2. a. A particle system is an asset in Unity which allows for many objects and lighting effects to be combined at once to create a visual effect. Particle systems are useful for visual effects like rain, fire, water flowing, explosions, smoke, and magic.

4. a. The animation controller defines the order animations should play in and how they change from one state to the next. Transitions specify how a state changes, and can be done with variables, triggers, or other conditions. For example, a Boolean defines the transition condition from move to attack for the zombie. Otherwise, transitions can be done via exit time, in which an animation moves from one state to the next after a certain amount of time. An animation is a set of movements done for an object within a state in the animation controller.