

Support Materials

Paraphrased from the "Illusion Of Life" by Frank Thomas & Ollie Johnston. (pp.47-69)
Look these up and read the original version for a complete understanding.

1. SQUASH AND STRETCH

This action gives the illusion of weight and volume to a character as it moves. Also squash and stretch is useful in animating dialogue and doing facial expressions. How extreme the use of squash and stretch is, depends on what is required in animating the scene. Usually it's broader in a short style of picture and subtler in a feature. It is used in all forms of character animation from a bouncing ball to the body weight of a person walking. This is the most important element you will be required to master and will be used often.

2. ANTICIPATION

This movement prepares the audience for a major action the character is about to perform, such as, starting to run, jump or change expression. A dancer does not just leap off the floor. A backwards motion occurs before the forward action is executed. The backward motion is the anticipation. A comic effect can be done by not using anticipation after a series of gags that used anticipation. Almost all real action has major or minor anticipation such as a pitcher's wind-up or a golfers' back swing. Feature animation is often less broad than short animation unless a scene requires it to develop a character's personality.

3. STAGING

A pose or action should clearly communicate to the audience the attitude, mood, reaction or idea of the character as it relates to the story and continuity of the story line. The effective use of long, medium, or close up shots, as well as camera angles also helps in telling the story. There is a limited amount of time in a film, so each sequence, scene and frame of film must relate to the overall story. Do not confuse the audience with too many actions at once. Use one action clearly stated to get the idea across, unless you are animating a scene that is to depict clutter and confusion. Staging directs the audience's attention to the story or idea being told. Care must be taken in background design, so it isn't obscuring the animation or competing with it due to excess detail behind the animation. Background and animation should work together as a pictorial unit in a scene.

Support Materials

4. STRAIGHT AHEAD AND POSE TO POSE ANIMATION

Straight ahead animation starts at the first drawing and works drawing to drawing to the end of a scene. You can lose size, volume, and proportions with this method, but it does have spontaneity and freshness. Fast, wild action scenes are done this way. Pose to Pose is more planned out and charted with key drawings done at intervals throughout the scene. Size, volumes, and proportions are controlled better this way, as is the action. The lead animator will turn charting and keys over to his assistant. An assistant can be better used with this method so that the animator doesn't have to draw every drawing in a scene. An animator can do more scenes this way and concentrate on the planning of the animation. Many scenes use a bit of both methods of animation.

5. FOLLOW THROUGH AND OVERLAPPING ACTION

When the main body of the character stops all other parts continue to catch up to the main mass of the character, such as arms, long hair, clothing, coat tails or a dress, floppy ears or a long tail (these follow the path of action). Nothing stops all at once. This is followed through. Overlapping action is when the character changes direction while his clothes or hair continues forward. The character is going in a new direction, to be followed, a number of frames later, by his clothes in the new direction. "DRAG," in animation, for example, would be when Goofy starts to run, but his head, ears, upper body, and clothes do not keep up with his legs. In features, this type of action is done more subtly. Example: When Snow White starts to dance, her dress does not begin to move with her immediately but catches up a few frames later. Long hair and animal tail will also be handled in the same manner. Timing becomes critical to the effectiveness of drag and the overlapping action.

6. SLOW-OUT AND SLOW-IN

As action starts, we have more drawings near the starting pose, one or two in the middle, and more drawings near the next pose. Fewer drawings make the action faster and more drawings make the action slower. Slow-ins and slow-outs soften the action, making it more life-like. For a gag action, we may omit some slow-out or slow-ins for shock appeal or the surprise element. This will give more snap to the scene.

7. ARCS

All actions, with few exceptions (such as the animation of a mechanical device), follow an arc or slightly circular path. This is especially true of the human figure and the action of animals. Arcs give animation a more natural action and better flow. Think of natural movements in the terms of a pendulum swinging. All arm movement, head turns and even eye movements are executed on an arc.

