hollow on the inside:



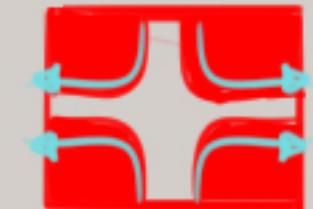
They make up the majority of curves that you see. They're usually "C" shaped, or the mirrored version of it.



b. Connector tiles are hollow on the outside:



They make the shapes that curve outward.



c. Extender tiles are seamless from all sides

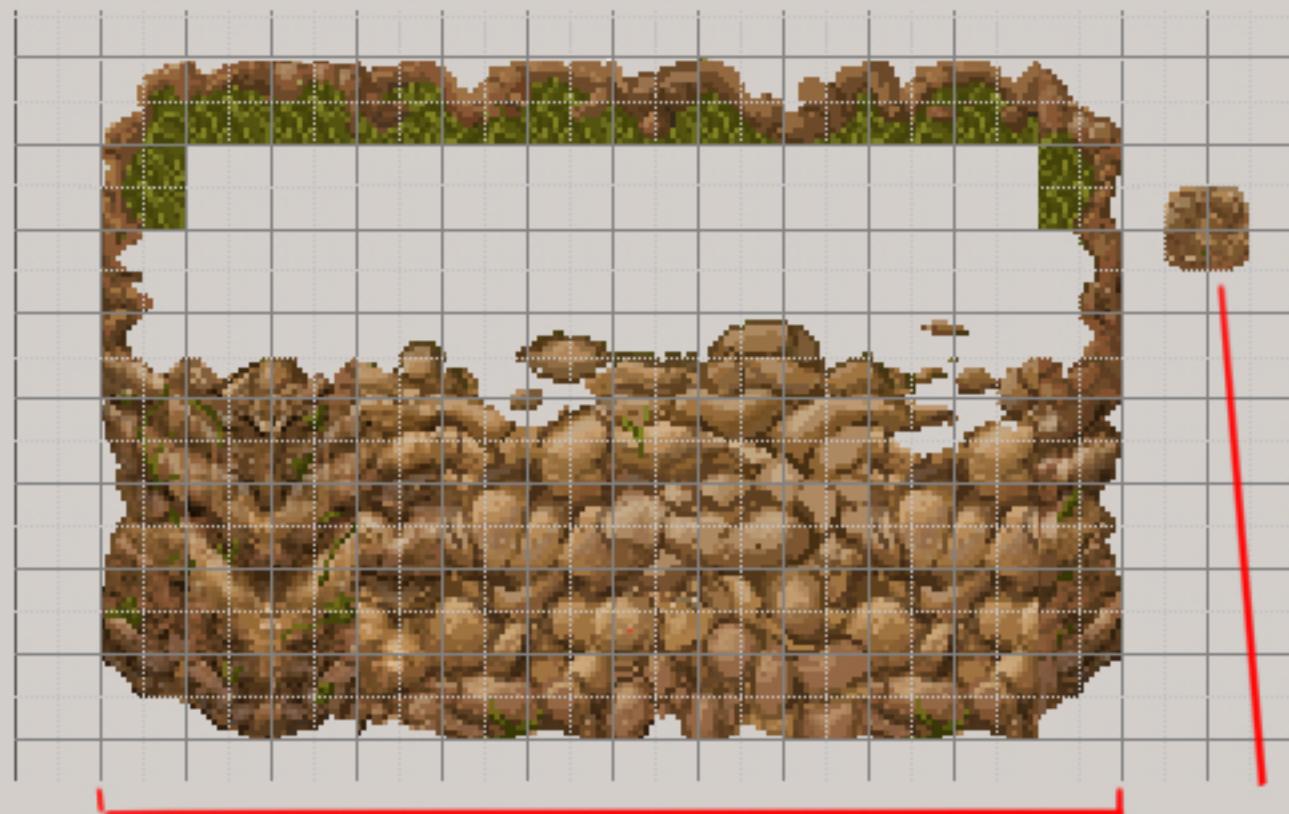


When combined you can create intricate paths like the ones shown on left.

