



Unit 3 - Intro to Lighting, Texturing & Rendering

Lesson #5 - 2D and 3D Texture Painting

CG Cookie Videos used in this lesson

Videos for this unit are available within the [Fundamentals of Texturing](#) download, and or are Included within the [Educator Blender Bundle](#).

- Fundamentals of Texturing - Create an Image Texture
- Fundamentals of Texturing - 2D Painting
- Fundamentals of Texturing - 3D Painting
- Fundamentals of Texturing - Saving Texture & Vertex Paintings

Key Training

- Creating and saving image textures.
- Painting 2D textures.
- Painting 3D textures.
- Working with 2D and 3D together.

Instructor Focus and Tips

- When creating image textures focus on reminding students to save their images before exiting blender. Have them get in the habit of saving their textures while working on their project. Demonstrate what will happen to their texture paintings if they do not save them.
- Working with texture painting can be fun for the students. Give them time to be creative with texture painting. Watch for students that need help switching from view mode to paint mode. Another area to watch for is making sure they have added their textures to a material before starting to 3D texture paint.

Student Activities and Assignments

- Have the students open the monkey file from the last lesson. Make sure that they have created an UV-map. Have them add a texture and then paint each monkey.
- Have the students open their past projects. They can use the object they UV-Unwrapped last lesson or use a new project. Make sure the object has an UV-Unwrapped. Have them add a texture and paint the texture.

Blender Terminology, Commands and Hotkeys Introduced

- Create a new image (Hotkey: N)

- Edit Context mode - View
- Edit Context mode - Paint

BellRinger Prompts and Ideas

- What is the difference between 2D and 3D texture painting.

Exit Ticket Prompts and Ideas

- What is the difference between 2D and 3D texture painting. Which method do you prefer to work with.

Learning Targets

- Student can create and save texture images.
- Student can paint textures using 2D techniques.
- Student can paint textures using 3D techniques.

Rubric

	Beginning	Developing	Accomplished	Exemplary
Creating Image texture	Student has received a demonstration on creating image textures.	Student can create image textures with assistance.	Student can create image textures.	Student can create image textures, manage seams, and manage stretching.
2D Paint	Student has received a demonstration on painting in 2D.	Student can create image textures using 2D painting techniques with assistance.	Student can create image textures using 2D painting techniques.	Student can create image textures using both 2D and 3D painting techniques.
3D Paint	Student has received a demonstration on painting in 3D.	Student can create image textures using 3D painting techniques with assistance.	Student can create image textures using 3D painting techniques.	Student can create image textures using both 2D and 3D painting techniques.

Standards

Standard 4: Surface Materials

- **Objective 1: Surface Material Terminology**

- o Indicator 1: Know surface material terminology
- o Indicator 2: Identify parts of the 3d application interface used with surface materials

- **Objective 3: Create, apply and edit textures**

- o Indicator 1: Create image textures using 3d application interface
- o Indicator 2: Create 2D and 3D textures for 3D Models
- o Indicator 3: Export 3d mapping and textures for external editing