

Sketchfab Introduction



Importing 3D assets into Sketchfab and setting up materials

Sketchfab Introduction | Contents



This lesson will introduce Sketchfab and its basic functionality. The lesson will cover the following:

1. Lesson Overview
2. Sketchfab Overview
3. Creating an Account
4. Uploading Models
5. Properties
6. 3D Settings
7. Navigation
8. Scene settings
9. Material settings
10. Textures
11. Texture Formats
12. Uploading Textures
13. Saving & Viewing
14. Publishing
15. Summary

Sketchfab Introduction | Lesson Overview

Today's learning goals and outcomes include:

- A basic understanding of Sketchfab and its functionality.
- The ability to upload an asset to Sketchfab and apply textures.
- The process of publishing a scene.

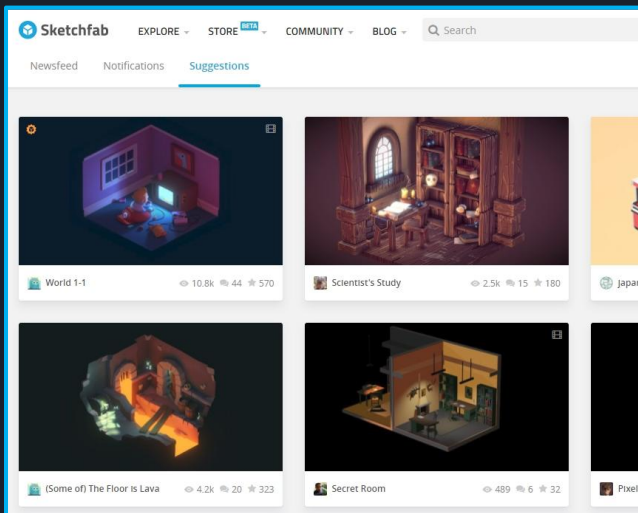
In this lesson you'll be learning about the process of importing assets into Sketchfab for presentation.

we will start by looking at the process of creating an account and uploading an asset.

we will then move on to the process of uploading and applying textures.

This will be followed by how to publish a Sketchfab scene.

Sketchfab Introduction | Sketchfab Overview

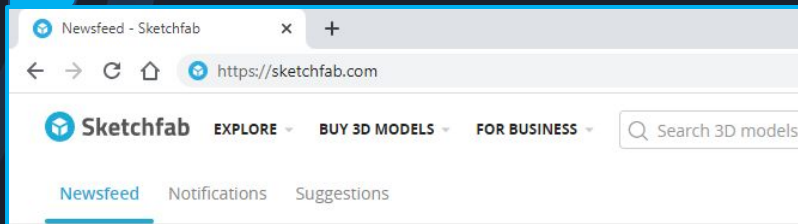


Sketchfab is an interactive, browser based real-time engine, designed to view and share 3D models in real-time across multiple platforms.

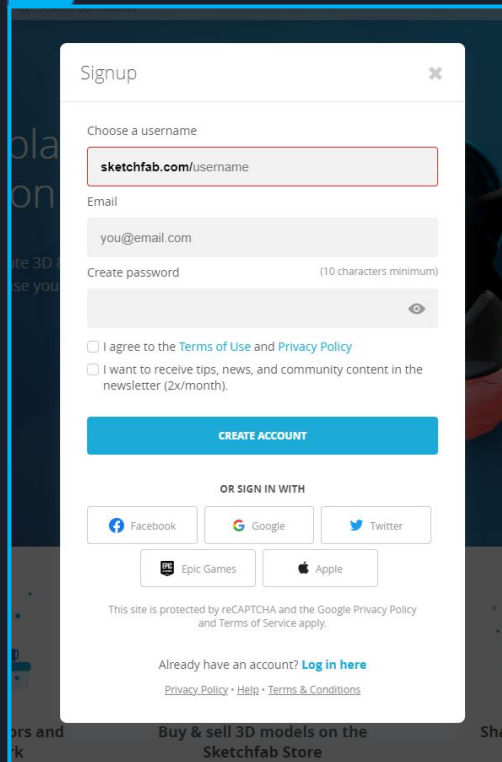
Sketchfab scenes can be embedded directly into Artstation and is often used to present assets as part of a portfolio.

Sketchfab Introduction | Creating an Account

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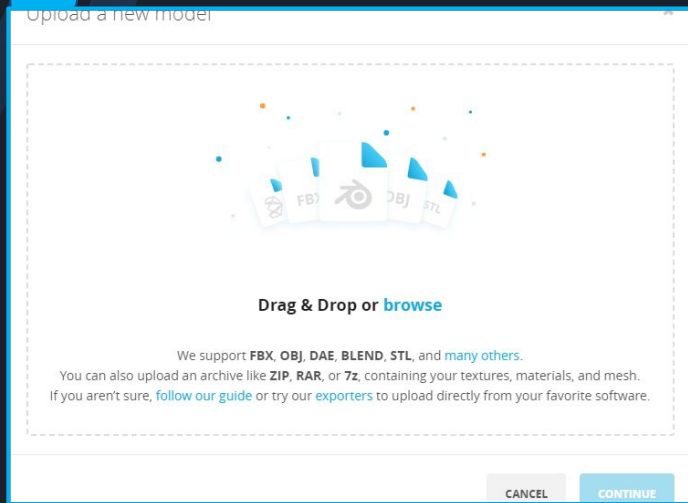


In order to utilise Sketchfab an account must first be made.

