Blender 3D model use

Blender is a free 3D application that anyone can access. Download it in here https://www.blender.org/

1. Import the OBJ File

Open Blender (preferably version 3.x or later).

Go to File → Import → Wavefront (.obj).

In the import dialog, check Image Search (to automatically find MTL and texture files if they're alongside your OBJ)

Click Import OBJ.

Your model should appear in the 3D viewport—if it looks grey, switch the viewport shading to Material Preview or Rendered mode.

2. Verify Automatic Texture Loading

If Blender detects the accompanying .mtl, it will auto-create materials and link textures for you.

If textures don't show, it's often due to missing UV maps or the texture node not set up.

Check whether UVs were imported:

Select the model → enter Edit Mode (Tab) → open the UV Editor.

If empty, your model lacks UVs.

3. Creating a custom texture

When creating your own textures, you can use a variety of applications to do this. You can use any of the following (and more). Save your artwork as a .png or .jpg file when you're finishied creating

Adobe Photoshop or Illustrator
Canva (free)
Microsoft Paint
Gimp (free)
Photopea (free)

4. Apply Textures Manually via Shader Nodes

This is key if textures aren't showing.

Switch to the Shading workspace.

Select your object, ensure in viewport you're not in "Flat" shading.

In the Shader Editor, click Use Nodes (if not already active).

Add an Image Texture node:

Press Shift+A → Texture → Image Texture.

Click Open and select your texture image (PNG/JPG).

Connect its Color output to the Base Color input of the Principled BSDF node

In the viewport, ensure Material Preview or Rendered shading is active to see it.

Tips
You must select viewport shading in the viewport to see the texture.

You add an image texture to an object's material by clicking on the dot next to a material's 'base color' selector.

4. Use Node Wrangler for Faster Setup

If you've multiple textures (e.g., Albedo, Normal, Roughness):

Enable the Node Wrangler add-on via Edit → Preferences → Add-ons.

In the Shader Editor, select the Principled BSDF, press Ctrl+Shift+T.

Browse and select all related texture files; Blender auto-links them to correct slots

5. UV Unwrap (If Needed)

If textures map incorrectly:

Select your model, press Tab to enter Edit Mode.

Press A to select all.

Go to UV → Smart UV Project or manually unwrap for better control.

Adjust UVs in the UV Editor.

6. Render and Final Touches

Switch to Rendered View to preview lighting.

Add lights (e.g. Area Light, HDRI in World > Color).

Position camera using Numpad 0, then render via F12.

Choose file output: .png or jpg. If you are going to add your design into a photo editing application like Photoshop or Canva, then you should save your file as a .png if you want no background behind the spark.

7. Watch these tutorials for visual guidance

Importing Files
https://www.youtube.com/watch?v=MnEf1HFr5ts&ab_channel=blenderian

Adding textures
https://www.youtube.com/watch?v=mURA2g1rOSc&ab_channel=TutsByKai