Cliffs:

This is one of the more challenging things to make, please be patient and test your work first before handing it over.

1. Sample cliff tileset



MAIN CLIFF

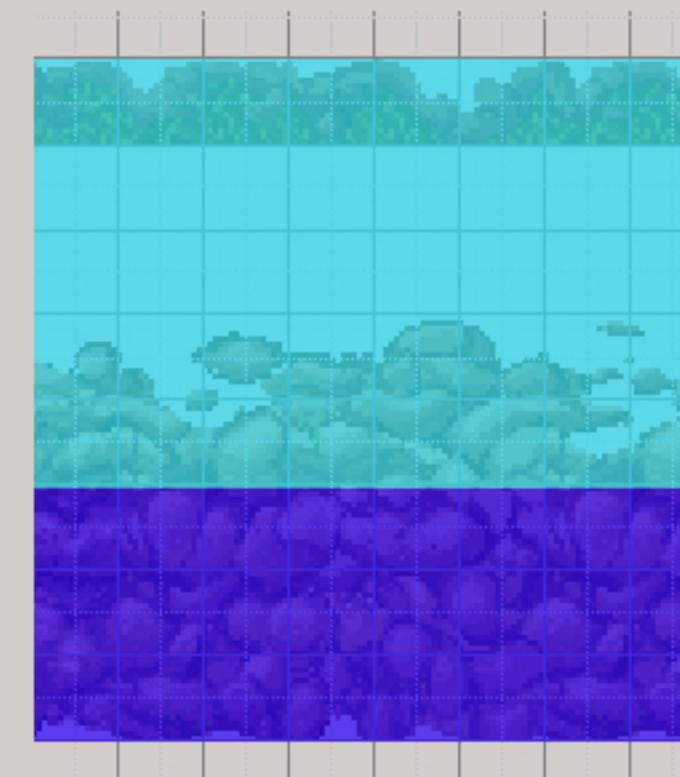
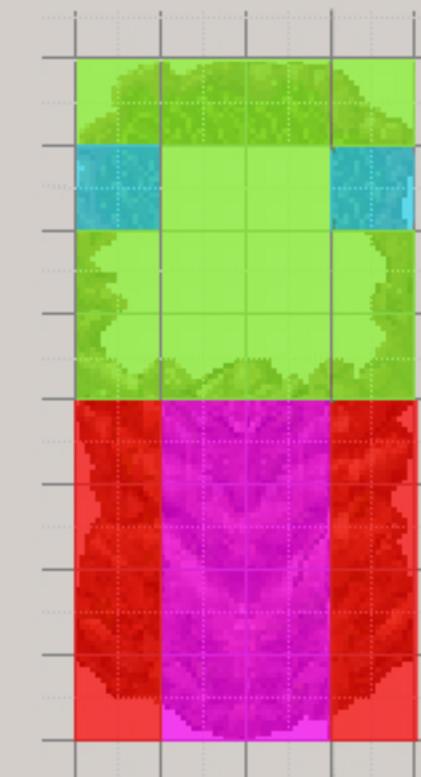
CONNECTOR TILES