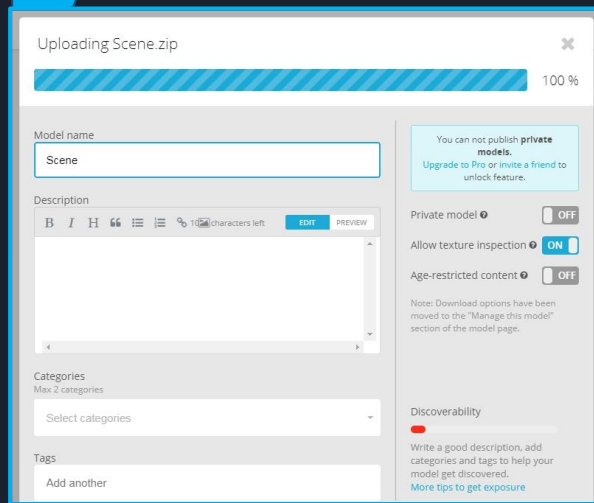
1. An account can be created by going to the Sketchfab website and clicking the **Sign up** button in the top right.
2. When creating an account, you must enter a username and email and agree to the terms of use and privacy policy, alternatively you can sign in using Facebook, Google, Twitter, Epic Games or Apple accounts.
3. Sketchfab has three account types, Basic is free and allows 10 uploads a month, Pro allows 50 and Premium allows 200.

Sketchfab Introduction | Uploading Models

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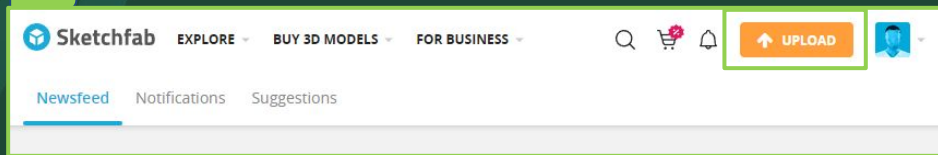


In order to make a model viewable on Sketchfab it must first be uploaded.

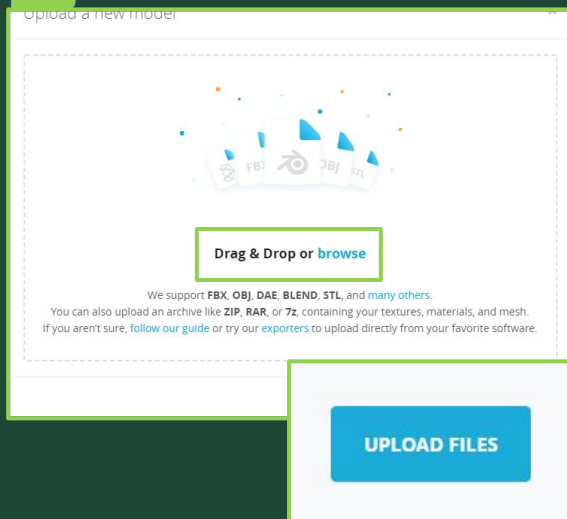
1. Sketchfab supports many industry standard mesh formats including fbx, obj, dae, blend and stl. Files can also be uploaded in archives including zip, rar or 7z formats.
2. Adding an appropriate title, description, category and relevant tags will make your scene easier to find on Sketchfab and will help generate more traffic.

Sketchfab Introduction | Uploading Models

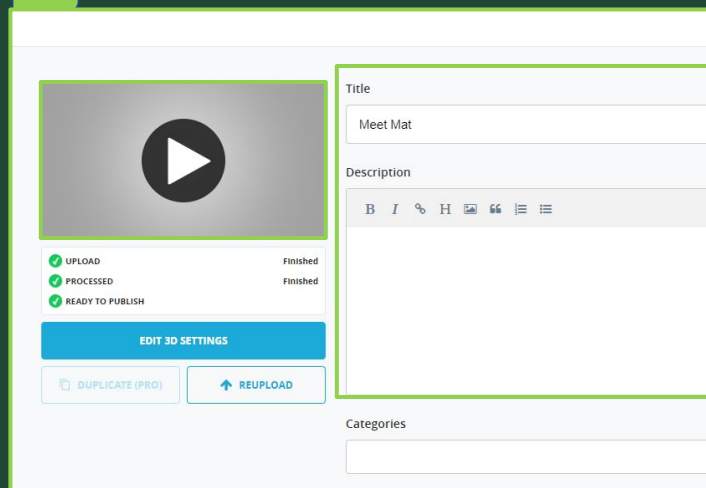
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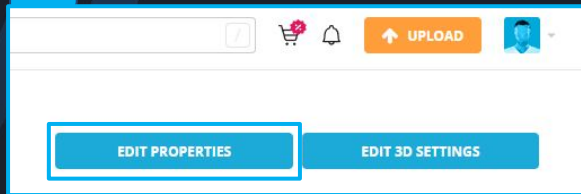


Create and/or log into your Sketchfab account.

