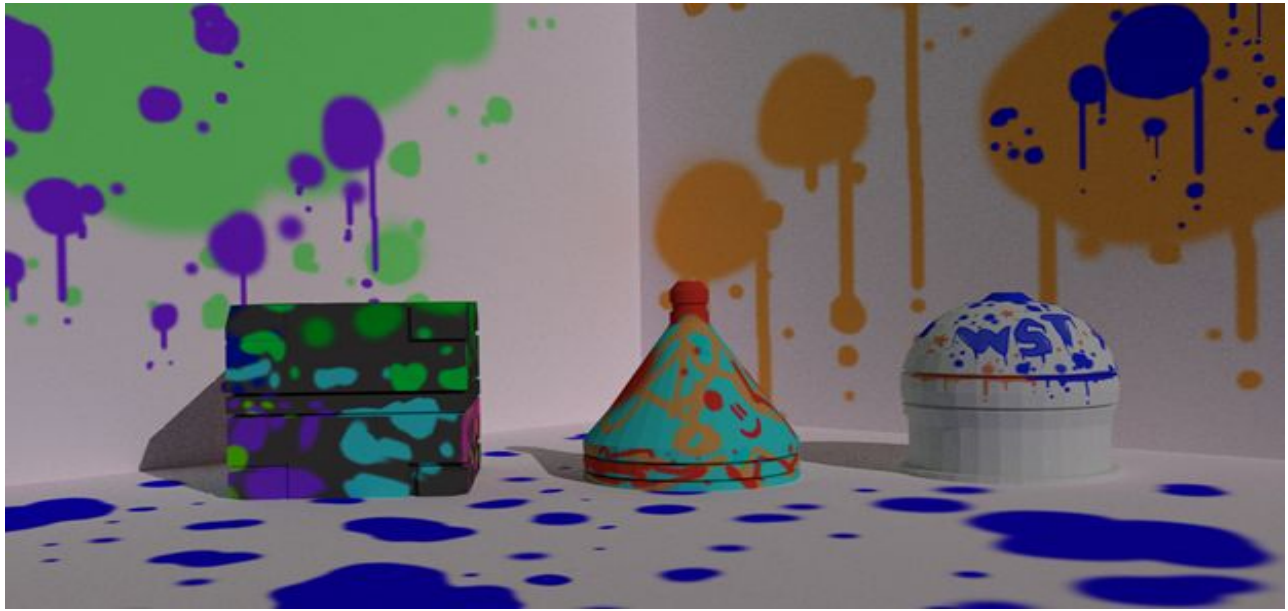# Unit 3 - Intro to Lighting,Texturing & Rendering

