



GLOSSARY

Note - For definitions of the 12 Principles of Animation see the 12 Principles PDF.

Breakdown - Usually used in hand drawn character animation the “breakdown” is the critical first inbetween between two key drawings that establishes the direction, flow, force, or tone of the movement. Breakdowns are usually done by the lead animator and often essentially become “keys”. The “up” and “down” positions in a walk cycle are good examples of “breakdowns” critical to the overall action.

Center of Gravity - 1. The approximate point where the weight of the body is concentrated, usually in the lower torso, in physics this is the “center of mass”.

2. Abbreviated as COG, a common controller in 3D and 2D character rigs that usually controls the overall position and rotation of the torso and head and is usually centered in the pelvis.

Controller - An object, slider, dial, check box, or any other device that controls part of a 2D or 3D rigged puppet.

Exposure Sheet (*X-Sheet, Dope Sheet, Bar Sheet*) - A digital or analog form with horizontal lines indicating individual frames and vertical lines for indicating animation timing, drawing numbers, dialogue phonemes and camera information. Digital versions of Exposure Sheets are used in Toon Boom animation software as well as stop motion software Dragonframe.

FK - Abbreviation for Forward Kinematics which uses the position and rotation of a parented chain of joints from the top of the chain to the bottom to determine the position/pose of a limb.

Full Animation - A loose term for very fluid, high frame rate, dimensional, high cost and high production value animation.

IK - Abbreviation for Inverse Kinematics which uses the position and rotation of the top of a parented chain as well as the position of a goal at the bottom of the chain to automatically determine the position of the joint(s) in between.

Inbetween (*‘Tween*) - In character animation a position, pose, or drawing between two keys.

Keyframe - 1. Same as Key Pose (*See below*) 2. In most animation software, a keyframe is a point along a timeline where something new occurs with the value of an attribute.

Key Pose (*Key Drawing, Key Frame, Key, Extreme*) - A pose that describes the most extreme extent of the beginning or end of a smooth transition. “Key Poses” are usually posed or drawn by the “key” or “lead” animator.

Kinematics - The study and measurement of the motion of objects without reference to the forces that cause the motion.

Limited Animation - A loose term for animation using more holds, lower frame rates, layering, and usually less dimensional movement, more budget and schedule friendly.

Line of Action - An imagined or implied line running through a figure’s pose that creates a strong sense of force and motion.

Lip Sync - Animating mouth shapes to match mouth phonemes in a dialogue track.

Phonemes - The individual sounds that make up spoken words.

Reversal AKA Contrast - The strong opposing shifts from one pose to another in the direction of lines of action, limb and torso flexing, squash and stretch, etc. that make animation dynamic and communicate forces, intentions and emotions clearly.

Rig - A system of controls for posing a 2D or 3D puppet.

Sight-line - The direction a character appears to be looking.