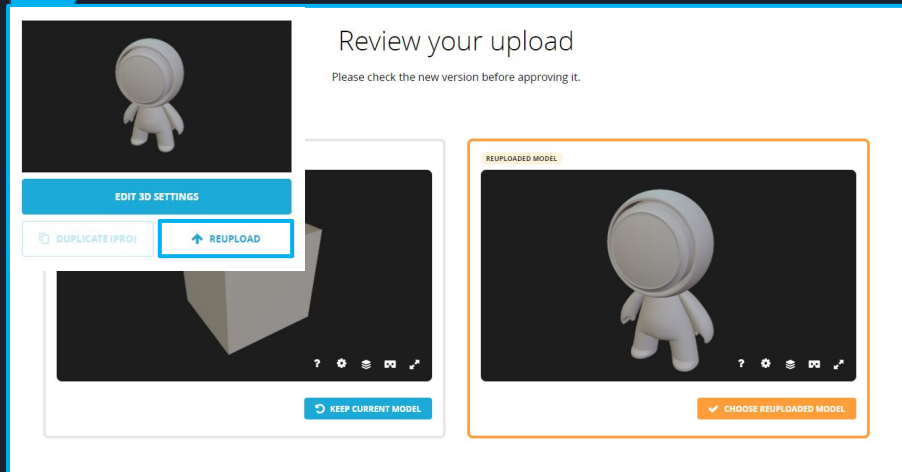
1. Click the orange **Upload** button at the top right of the browser.
2. In the upload a new model screen, browse for the MeetMat.fbx file or drag and drop it into the window and click the **Upload Files** button.
3. Once the model has been uploaded, it is important to check it for any errors by pressing the play button at the top left and ensure that you give the scene an appropriate title and description.

Sketchfab Introduction | Properties

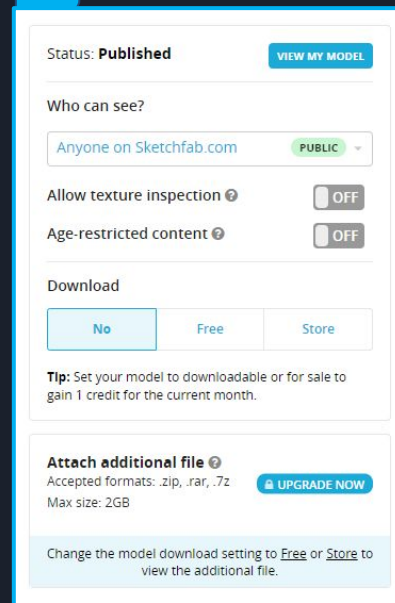
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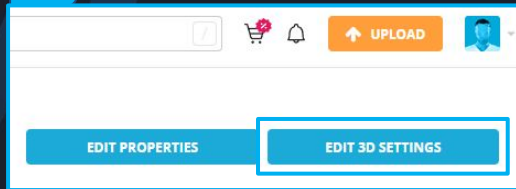


After a model has been uploaded the model properties can be viewed and edited at any time.

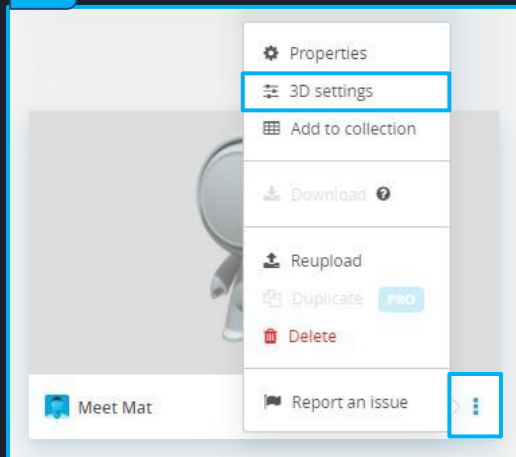
1. The **Edit Properties** button is visible once a scene is selected in Sketchfab dashboard.
2. Under edit properties the mesh can be re-uploaded, replacing the original mesh but keeping any relevant settings. This is achieved by clicking the **Reupload** button and following the prompts.
3. Various settings relating to how the model is displayed can also be edited, including model privacy, age restriction, download and texture inspection settings.

Sketchfab Introduction | 3D settings

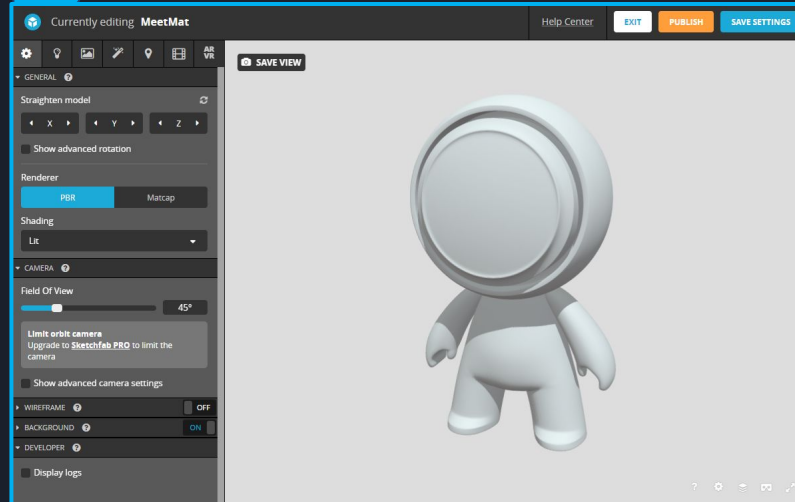
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Once a model has been uploaded and the properties have been set the 3D settings can be adjusted.

1. The **Edit 3D Settings** button is visible once a scene is selected in Sketchfab dashboard.
2. 3D settings can also be accessed by clicking on the triple dots in the bottom corner of a model's thumbnail.
3. Under Edit 3D Settings various settings related to the model and scene can be adjusted, including render settings, textures/materials, lighting, post processing, annotations animation and AR/VR settings.

