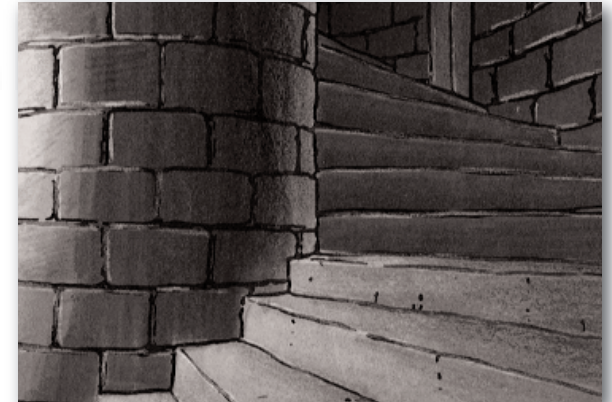
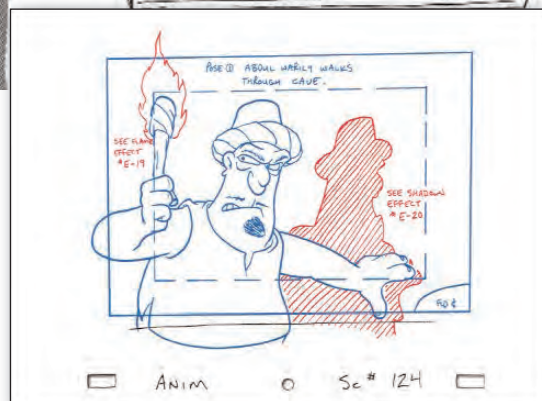
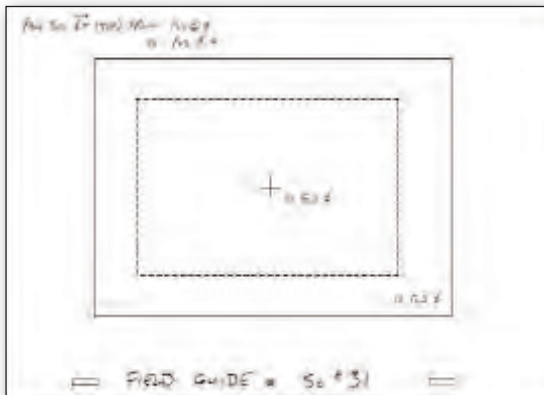
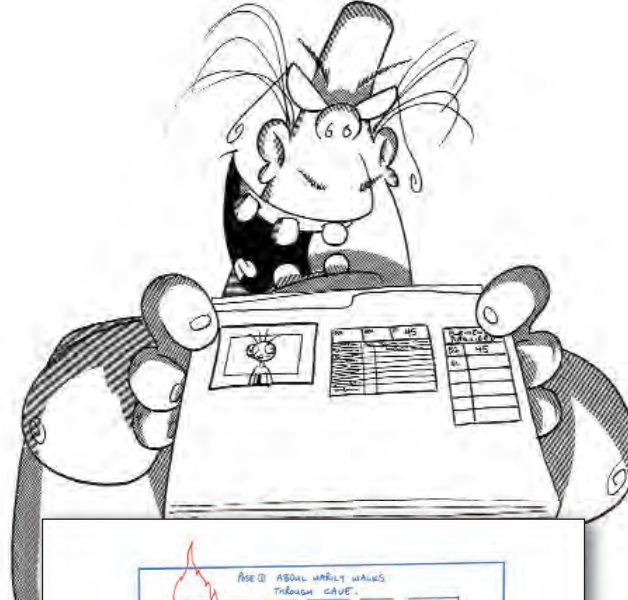


Finding the Balance in your Character

Animation is not just moving a bunch of lines around on paper and hoping that it looks right. You need to plan the action out well in advance of even starting to use a pencil. Thinking about what your character needs to do is step 2. What is step 1? That's the basic idea of what the character is going to do. This can apply to any piece of animation that you are ever going to do.

In a studio, if you are working on a commercial, a show or a movie, you will be assigned a specific scene to animate. You'll usually get a scene folder which will include: a **Field Guide** to indicate the size the scene is to be drawn at. **Animation Poses**, at least 1 indicating the position of the character in the field, their eye direction and possibly more poses indicating start and stop positions or any actions taking place. A **Background Layout** showing the environment the character is acting within. There may also be held cels of objects, overlays/underlays of background elements on separate layers.



On the cover of the folder will be the storyboard panels that may indicate further actions that take place in the scene. There will also be the exposure sheets indicating the total length of the scene in frames. The director may have "slugged" the sheet with notations showing beats or accent points that the character will need to hit. If there is dialogue, it will be "broken down" in the dialogue column and the character will need to sync exactly to the audio. With all this information the guesswork is pretty much eliminated. You'll know exactly where and when the character has to do anything within the scene. All the animator needs to do is draw the character "on model" with the proper expressions and attitude. In some cases, the animator has the option to interpret the action in the way that they feel the character should act. Trying to give the drawings the feeling of life and thought process. It's not easy.

