## Knowledge Mat – Animation

| Subject Specific Vocabulary | | | | Key Knowledge |
|---|---|---|---|---|
| **Animation** | A process by which still pictures appear to move. | | | To discuss what makes a good film or cartoon. |
| **Frame** | A single image in an animation. | | | To learn how animations are created by hand. |
| **Background** | A non-moving image that appears behind the animated images. | | | To find out how animation can be created in a similar way using the computer. |
| **Sound** | Music or oral effects that can be added to the animation. | | | To learn about onion skinning in animation. |
| **Video clip** | A short piece of film or animation. | | | To add backgrounds and sounds to animations. |
| **Flipbook** | A book with pictures drawn in a way that makes them appear to move when the pages are flicked. | | | To be introduced to 'stop motion' animation. |
| **Play** | Press this button to make the animation start. | | | To share animation on the class display board and by blogging |
| **Stop motion** | A technique whereby the camera is repeatedly stopped and started. Eg, to give animated figures the impression of movement. | **Onion skinning** | A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly. | |

| Key questions |
|---|
| What is an animation?<br>Animation is the process of giving the illusion of movement to drawings, models or inanimate objects. Animated motion pictures and television shows are highly popular forms of entertainment. |
| What is meant by onion skinning ?<br>Onion skinning is a 2D computer graphics term for a technique used in creating animated cartoons and editing movies to see several frames at once. |
| What is meant by stop motion animation ?<br>Stop motion animation is a filming technique in which objects (such as clay models) are photographed in a series of slightly different positions so that the objects seem to move. |

## Knowledge Mat – Effective Searching

| Subject Specific Vocabulary | | | | Key Knowledge |
|---|---|---|---|---|
| **Internet** | A global communication network providing a variety of information and communication facilities, consisting of interconnected networks and computers. | **Internet Browser** | A software application used to locate and display Web pages | To locate information on the search results page. |
| **Search** | Look for information in a database or the World Wide Web using a search engine. | **Spoof website** | Website spoofing is the act of creating a website, as a hoax, with the intention of misleading readers that the website has been created by a different person or organization. | To use search effectively to find out information. |
| **Search engine** | A program that searches for and identifies items on the World Wide Web. | **Website** | A set of related web pages located under a single domain. | To assess whether an information source is true and reliable. |
| **Easter Egg** | An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or bonus. | | | |

**Key Questions**

What is a search engine ?

A search engine is a piece of software that allows the user to find and display pages from the World Wide Web.

## Knowledge Mat – Hardware Investigators.

| Subject Specific Vocabulary | | | | Key Knowledge |
|---|---|---|---|---|
| **Motherboard** | A printed circuit board containing the main parts of a computer or other device, with connectors for other circuit boards to be slotted in. | **CPU** | The part of a computer in which operations are controlled. | To understand the different parts that make up a computer. |
| **RAM** | Allows programs to store information to help the computer run more quickly. | **Graphics card** | A printed circuit board that controls the output to a display screen. | To recall the different parts that make up a computer. |
| **Network card** | An electronic device that connects a computer to a computer network. | **Monitor** | A screen which displays an image generated by a computer. | |
| **Speakers** | A device for letting you hear sounds generated by the computer. | **Keyboard and mouse** | External input devices. | |

**Key Questions**

What is the difference between hardware and software?

Hardware refers to the physical parts of a computer or device. The parts inside the computer casing are often called the components. The parts that are attached to the computer case are called peripherals. Software describes the programs that run on the computer.

## Knowledge Mat – Making Music.

| Subject Specific Vocabulary | | Key Knowledge |
|---|---|---|
| **Pitch** | How high or low the sound of a note is. | To identify and discuss the main elements of music |
| **Rhythm** | A pattern of long and short sounds and silences. | To understand and experiment with rhythm and tempo. |
| **Pulse** | The steady beat of a piece of music. | To create a melodic phrase |
| **Melody** | A sequence of notes which make up a tune. | To electronically compose a piece of music. |
| **Tempo** | The speed at which a passage of music is, or should be, played. | **Key Questions** |
| **Dynamics** | How loud or quiet the sounds is. | What is the difference between melody and rhythm ? |
| **Texture** | The way that different sounds and music elements are layered together to create a piece of music. | A rhythm is a pattern of sounds based on the length of the notes and the silences. A melody is a pattern of notes based on the pitch and rhythm, which make up a memorable tune. |
| **Rippler** | The tool which when clicked, begins the ripple of sound. | |
| **House music** | A style of electronic disco music which uses a range of different beats and synth sounds. | |