Sketchfab Introduction | Navigation

Orbit



Zoom



or

CTRL



Pan



or



Rotate Lighting

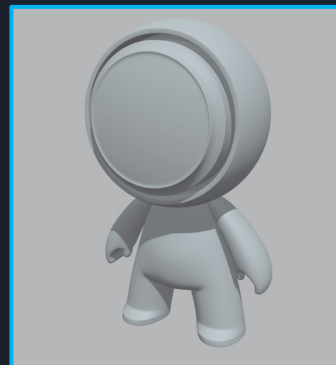
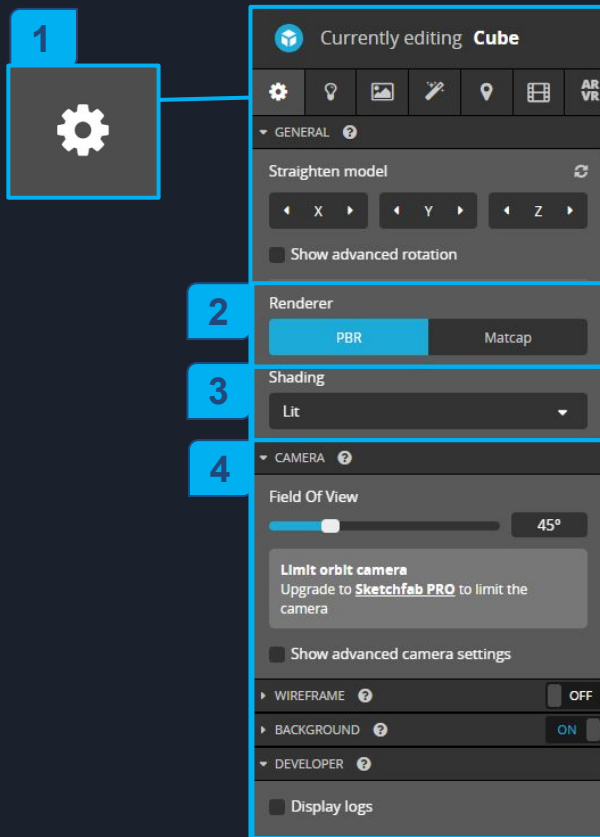
ALT



Navigation in the 3D viewport of sketchfab is very similar to Maya, but there are some things to be mindful of, in particular holding Alt while clicking and dragging with either the left or right mouse will inevitably result in the scene lighting being rotated.

1. Select the uploaded model and click on the **Edit 3D Settings** button.
2. Click on 3D viewport and familiarise yourself with the controls for orbit, zoom, pan and rotate lighting.

Sketchfab Introduction | Scene Settings



Physical Based Rendering

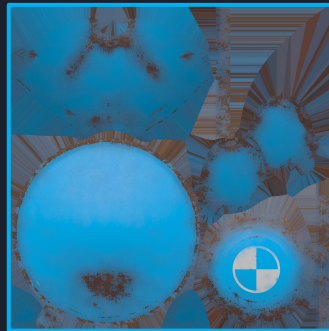
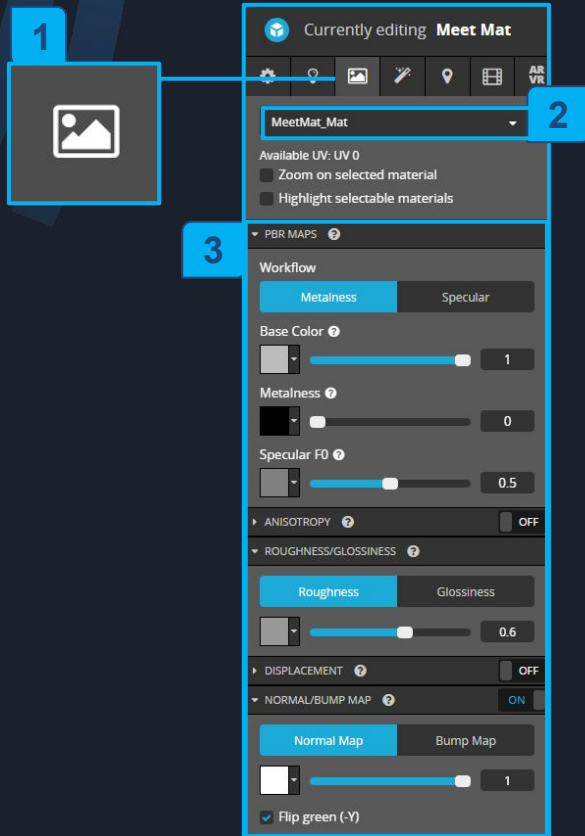


Matcap

The scene tab, allows scene wide general settings to be modified.

1. The scene tab can be accessed by clicking on the cog icon.
2. The renderer defines the render pipeline that will be used in the scene, PBR is the default setting, Matcap is a library of predefined materials.
3. Shading defines how lights affect materials. Lit is the default setting and required for PBR, Shaderless removes the effect of lights on materials in the scene.
4. Camera settings, backgrounds and the wireframe mode can also be adjusted.

