

baseColorShader()

This API is experimental

Its behavior may change in a future version of p5.js.

Get the shader used when no lights or materials are applied.

You can call `baseColorShader().modify()` and change any of the following hooks:

Hook	Description
<code>void beforeVertex</code>	Called at the start of the vertex shader.
<code>vec3 getLocalPosition</code>	Update the position of vertices before transforms are applied. It takes in <code>vec3 position</code> and must return a modified version.
<code>vec3 getWorldPosition</code>	Update the position of vertices after transforms are applied. It takes in <code>vec3 position</code> and must return a modified version.
<code>vec3 getLocalNormal</code>	Update the normal before transforms are applied. It takes in <code>vec3 normal</code> and must return a modified version.
<code>vec3 getWorldNormal</code>	Update the normal after transforms are applied. It takes in <code>vec3 normal</code> and must return a modified version.
<code>vec2 getUV</code>	Update the texture coordinates. It takes in <code>vec2 uv</code> and must return a modified version.
<code>vec4 getVertexColor</code>	Update the color of each vertex. It takes in a <code>vec4 color</code> and must return a modified version.
<code>void afterVertex</code>	Called at the end of the vertex shader.
<code>void beforeFragment</code>	Called at the start of the fragment shader.
<code>vec4 getFinalColor</code>	Update the final color after mixing. It takes in a <code>vec4 color</code> and must return a modified version.
<code>void afterFragment</code>	Called at the end of the fragment shader.

Most of the time, you will need to write your hooks in GLSL ES version 300. If you are using WebGL 1 instead of 2, write your hooks in GLSL ES 100 instead.

Call `baseColorShader().inspectHooks()` to see all the possible hooks and their default implementations.

Examples

```

▶ let myShader;

▶ function setup() {
  createCanvas(200, 200, WEBGL);
  myShader = baseColorShader().modify({
    uniforms: {
      'float time': () => millis(),
    },
    'vec3 getWorldPosition': `(
      pos.y += 20. * sin(time * 0.001 + pos.x * 0.05);
      return pos;
    )`;
  });
}

function draw() {
  background(255);
  shader(myShader);
  noStroke();
  fill('red');
  circle(0, 0, 50);
}

```

Returns

p5.Shader: The color shader

This page is generated from the comments in [src/webgl/material.js](#). Please feel free to edit it and submit a pull request!

Related References

[copyToContext](#)
Copies the shader from one drawing context to another.

[inspectHooks](#)
Logs the hooks available in this shader, and their current implementation.

[modify](#)
Returns a new shader, based on the original, but with custom snippets of shader code replacing default behaviour.

[setUniform](#)
Sets the shader's uniform (global) variables.