Assessments and Projects

Continuing Projects

Have the students UV-Unwrap and texture paint the 3 objects. Add an environment and 3-point lighting. Here is a student example for inspiration.
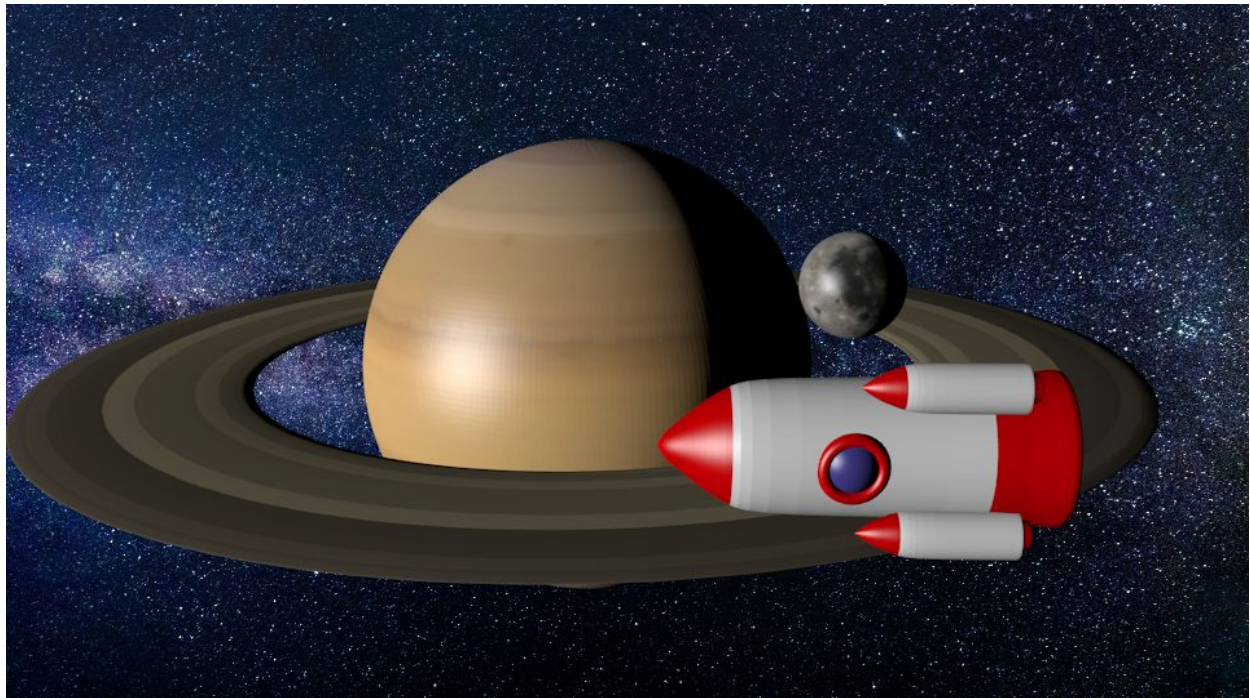

Snowman Project

This project is a continuation of Unit 1&2 Snow Man project. Have the students add a 3-point light setup to their scene. Add materials and textures to their snowman scene. Practice rendering. Here are a couple of examples for inspiration.

Space Project

This project is a continuation of the Space Scene from Unit 1 and 2. For this part of the project have the students add textures and materials to their scene. Here is an example of a scene.

Rubric

	Beginning	**Developing**	**Accomplished**	**Exemplary**
Creating and naming objects	Objects are not created and named as required.	Objects are partially created as required and not named correctly.	Objects are created as required and not named correctly.	Objects are created as required and named correctly.
3-Point Lighting	Student's project shows no use of a 3-Point Lighting system.	Student's project shows poor use of a 3-Point Lighting system.	Student's project shows good use of a 3-Point Lighting system.	Student's project shows excellent use of a 3-Point Lighting system.
Texture Creation	There is no evidence of a texture created by student.	The exercise has a student created texture, but the texture is not added to any object as required.	The exercise has a student created texture, and it is applied to one object as required.	The exercise has a student created texture, and it is applied to all objects as required.
UV Unwrapping	Student's project shows no unwrapping of objects.	Student's project shows one object unwrapped.	Student's project shows all objects unwrapped, but the UV unwraps are all the same.	Student's project shows all objects unwrapped, and the UV unwraps are all different.
Project Completion and Creativity	Student's project shows no creativity, and project is not complete.	Student's project shows little creativity, and project is mostly complete.	Student's project shows some creativity, and project is complete.	Student's project shows a lot of creativity, and project is complete.

Aligned Standards

Standard 3: Lighting

- **Objective 1: Lighting Object Types and Terminology**
    - o Indicator 1: Know lighting terminology
    - o Indicator 2: Identify parts of the 3d application interface used with lighting
- **Objective 2: Apply lighting effects**
    - o Indicator 1: Use basic three point lighting for artistic effect: key, fill, rim
    - o Indicator 2: Use other realistic lighting: indoor, outdoor, mood, artistic, etc.
    - o Indicator 3: Understand & use 3D specific lighting sources: Global/Image Based, Directional, Spot Lights, Shadows/Shading, Point Light

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 2: Create, apply and edit UV mapping**
    - o Indicator 1: Prepare model for UV Mapping
    - o Indicator 2: Create and edit UV Mapping
- **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
    - o Indicator 4: Create procedural textures
    - o Indicator 5: Apply textures to 3D models
- **Objective 4: Create, apply and edit materials**
    - o Indicator 1: Add and edit material color
    - o Indicator 2: Add and edit material texture
    - o Indicator 3: Add and edit material gloss