Sketchfab Introduction | Material Settings



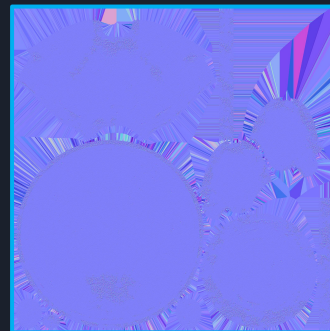
Base Color



Metallic



Roughness



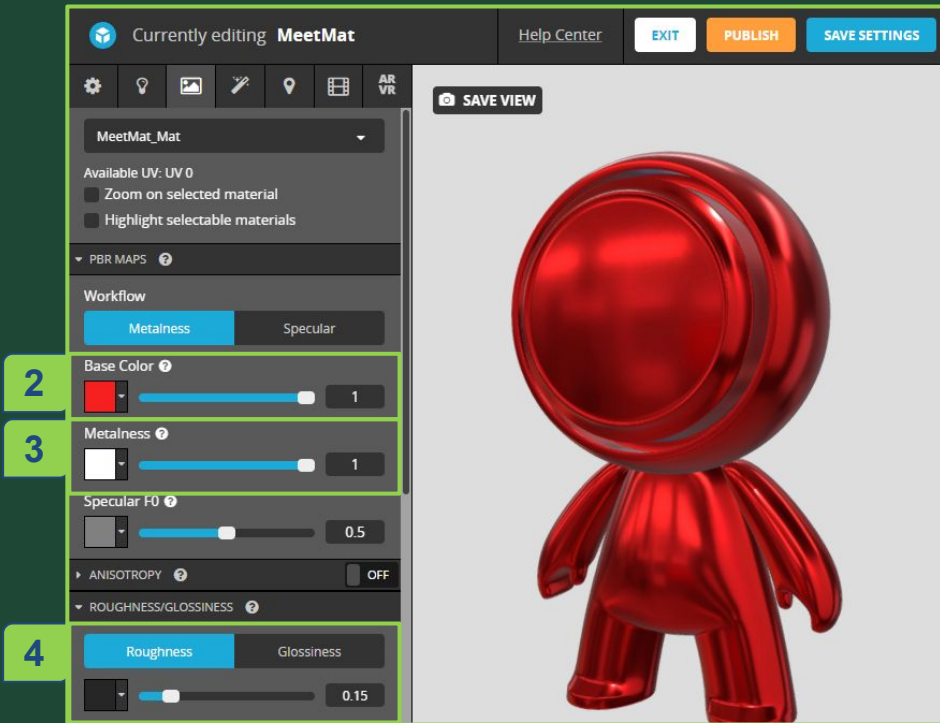
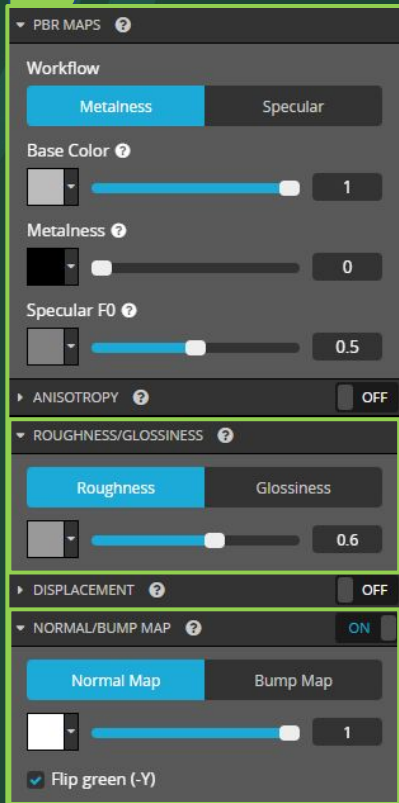
Normal

The material tab allows textures to be added and material settings to be modified.

1. The material settings tab can be accessed by clicking on the image icon.
2. Any materials assigned to the model can be accessed from the material dropdown, it is important to give your materials appropriate names before exporting a model.
3. In the PBR render pipeline the core material attributes are base color, metalness, roughness and normal, but various inputs for more complex materials are also supported.

Sketchfab Introduction | Material Settings

1

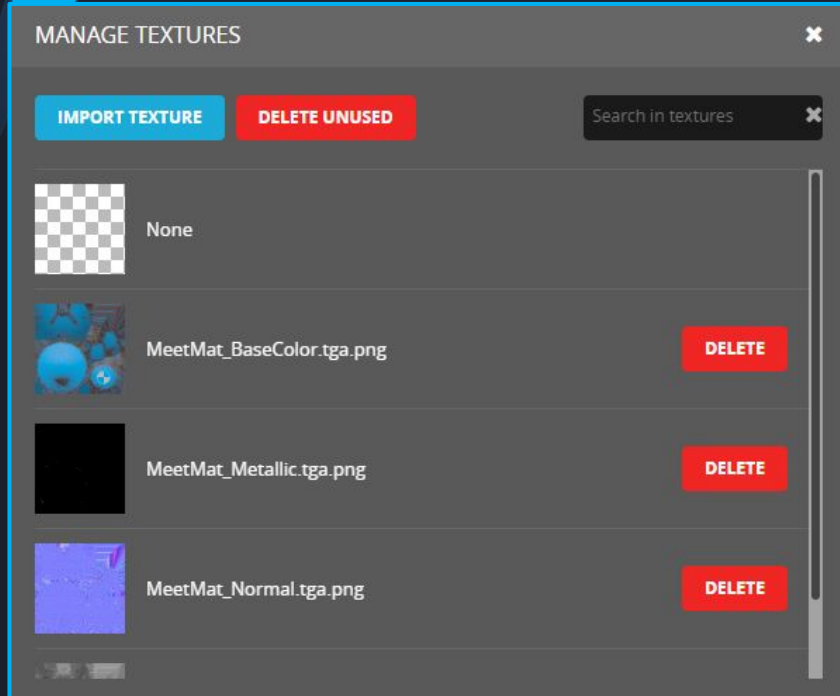


Material settings can be modified by adjusting the default values.

1. Click on the Materials tab and ensure that the PBR Maps, Roughness/ Glossiness and Normal /Bump Map drop downs are open.
2. Click on the grey box under base colour, adjust the colour using the colour picker.
3. Adjust the slider for Metalness and observe the effect on the material.
4. Adjust the slider for roughness and observe the effect on the material.

