**P2 – Uses of Animation**

**Movies**When a movie has a premise that would be too difficult, expensive or dangerous to film live-action, or would look better with a specific aesthetic, animation is a much more flexible and cost-efficient way to produce movies. It does not require expensive camera equipment or sets, and allows for the creation of imagery that would be difficult to achieve via practical effects, such as stunts, alien or fictional settings, and non-human characters.  
It is also a great way to create ‘blockbuster’ type movies on a much lower budget. For example, the animated series *Young Justice* would be very difficult and expensive to film, but is easily and cheaply animated.

**Games**Every graphical game is animated. Each character or object in a 2D game is called a ‘sprite’, and are designed by the creator/s of the game. They may be static or animated, but as games display movement the same way any other animation does – a rapid sequence of still images – it counts as animation.  
In 3D games, sprites are replaced by ‘models’, which is a simulation of a 3D object. In graphically simple games, this might be done by illusion (such as layers of 2D sprites, like in *DOOM* and *WOLFENSTEIN*), and in newer games, the computer renders a fully-3D object, as well as textures, lighting and physics.  
Some games also use pre-rendered animated footage. This is usually just recorded gameplay (to allow for maximum quality without stressing the user’s computer), but can also be any kind of video. For example, *Mirrors Edge* uses pre-rendered 2D animations made in Adobe Flash.

**Technical/Educational demonstrations**Animations are very helpful for explaining concepts or showing dynamic proccesses, as they provide a visual aid to clarify meaning and add information. This makes them useful for educational videos (of things such as the inside of the human body, or outer space), technical demonstrations (showing technology to a customer), or training videos.

**Special effects/CGI**While it is possible to create almost anything in a movie with practical effects, once they go beyond a certain size or complexity it becomes expensive, time-consuming and impractical to do so. It is much easier to use CGI to add in monsters, scenery, explosions, and almost anything else. Typically, this is done by modelling the object, then animating and rendering them. Motion tracking can be used to combine CGI objects with real footage.

**Video overlays**In videos such as TV broadcasts, YouTube videos or Twitch Livestreams, many content creators use animation to display additional information on top of real footage. This can as simple as a title of the current and next show, or a real-time data display (such as a subscriber count). While the primary purpose of these is to show information, they are usually animated because it looks better.  
Often, content creators will use an animation as intro, or to switch between scenes.