

Unit 2 - Intro to Modeling with Blender

Assessments and Projects

Pre Assessment

Before you introduce this unit have the student do this pre-assessment. Have them start with a Cube and change it to the image shown.



Do not give much time to do this (Between 5 and 15 minutes) and be very vague on the requirements other than you want the students to see what skill the student have with editing objects.

At the end of the time have the students save a screenshot.

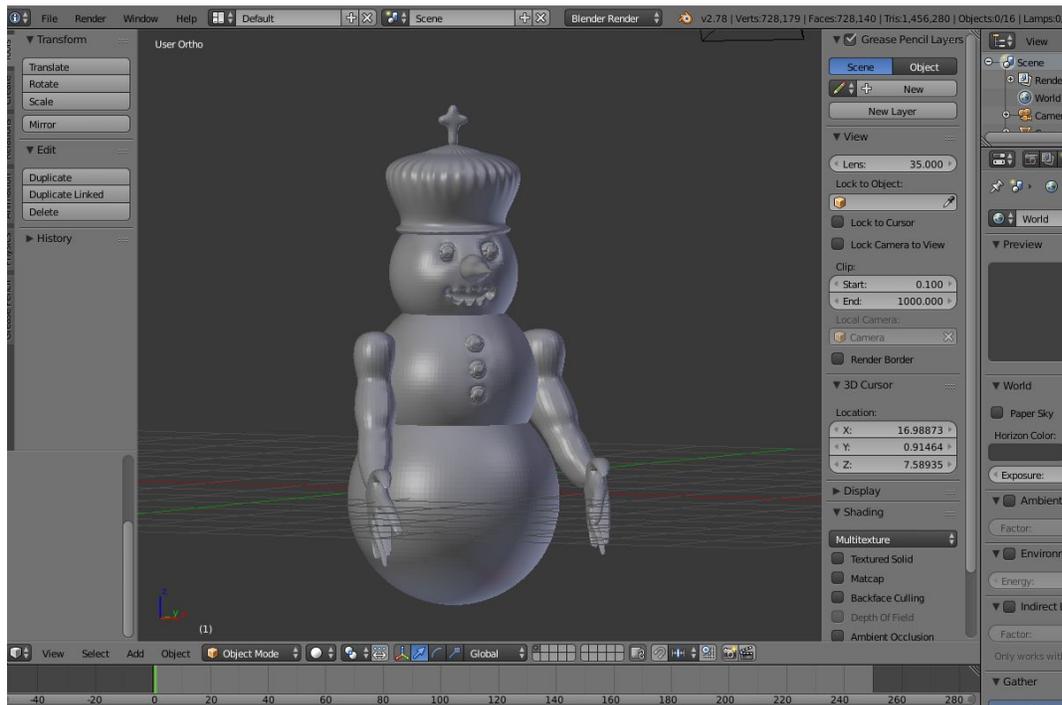
This assessment is more for you than it is for the students. Watch your students interact with the program just to get a feel of what the student can already do with Mesh Modeling tools.

Continuing Projects

Snowman Project

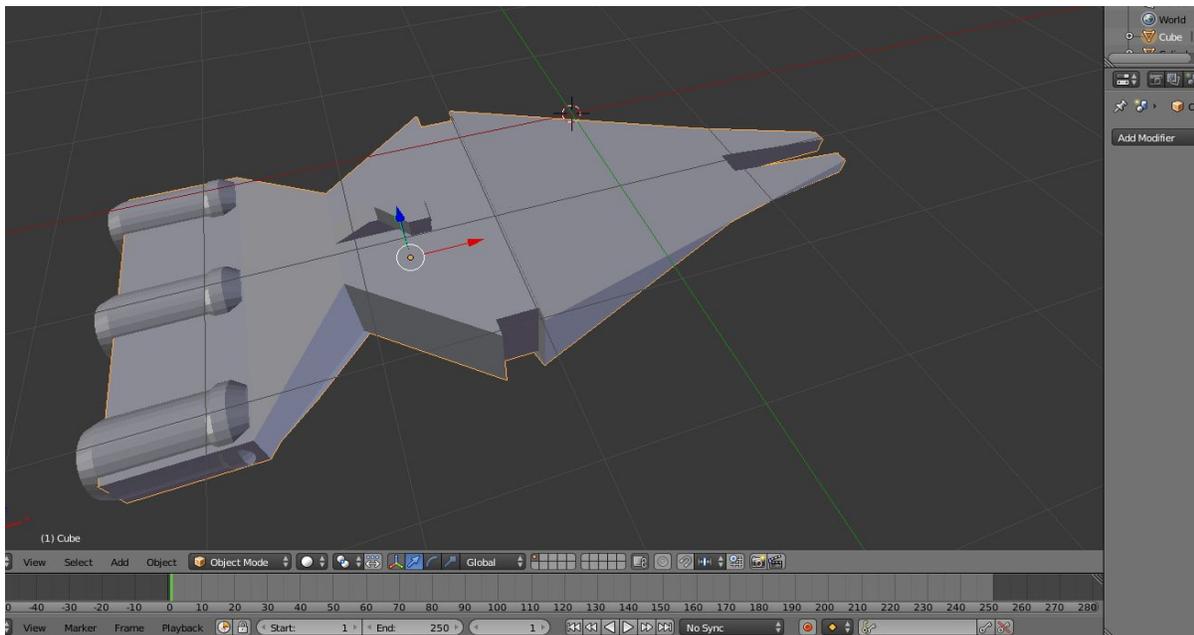
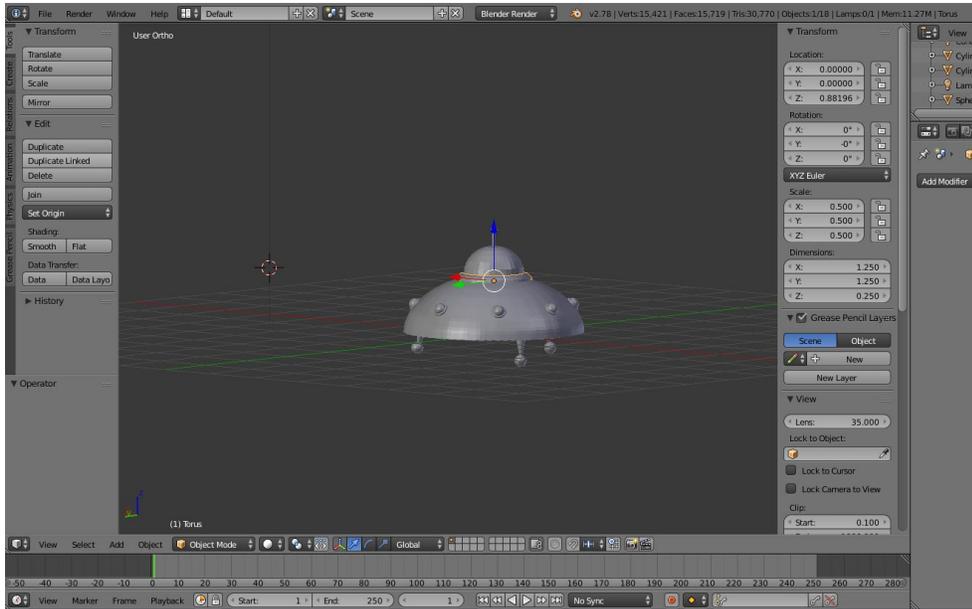
This project is a continuation of Unit 1 Snow Man project. Have the students create a snowman using their Mesh Modeling skills. Have them compare it to the snowman created in unit 1. Allow the students to then create their own scene for the snowman.

