Week 5

Problem Statement:

To calculate the gravitational force of an object you will need a formula. Let's use a basketball as the object example. A basketball's mass is 22 ounces, which calculates to 0.62kg.

Formula to calculate gravitational force is:

$$F = mg$$

$$g = 9.8 \text{ m/s}^2$$
$$m = 0.62\text{kg}$$

$$F = 9.8 \text{ x } 0.62$$
$$F = 6.076 \text{ N}$$

Solution:

```
function Update () { rigidbody.mass = 10; } function FixedUpdate() { rigidbody.AddForce(Physics.gravity); }
```