

# Week #2 Quiz

Due	Oct 9 at 11:59pm	Points	10	Questions	10	Available	Oct 7 at 2pm - Oct 9 at 11:59pm 2 days
Time Limit	60 Minutes						

## Instructions

Welcome to Week #2's Quiz!

There are 10 questions. You have one hour. This is open notes.

Good luck!

This quiz was locked Oct 9 at 11:59pm.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	29 minutes	10 out of 10

Score for this quiz: **10** out of 10  
Submitted Oct 9 at 10:21am  
This attempt took 29 minutes.

Correct!

Question 1

1 / 1 pts

What is the general idea behind Texture Mapping?

☒

To stretch an image over a piece of geometry

☐

To add translucency to a surface

☐

To get more colors onto a surface than you normally could

☐

To add a bumpy, or rough, appearance to a surface

Question 2

1 / 1 pts

A texture image has  $M \times N$  pixels (texels). OpenGL treats its dimensions as:

Correct!

☒ 1. x 1.

☐ M x N

☐ 1. x (N/M)

☐ N x M

### Question 3

1 / 1 pts

In Texture Mapping, the OpenGL program specifies s and t coordinate values at:

☐ Each texel

☐ Each triangle

Correct!

☒ Each vertex

☐ Each pixel

### Question 4

1 / 1 pts

The `GL_TEXTURE_WRAP_S` and `GL_TEXTURE_WRAP_T` texture parameters tell OpenGL what to do when:

☐ When s and t are undefined

Correct!

☒ s and t are  $< 0$ . or  $> 1$ .

☐ When s and t are  $> 0$ . and  $< 1$ .

☐ Always

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

The Texture Map parameter value GL\_LINEAR tells OpenGL to:

- ☐ Always use black
- ☐ Always use white
- ☒ If a pixel doesn't fall on an exact texel, interpolate from the 4 surrounding texels
- ☐ If a pixel doesn't fall on an exact texel, grab the nearest texel

Correct!

**Question 6****1 / 1 pts**

The Texture Map parameter value GL\_NEAREST tells OpenGL to:

- ☐ Always use white
- ☐ Always use black
- ☒ If a pixel doesn't fall on an exact texel, grab the nearest texel
- ☐ If a pixel doesn't fall on an exact texel, interpolate from the 4 surrounding texels

Correct!

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

The texture environment setting of GL\_MODULATE differs from GL\_REPLACE by:

- ☐ They are different names for the same thing
- ☒ GL\_MODULATE allows the underlying color of the surface to shine up through the texture
- ☐ GL\_MODULATE alters the surface geometry
- ☐ GL\_REPLACE allows the underlying color of the surface to shine up through the texture

Correct!

**Question 8****1 / 1 pts**

The purpose of texture objects and texture binding is:

**Correct!**

To allow textures to stay resident in GPU memory and not need to be downloaded each time they are used



The keep the texture information in a single CPU data structure



To compress the texture image



To allow the texture to be used with multiple geometric objects

**Question 9****1 / 1 pts**

If you setup the Texture Transformation to scale by 2.0, the appearance of the texture image on the object will differ by:

**Correct!**

Trick question -- there is no Texture Transform in OpenGL



Being scaled by 0.5



The image will remain the same size



Being scaled by 2.0

**Question 10****1 / 1 pts**

In HSV color, the letters H-S-V stand for:

**Correct!**

Hue-Saturation-Value



Highlighting-Salience-Vector



Highlighting-Saturation-Valence

☐ Hue-Saliency-Viscosity

Quiz Score: **10** out of 10