Sketchfab Introduction | Textures

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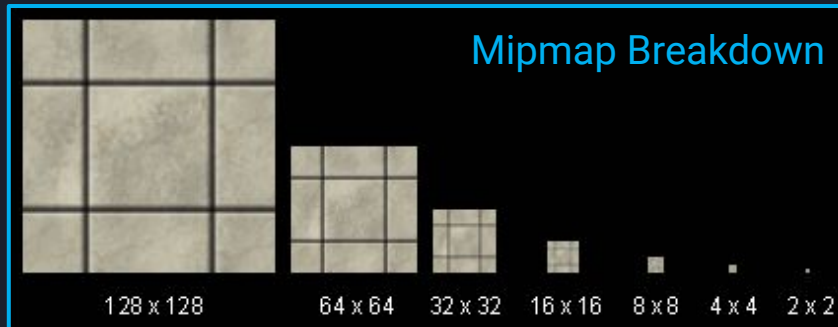
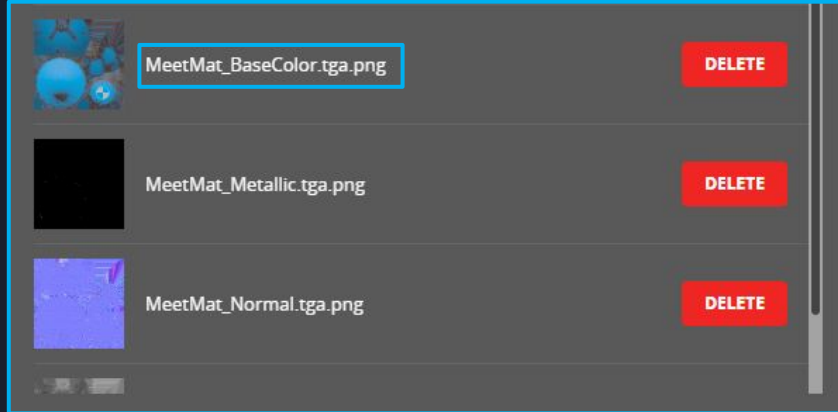


While adjusting sliders in the materials tab can be used to create simple materials, complex materials require the use of texture maps, which are created in external tools.

1. In order for texture maps to be used they must first be uploaded into the scene. This is done via the **Manage Textures** dialog.
2. When a texture is inserted into a material slot it overrides the default values, in this example the texture map is driving the roughness values.
3. It is the interplay between the various maps that allows us to create complex materials.

Sketchfab Introduction | Texture Formats

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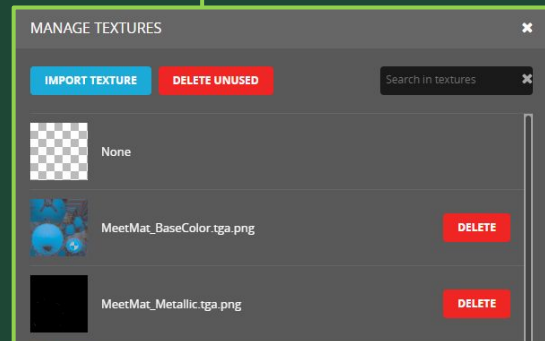
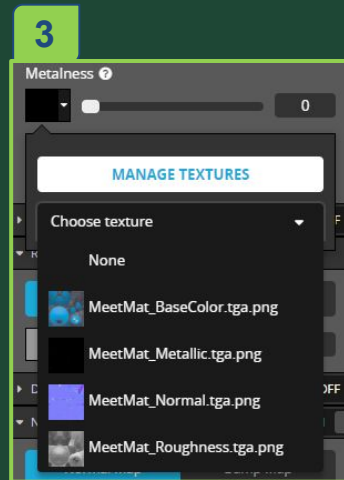
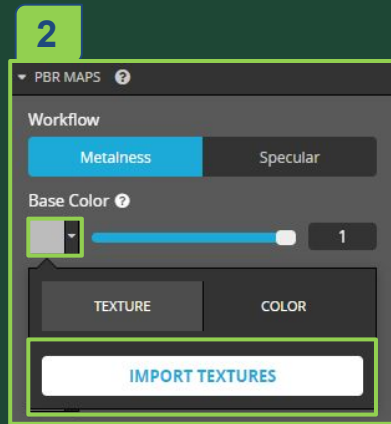
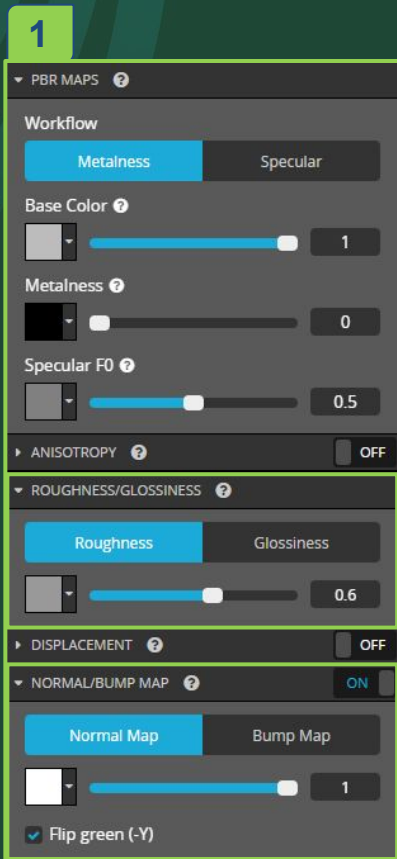
2

2
4
8
16
32
64
128
256
512
1024
2048
4096
8192

Sketchfab supports multiple texture formats, but there are important considerations that must be taken into account.

