

Name: _____

Period: _____

The Construct Tab Worksheet

The answers to this worksheet can be found in the *LightWave 3D Seven Reference Guide* Chapter 25.

Vocabulary: Define the following tools, commands, and sub-commands.

1 – 3. Merge Polygons Command (Define all three parts)

- Automatic Range Mode
- Absolute Range Mode

4. Collapse Polygons Command

5. Unify Polygons Command

6. Reduce-Points Command

7. Reduce-Polygons Command

8. Knife Tool

9. Split Polygon Command

10. Triple Polygon Command

11-13. Subdivide Polygons Panel: *Several Commands that automatically increase detail in an existing polygon.*

- Fractal Option
- Faceted Subdivide
- Smooth Subdivide

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Organic Modeling Tools Worksheet

The answers to the questions can be found in the *LightWave 3D Seven Reference Guide* Chapter 29 (pages 29.1 – 29.3).

Review Questions:

1. Define *SubPatch* in your own words.
2. Describe two ways to activate *SubPatch* mode.
3. What is the minimum and maximum number of points any polygon can have in an object in order for *SubPatch* to work?

Practice: You may need to refer to page 25.15 in the text to refresh your memory of the *Metaform* option of *Subdivide*. Use pages 29.2 – 29.3 to help you with using *SubPatch*.

4. Construct a rock using *SubPatch*. This rock will not be symmetrical (not perfectly round, but rather uneven).
 - Make a three-dimensional rectangle in Modeler
 - Use *Subdivide* (*Metaform* option) to segment your rectangle. You may need to use this option a couple of times to get enough segments.
 - Use *SubPatch* to smooth out the rock.
 - Leave the rock on your screen for grading.

Extra Credit: Make the object in the pictures on page 29.1. Use *SubPatch* to smooth the edges.