Instantiate??



Prefabs

- A way to create linked copies of objects
- Watch <u>Unity tutorial</u>



Object.Instantiate

```
public static Object Instantiate(Object original);
public static Object Instantiate(Object original, Transform parent);
public static Object Instantiate(Object original, Transform parent, bool worldPositionStays);
public static Object Instantiate(Object original, Vector3 position, Quaternion rotation);
public static Object Instantiate(Object original, Vector3 position, Quaternion rotation, Transform parent);
```

Parameters

| original | An existing object that you want to make a copy of. |
|--------------------|--|
| position | Position for the new object (default <u>Vector3.zero</u>). |
| rotation | Orientation of the new object (default <u>Quaternion.identity</u>). |
| parent | The transform the object will be parented to. |
| worldPositionStays | If when assigning the parent the original world position should be maintained. |

Returns

Object A clone of the original object.

Casting & Manipulating

```
// Spawning and casting
Vector3 spawnPoint = new Vector3(1f, 0f, 0f);
Quaternion spawnRotation = Quaternion.identity;
GameObject clone = (GameObject) Instantiate(Prefab, spawnPoint, spawnRotation, transform);

// Now we have a GameObject, rather than an Object. We can use any of the methods
// available on a GameObject:

// Apply a random scale
Vector3 randomScale = new Vector3(1f, Random.Range(1f, 3f), 1f);
clone.transform.localScale = randomScale;
```