1. Only Industry standard formats should be used, either TGA, PNG or DDS. Non PNG textures will be converted to a PNG on import.
2. Texture maps should be power of 2 as mipmaps are automatically generated on import. Textures that are not power of 2 will be scaled down to the nearest power of 2.
3. The maximum texture size supported is 8192 x 8192 and a individual texture can not exceed 75mb.

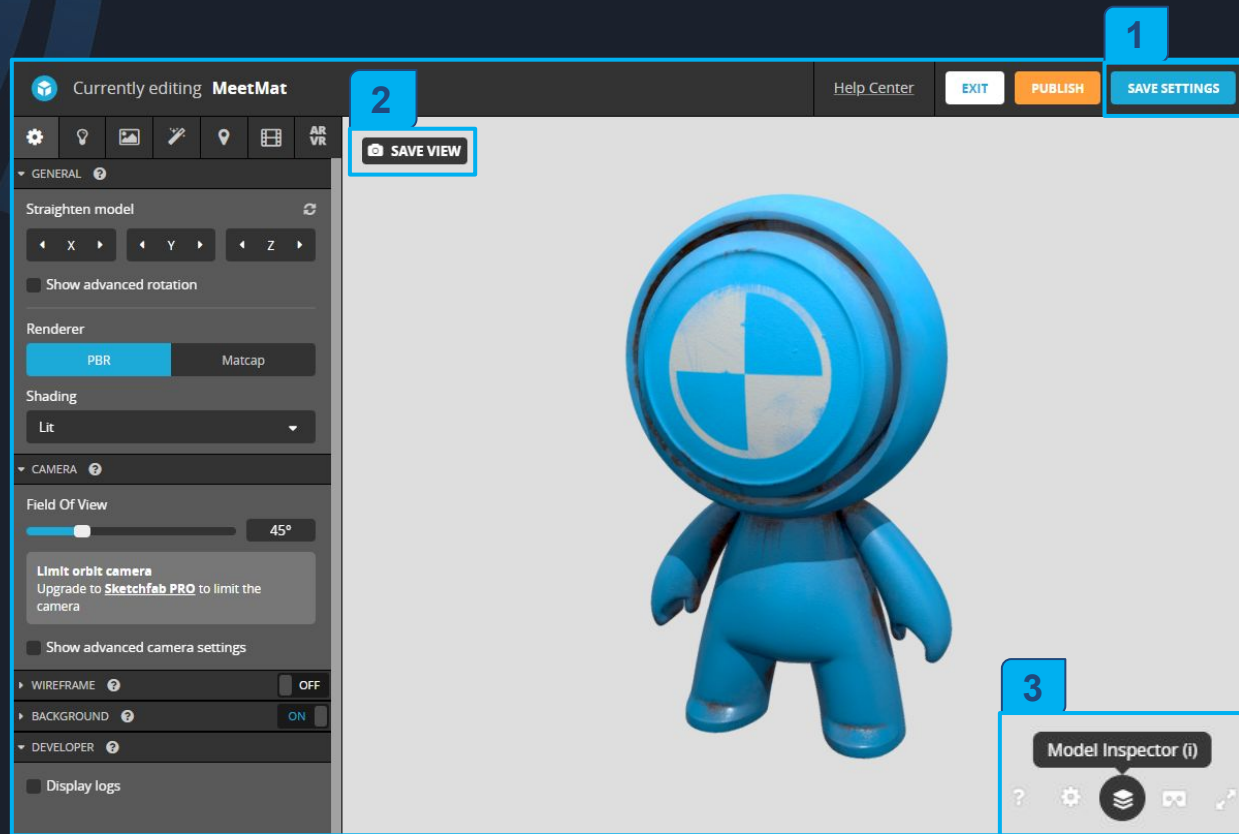
Sketchfab Introduction | Uploading Textures



To import the textures:

1. Click on the Materials tab and ensure that the PBR Maps, Roughness/Glossiness and Normal/Bump Map drop down menus are open and enabled.
2. Click on the grey box under Base Color, select the texture tab, click import textures and import all the MeetMat textures.
3. Selecting the boxes under each of the four inputs, insert each texture into the appropriate slot.
4. Check the model for any texture issues and make corrections as required.

Sketchfab Introduction | Saving & Viewing

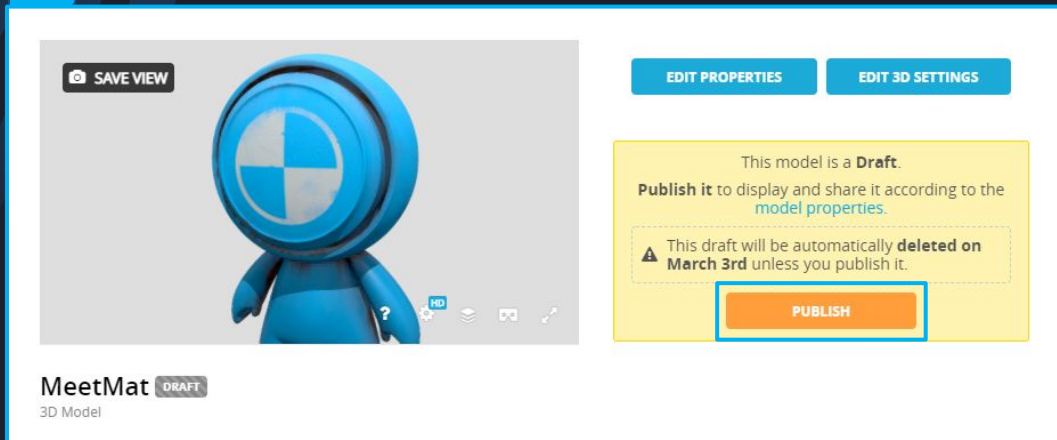


It is important to regularly save scene settings, exiting without saving will result in lost work.

