

COMP280: Specialisms in Creative Computing

10: Computer Graphics Workshop 2



Learning outcomes

- ▶ **Implement** a basic procedural mesh
- ▶ **Implement** some basic primitives
- ▶ **Manipulate** geometry in shaders

Exercise 1 - Geometry

1. Download one of the following projects

▶ Unity -

<https://github.com/Falmouth-Games-Academy/COMP280-Unity-Mesh-Example>

▶ UE4 -

<https://github.com/Falmouth-Games-Academy/COMP280-UE4-Mesh-Example>

2. Instead of the triangle, implement the following primitives

2.1 Plane

2.2 Pyramid

2.3 Sphere

2.4 Cylinder

Exercise 2 - Manipulation

1. Manipulate the vertices over time, perhaps using a sine wave
2. Use one of the other vertex element to dampen or expand the effect
3. Use one of the other vertex elements to implement vertex animation