



To add a pattern to an object (e.g., your Shaders project), you could do all of these **except**:

Correct!

- ☐ Key off the Time variable
- ☒ Key off of a set of uniform Freudian variables
- ☐ Key off of a set of uniform scalar or vector variables
- ☐ Key off the x-y-z coordinates
- ☐ Key off the s-t texture coordinates

### Question 3

1 / 1 pts

To produce shaders for your Shaders project, you need to do all of these **except**:

Correct!

- ☐ Setup a GLSLProgram class to handle the shaders' program creation
- ☐ Create vertex shader code in a .vert file
- ☒ Compile the shaders yourself
- ☐ Create fragment shader code in a .frag file

### Question 4

1 / 1 pts

To turn on a shader program so that the next draw calls will use it, you say:

Correct!

- ☐ Pattern->Use( 0 );
- ☐ Pattern->Ready( );
- ☒ Pattern->Use( );
- ☐ Pattern->Draw( );

**Question 5****1 / 1 pts**

To turn off a shader program and return to using the fixed-function pipeline, you say:

Correct!

☒ Pattern->Use( 0 );☐ Pattern->Ready( );☐ Pattern->Use( );☐ Pattern->Draw( );**Question 6****1 / 1 pts**

A Vertex Buffer Object is:

Correct!

☐

A collection of vertices, colors, normals, and texture coordinates kept in a table in VBOPU memory

☒

A collection of vertices, colors, normals, and texture coordinates kept in a table in GPU memory

☐

A collection of vertices, colors, normals, and texture coordinates kept in a table in either CPU or GPU memory

☐

A collection of vertices, colors, normals, and texture coordinates kept in a table in CPU memory

**Question 7****1 / 1 pts**

All of these are true about Vertex Buffer Objects except:

☐ They are more efficient than glBegin-g glEnd

Correct!

- ☒ They are optional in OpenGL-ES (embedded system)
- ☐ They are optional in OpenGL-Desktop
- ☐ They can list vertex-based data only, or can list vertex-based data plus index connections

**Question 8**

0 / 1 pts

**We are looking at GLM because:**

- ☐ It makes your program run faster
- ☐ All of the OpenGL transformation functions are "deprecated"
- ☐ Your friends will be more impressed

Correct Answer

- ☒ It is less confusing than the OpenGL transformation functions

You Answered

**Question 9**

1 / 1 pts

GLM creates some datatypes that are:

- ☐ Like OpenGL uses (e.g., GLfloat)
- ☒ The same as GLSL uses (e.g., vec3)
- ☐ Totally different from GLSL

Correct!

**Question 10**

1 / 1 pts

The OpenGL glMultMatrixf( ) function:

- ☐ Replaces the current matrix with a given matrix

Correct!

- ☐ Multiplies 3 matrices to produce a fourth
- ☐ Multiplies 2 matrices to produce a third
- ☒ Multiplies a given matrix into the current matrix

Quiz Score: **9** out of 10