12 Principles of Animation

8. SECONDARY ACTION

This action adds to and enriches the main action and adds more dimension to the character animation, supplementing and/or reinforcing the main action. Example: A character is angrily walking toward another character. The walk is forceful, aggressive, and forward leaning. The leg action is just short of a stomping walk.

The secondary action is a few strong gestures of the arms working with the walk. Also, the possibility of dialogue being delivered at the same time with tilts and turns of the head to accentuate the walk and dialogue, but not so much as to distract from the walk action. All of these actions should work together in support of one another. Think of the walk as the primary action and arm swings, head bounce and all other actions of the body as secondary or supporting action.

9. TIMING

Expertise in timing comes best with experience and personal experimentation, using the trial and error method in refining technique. The basics are: more drawings between poses slow and smooth the action. Fewer drawings make the action faster and crisper. A variety of slow and fast timing within a scene adds texture and interest to the movement. Most animation is done on twos (one drawing photographed on two frames of film) or on ones (one drawing photographed on each frame of film). Twos are used most of the time, and ones are used during camera moves such as trucks, pans and occasionally for subtle and quick dialogue animation. Also, there is timing in the acting of a character to establish mood, emotion, and reaction to another character or to a situation. Studying movement of actors and performers on stage and in films is useful when animating human or animal characters. This frame by frame examination of film footage will aid you in understanding timing for animation. This is a great way to learn from the others.

10. EXAGGERATION

Exaggeration is not extreme distortion of a drawing or extremely broad, violent action all the time. It's like a caricature of facial features, expressions, poses, attitudes and actions. Action traced from live action film can be accurate, but stiff and mechanical. In feature animation, a character must move more broadly to look natural. The same is true of facial expressions, but the action should not be as broad as in a short cartoon style. Exaggeration in a walk or an eye movement or even a head turn will give your film more appeal. Use good taste and common sense to keep from becoming too theatrical and excessively animated.

12 Principles of Animation

11. SOLID DRAWING

The basic principles of drawing form, weight, volume solidity and the illusion of three dimensions apply to animation as it does to academic drawing. The way you draw cartoons, you draw in the classical sense, using pencil sketches and drawings for reproduction of life. You transform these into color and movement giving the characters the illusion of three-and four-dimensional life. Three dimensional is movement in space. The fourth dimension is movement in time.

12. APPEAL

A live performer has charisma. An animated character has appeal. Appealing animation does not mean just being cute and cuddly. All characters have to have appeal whether they are heroic, villainous, comic or cute. Appeal, as you will use it, includes an easy to read design, clear drawing, and personality development that will capture and involve the audience's interest. Early cartoons were basically a series of gags strung together on a main theme. Over the years, the artists have learned that to produce a feature there was a need for story continuity, character development and a higher quality of artwork throughout the entire production. Like all forms of storytelling, the feature has to appeal to the mind as well as to the eye.

Reference:

<http://www.animationtoolworks.com/library/article9.html>

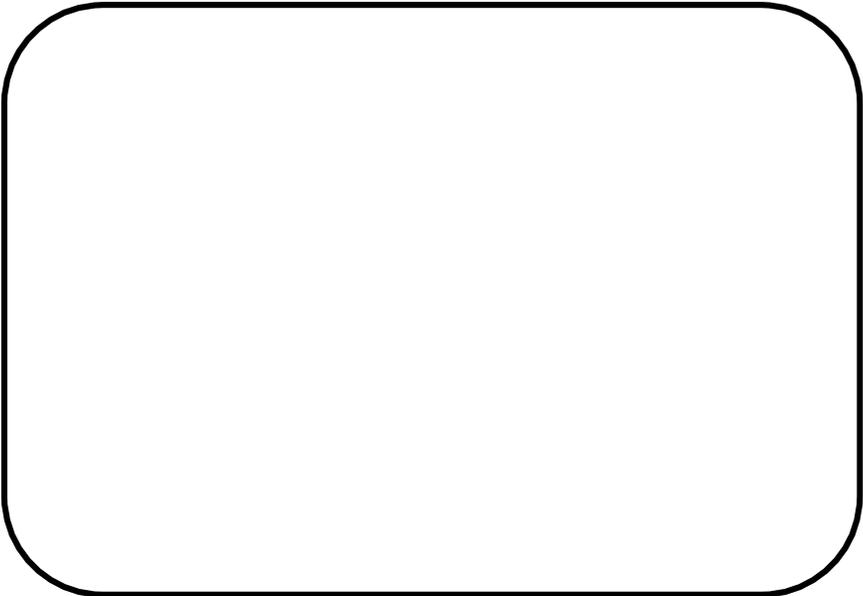
Character Turnaround

Team: _____ Page: _____ of _____

Character Turnaround

Storyboard Sheet

Team: _____ Page: _____ of _____



Action: _____ Time: _____

Shot: _____

Notes: _____



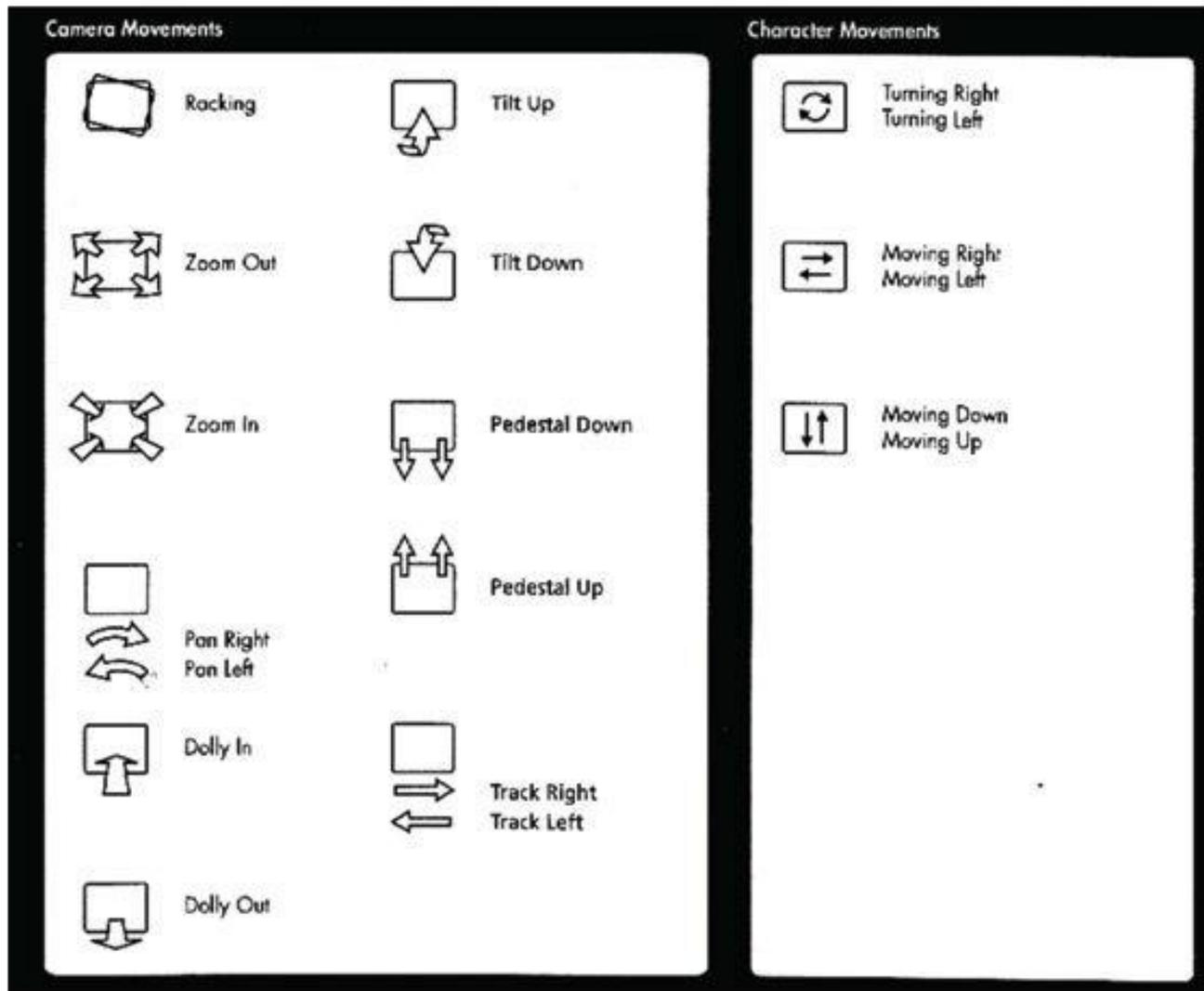
Action: _____ Time: _____

Shot: _____

Notes: _____

Storyboard Sheet

Storyboard Symbols



Judging Criteria

The final animations from each team will be viewed and assessed by the judges. Tabulation sheets will be given to the members of the PTC for verification of scores. Judges should direct any questions to members of the PTC only, with the exception of the interview.

To qualify for a medal, competitors **MUST** achieve a minimum of 60 out of 100 possible points.

Animatics (20)

The storyboard describes with simple but clear sketches, all the story elements, action and timing to be communicated in the final animation. Each scene/event in the animation should be presented in detail and timed to the second.

- Camera shots and or movements reflected- The storyboard uses the industry standard symbols and terminology as provided in the Scope documents, and clearly indicates the camera movement and framing of the shot.
- Storyboard adheres to Final Animation-The final animation illustrates the story as outlined in the storyboard.

Character and Asset Design (20)

Characters appearance is designed to create visual interest. Models contain a level of detail consistent with the story and setting.

- Model Sheets - The Model sheet reflects front, back, side, and $\frac{3}{4}$ perspective view for each major character, in full body view.
- Character(s) Design- Characters are appealing, have personality, and show clear differences between characters.
- Model of environment and or set- Modeled assets or elements are created in relation to sound clip.
- Continuity amongst assets - There is a consistent visual style in the characters, setting and props that unifies all the visual elements and supports the theme and story.