— CLIFFSIDE VARIATION

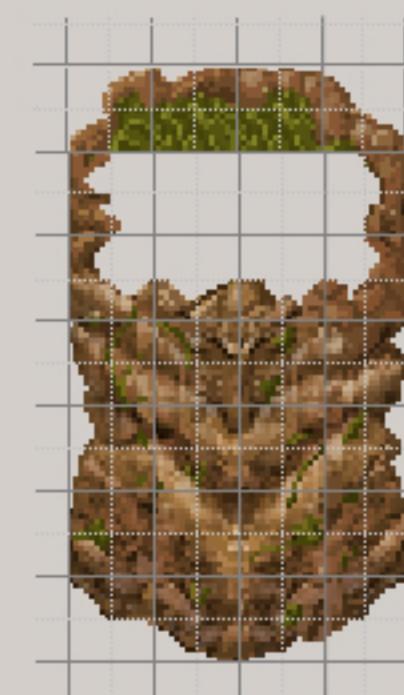


2. The parts and their purpose:

A. Main cliff: This is the tileset that everything is built around, make this first.



- i. Outline tiles
- ii. Base side tiles
- iii. Spine tiles
- iv. Extender tiles - outline
- v. Extender tiles - base



What you see on the left are the bare essentials of the main cliff.

You can have only this and it could still work, not as nicely as one with the extender tiles though.



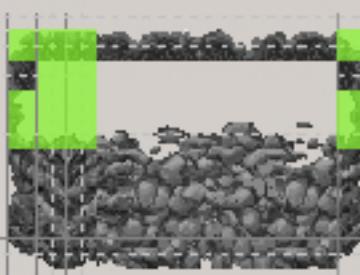
This is made with the bare essentials, the grid is really obvious and has some abrupt cuts.



This is made with the whole tileset, it looks more organic and can make more shapes.

Cliffs:

i. Outline tiles



Check out the way it's built and the shapes. It's practically the same as a tileset, to compare:

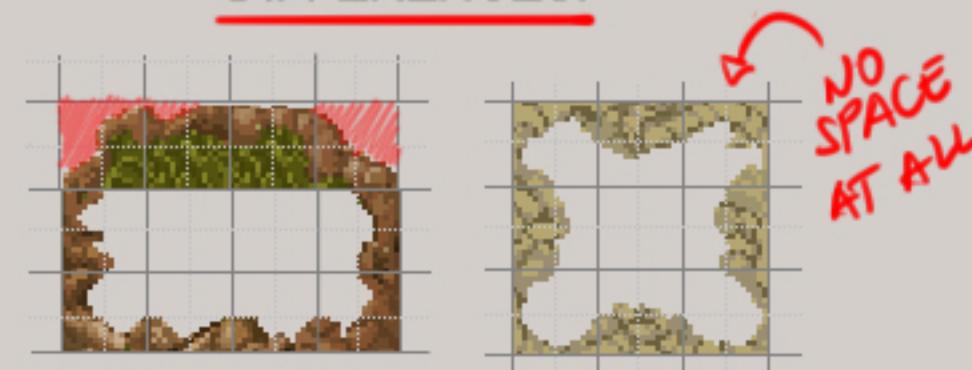


SIMILARITIES:

The tiles' connection has to be consistent - on the edges of the tile or halfway through the tiles

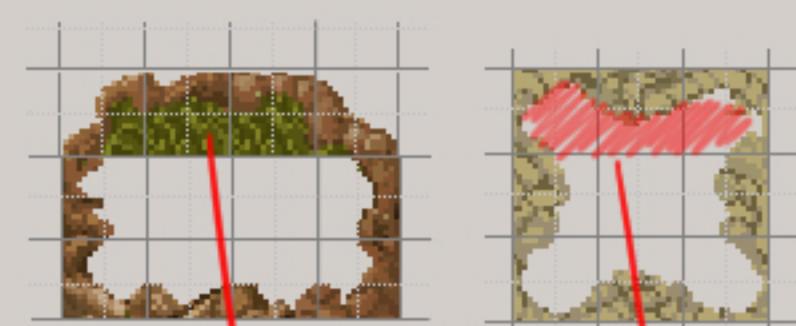
In this example, both of them are connected halfway.

DIFFERENCES:



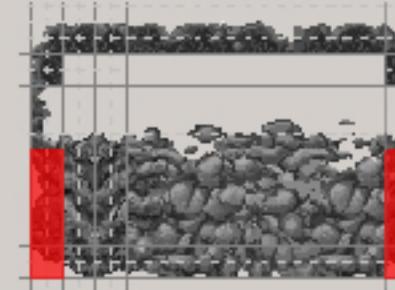
Notice that around the northern part of the outline tiles, there's some space above, unlike the tilesets which are filled through the edge.