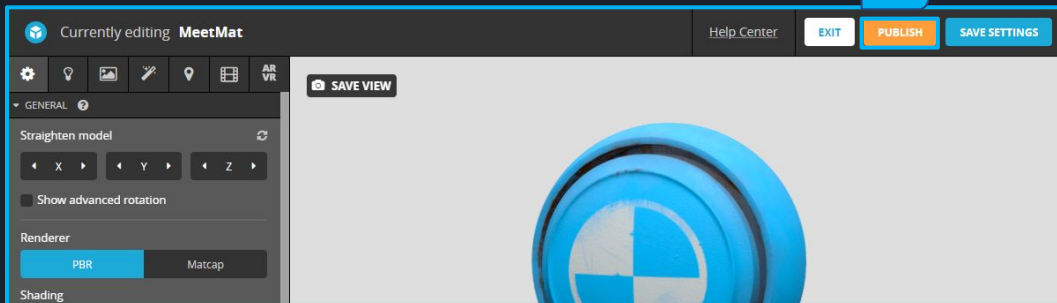
1. The **Save Settings** button will save the scene as a draft, draft scenes are not publicly listed and are removed automatically after 30 days, unless published.
2. The **Save View** button will save the current camera position as the default for the scene and the Sketchfab thumbnail.
3. The **Model Inspector** is a tool that allows a model's geometry, topology and textures to be studied. It can be accessed in the bottom right of the 3D viewport.

Sketchfab Introduction | Publishing

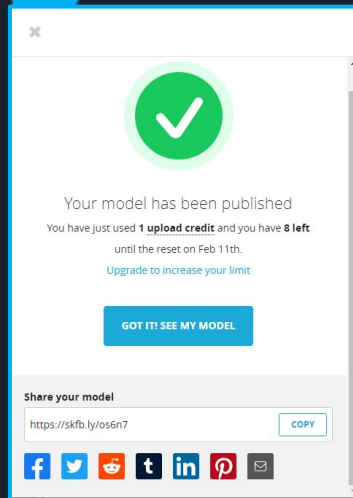
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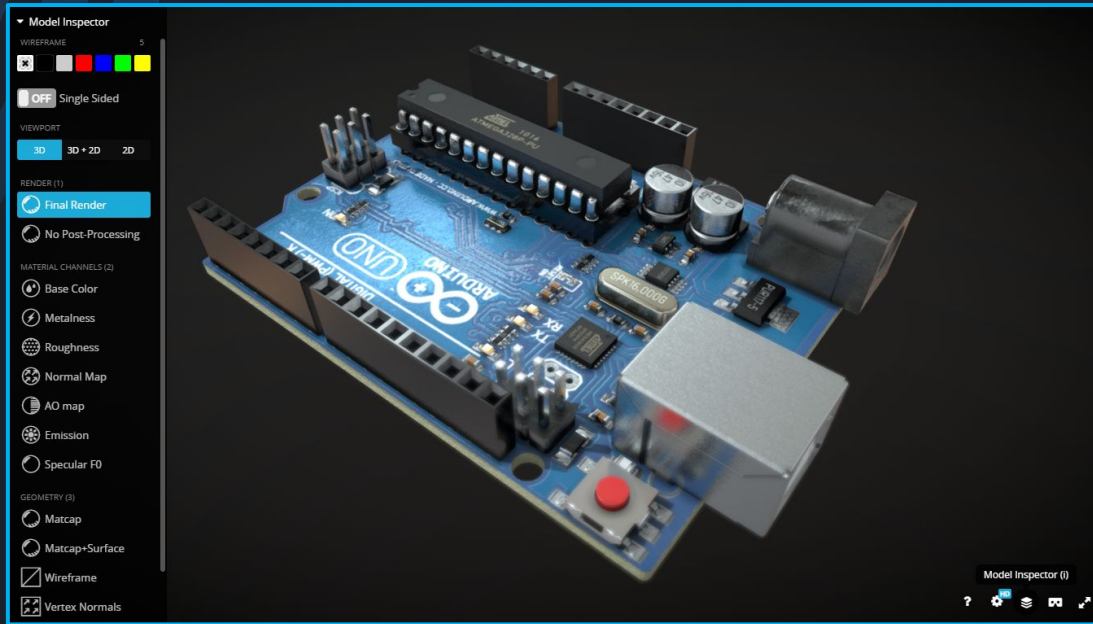
3



For a scene to be publicly visible on Sketchfab it must first be published.

1. In the main Sketchfab dashboard, a draft scene can be published by clicking on the desired thumbnail and clicking the orange **Publish** button.
2. In Edit 3D Settings a scene can be published by clicking the orange **Publish** button at the top right of the window.
3. Once published the final scene can be shared via the unique direct link or can be shared via one of the supported social media platforms.

Sketchfab Introduction | Summary



Arduino UNO by Mohamed Fathi

Today you have learned some of the basic functionality of Sketchfab, including how to create an account, import assets and textures and assign textures to materials.

Complete:

You can now import your own assets into Sketchfab for presentation.

Usability:

These techniques can be used to present assets online or in your professional portfolio.

What next:

Continue to develop and expand your online presence through Sketchfab and use the Model inspector to study other artists work.

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