## // MinTuts/Procedural Terrain.shader

```
Shader "MinTuts/Procedural Terrain" {
SubShader {
  Pass {
    CGPROGRAM
      #pragma vertex
                       vert
      #pragma | fragment | frag
      #include "UnityCG.cginc"
      struct v2f {
        float4 pos : SV POSITION;
        float3 wpos : POSITION1;
      };
      v2f vert(float4 vertex : POSITION) {
        v2f o;
        o.pos = UnityObjectToClipPos(vertex);
        o.wpos = mul(unity_ObjectToWorld, vertex);
        return o;
      float4 frag(v2f i) : COLOR {
        float p = i.wpos.y * 0.015;
        float3 y = float3(p, p, p);
        return float4(y, 1);
    ENDCG
```

These are **pragma-name**s

**pragma-name**s specify what *kind* of **#pragma** directive we want

vertex and fragment instruct the <u>compiler</u> to <u>ensure</u> a vertex function and a fragment function <u>exist</u> in the **Cg** block

**NOTE**: **#pragma** directives <u>only apply to the code</u> <u>below</u> their definition

## // MinTuts/Procedural Terrain.shader

```
Shader "MinTuts/Procedural Terrain" {
SubShader {
  Pass {
    CGPROGRAM
                       vert
      #pragma vertex
      #pragma fragment frag
      #include "UnityCG.cginc"
      struct v2f {
        float4 pos : SV POSITION;
        float3 wpos : POSITION1;
      };
      v2f vert(float4 vertex : POSITION) {
        v2f o;
        o.pos = UnityObjectToClipPos(vertex);
        o.wpos = mul(unity_ObjectToWorld, vertex);
        return o;
      float4 frag(v2f i) : COLOR {
        float p = i.wpos.y * 0.015;
        float3 y = float3(p, p, p);
        return float4(y, 1);
    ENDCG
```

These are **pragma-arguments** 

pragma-arguments tell the compiler what symbol to look for that satisfies the pragma-name vert and frag are the names of the two functions defined in this file

If **vert** and/or **frag** are <u>not defined</u> in this file the compiler will throw an <u>error</u>

**NOTE**: These **#pragma** lines do not say anything about the arguments to the **vert** or **frag** functions (I'll explain why when I get to **semantics**)