And due to this, we have our second difference - the northern part of the outline tiles have texture underneath.

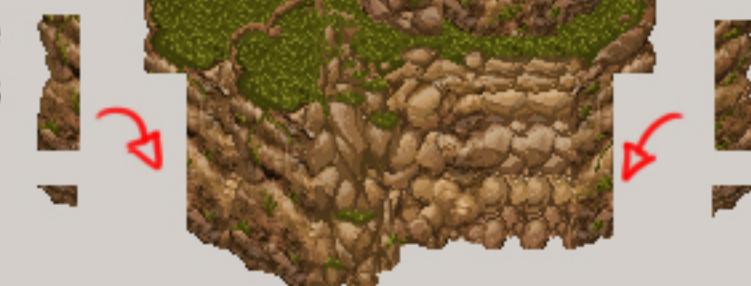


**GRASS TEXTURE
ALREADY PLACED** **EMPTY**

ii. Base side tiles



The main purpose of these tiles is to close off the sides of the cliff base:



The base side tiles is divided into 2:



Why do we have to add the texture underneath?



**EXCESS UNDERLAY
SHOWS THROUGH**

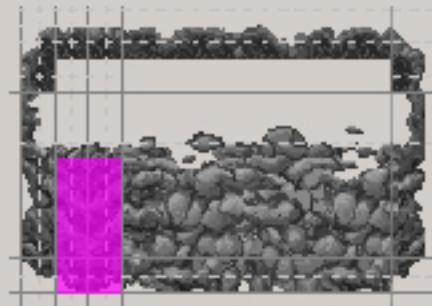
Because unlike our tilesets which are filled on the edges, there's some blank space on top of the outline tiles where the underlays will show through



b. Bottom taper: add to bottom corners of cliffs

Cliffs:

iii. Spine tiles



These tiles fill in the base of the cliffs. It has two parts:

a. Seamless vertical+horizontal tiles:

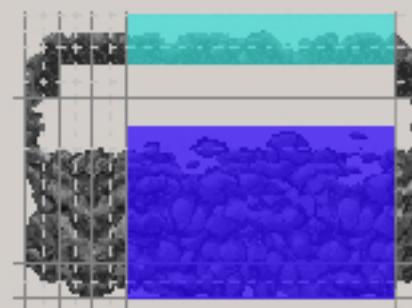
These combine seamlessly with itself horizontally and vertically



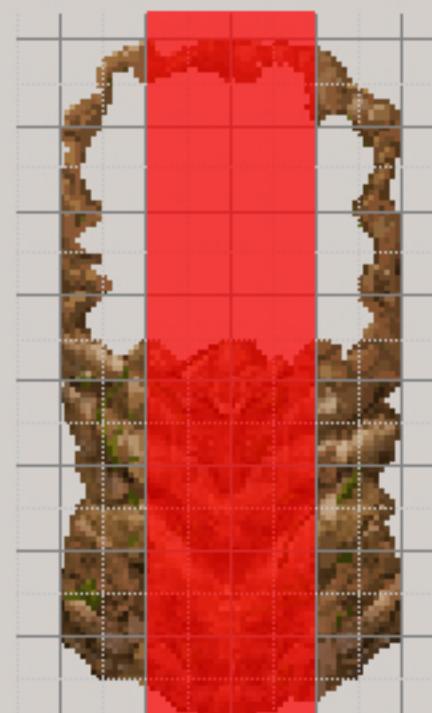
b. Bottom taper: Add to bottom of spine tiles