Judging Criteria

Animation (40)

There is effective application of the animation principles outlined in the supporting documents for the competition, such as exaggeration, anticipation, squash and stretch, secondary motion.

- Staging – the position, and movement of the camera, and the framing of scenes supports the expression of emotions by the characters and the action in the scenes, and the variety of shots adds interest to the animation.
- Physicality - Movement within the animation displays the interaction between characters and interaction with physical objects including the influence of mass and gravity.
- Timing - The timing of actions within the scene is consistent between characters and supports the sound clip. Actions by one character affect the actions of another in a manner that flows consistently.
- Acting - The characters are actors in the scene using expressions of emotion, posing, and movement to provoke empathy and emotion in the audience, and drive the action of the story.

Final Product (20)

The final product is the end result. It is an accumulation of all animation that is synchronized to the sound clip provided. The product is presented to judges at end of competition.

- Overall appeal- Elicits an emotional response by audience
- Clarity of message- The interpretation of the sound clip is evident throughout the final animation.
- Final Cinematography- The final animation integrates changes in camera angle and position, zooms, pans and fades and other visual effects to support the story, as outlined in the storyboard.
- Execution of Animation relates to sound theme- The final product illustrates a clear, strong, connection to sound clip provided and utilizes story elements such as character, protagonist, antagonist, point of view, setting, conflict, description, emotion, suspense, humor, rising action, to tell the story in an interesting and entertaining, original way.