Let the student be creative with their scene. Remind students to save work for future projects. Here is a student examples for inspiration.



Space Project

This project is a continuation of the Space Scene from Unit 1. For this part of the project have the students create a spaceship using Mesh Modeling commands. Let the students be creative with their spaceship. Have the students save their spaceship for later use with the planet scene created in Unit 1. Remind students to save work for future projects. Here is a student example for inspiration.



Rubric

	Beginning	Developing	Accomplished	Exemplary
Creating Objects	Student's project shows no ability to create new objects.	Student's project shows some ability to create new objects.	Student's project shows a good ability to create new objects.	Student's project shows excellent ability to create new objects.
Modifying vertices edges and faces	Student's project shows no manipulation of edges, vertices, and faces.	Student's project shows some manipulation of edges, vertices, and faces.	Student's project shows good manipulation of edges, vertices, and faces.	Student's project shows excellent manipulation of edges, vertices, and faces.
Fundamental Modeling Tools	Student's project shows little or no use of Fundamentals Modeling Tools.	Student's project shows some use of Fundamentals Modeling Tools.	Student's project shows good use of Fundamentals Modeling Tools.	Student's project shows excellent use of Fundamentals Modeling Tools.
Project Completion for the Mesh Modeling Project	Student's project is not complete and shows no use of the Mesh Modeling tools.	Student's project is mostly complete and show some use of the Mesh Modeling tools.	Student's project is complete and shows good use of the Mesh Modeling tools.	Student's project is complete and is an exact duplicate of the images presented.
Project Completion and Creativity for the Snowman and Spaceship Project.	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 an extra details have been added to the scene.

Aligned Standards

Standard 1: 3D Modeling Application Interface

- **Objective 1: Introduce basic 3D terminology and the 3D application interface.**
 - o Indicator 1: Know 3D modeling terminology
 - o Indicator 2: Identify parts of the 3D application interface
- **Objective 2: Manipulation of 3D application interface**
 - o Indicator 1: Use application interface
 - o Indicator 2: Navigating 3D space
 - o Indicator 3: Navigating views
 - o Indicator 4: Use different shading modes (solid, wireframe)
- **Objective 3: Manipulation of objects**
 - o Indicator 1: Selecting and transforming objects
 - o Indicator 2: Adding and removing objects

Standard 2: Modeling 3D Objects

- **Objective 1: Use and manipulate 3D graphics and primitives**
 - o Indicator 1: Use 3D primitives
 - o Indicator 2: Manipulate 3D models and primitives
- **Objective 2: Create, use and manipulate shapes**
 - o Indicator 1: Create 3D Shapes
 - o Indicator 2: Use 3D Shapes
 - o Indicator 3: Manipulate 3D shapes
- **Objective 3: Edit Models**
 - o Indicator 1: Modify edges, faces, vertices
 - o Indicator 2: Edit an object after its been created
 - o Indicator 3: Subdivide a model
 - o Indicator 4: Extrude edges, faces, vertices
 - o Indicator 5: Use Reshape/Convert
 - o Indicator 6: Use Insetting
 - o Indicator 7: Use Beveling
 - o Indicator 8: Deleting and duplicating edges, faces, vertices