iv and v. Extender tiles - outline and base



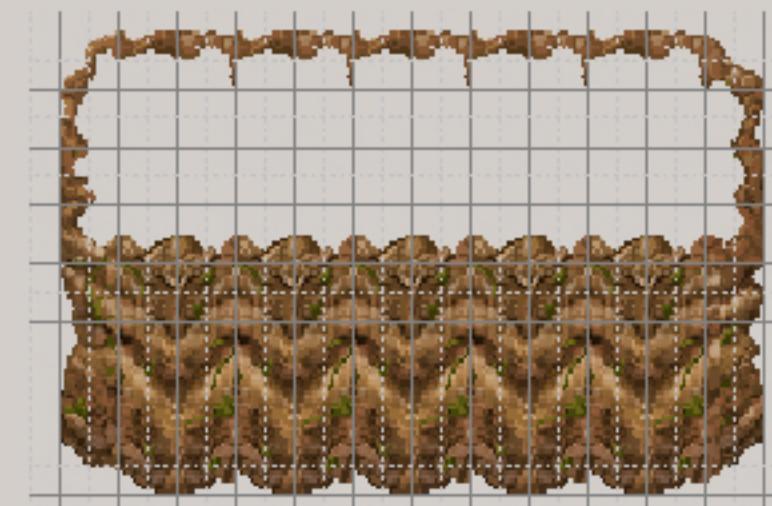
The key word here is extender - They're essentially an extension of the middle outline tiles and spine tiles



Extender tiles "extend" this area..



...so we can have this, instead of our bad examples below:



Add'l note:
Test your tilesets before uploading them for checking by assembling them into a sample cliff or something that doesn't take up much time.

IMPORTANT!

Since extender tiles are basically extra spine and mid outline tiles, they have to have the same mechanics of horizontal and vertical seamless and stop at the same points (edges or halfway)

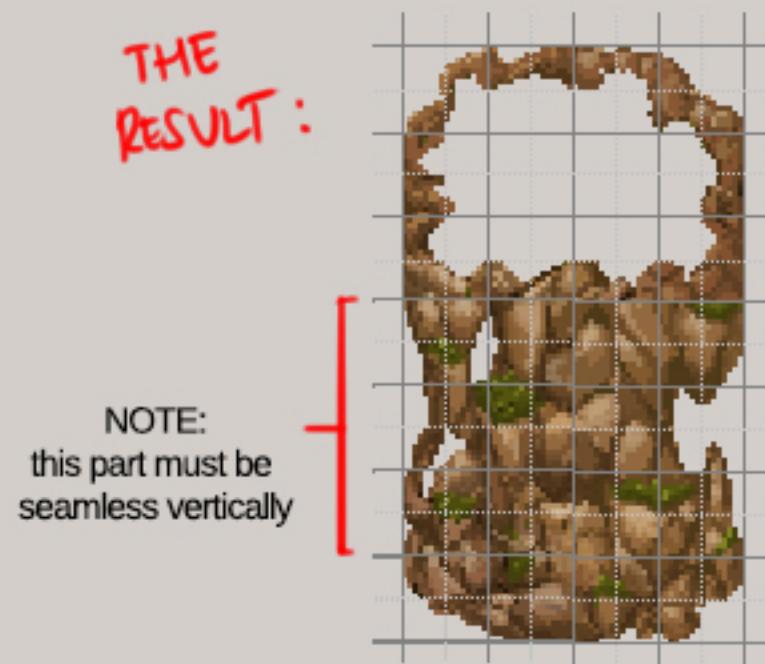


Cliffs:

3. Cliffside variation: Pretty self-explanatory; you add these to sides of cliffs to add variety.



THE
RESULT :



NOTE:
this part must be
seamless vertically

4. Connector tiles: these have the exact same principle as the ones on the tile style guide, pls check it out for more info



They combine with the outline tiles to make elaborate shapes

OTHER NOTES:

1. The first thing to create is the bare essential tiles, we need to check this before moving on. Please put off creating extender tiles until after we've approved this.



2. You don't have to create extenders on every cliff you make, please check with us first before creating any