Prod. No.	Scene No.	Description	Animator	Assistant	Sheet									
			BLAN		5 of 9									
Scene Footage			Drawings	Camera	Approved									
Special Instructions														
Track	EPX	Action	Top					Bot	Pan	EXP	FLD	Camera	NB	EW
			8	4	3	2	1							
4		J								12.1	4.01			
										12.2	4.03			
										12.3	4.05			
		K								12.4	4.07			
										12.5	4.09			
		L								12.6	4.11			
										12.7	4.13			
										12.8	4.15			
		L								12.9	4.17			
										13.0	4.19			
										13.1	4.21			
										13.2	4.23			
										13.3	4.25			
		M								13.4	4.27			
										13.5	4.29			
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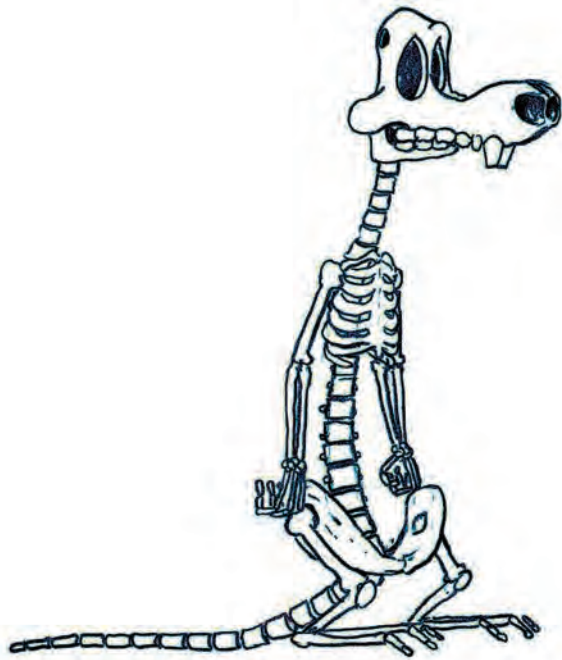
Let's put this into an assignment context. In the Weightlift assignment the "basic idea" would be: "character lifts a heavy object". There are so many variables to this statement that it then requires you to move into step 2. However, part of this step is not just the physical actions: character anticipates, bends down, grabs object, anticipates, lifts object up, recovers... it's knowing the who, what, where, when, how and why.

The Questions

- 1) **Who** your character is - what is their species, weight, height, strength level, emotion (how they feel about it).
- 2) **What** is the object - solid, soft, size, weight.
- 3) **Where** are the character and object? What kind of environment are the character and object in? Is there anything that would effect the action in any way? i.e wind blowing, surface texture, temperature, etc.
- 4) **When** is this taking place? Time of day, year, century.
- 5) **How** does the character lift it? There are different techniques to lifting things.
- 6) **Why** is the character doing this? Attitude (reason for lifting).

The Answers

- Who** - Rat, not very strong - will struggle with it.
- What** - Block of cheese, solid, 1/4 size of character, moderately heavy.
- Where** - inside mouse hole
- When** - night
- How** - Up to shoulder on one hand, balanced with other. Will lose balance and scramble to get control, then double handed put up onto shelf.
- Why** - To get it off mouse trap so he can eat it.



Know Your Character

This is both a physical and psychological knowledge. You'll need to know the construction of your character - not just the basic shapes but also the skeletal structure. You could do a drawing of the character's skeleton for basic reference. You're never going to actually animate the character's skeleton, but it's good to know where things are anchored so that you can make them work plausibly.

Here's where your basic life drawing skills will come into play. Anatomy and proportion are important any time you're drawing a character. You need to have your character move properly. That doesn't mean that you can't exaggerate parts with squash and stretch when necessary but it does have to work within plausible reason.

You need to know how your character thinks. What their attitude is and what their emotion is. For my mouse lifting the cheese, do I want him to be scared because it's sitting on the trap, cautious, anxious? While these are similar emotions, they're not exactly the same thing. Visually, the body attitude will be different for each one depending on the degree you want to express. One of the things many animators will do before they begin their animation is to do a series of sketches exploring possible poses. Not necessarily any actual poses from the movie, just a variety of positions to see how far you can push it. I've included a few pages of these for both the Weightlift and Pitch & Bat assignments. I've included both the good and bad drawings as well as drawings that I've adjusted by pushing them further. Sometimes I'll start a pose and then realize it's not working. Rather than beating it to death, I'll just abandon it. Normally it would go directly into the garbage but I've kept a few here just to show.

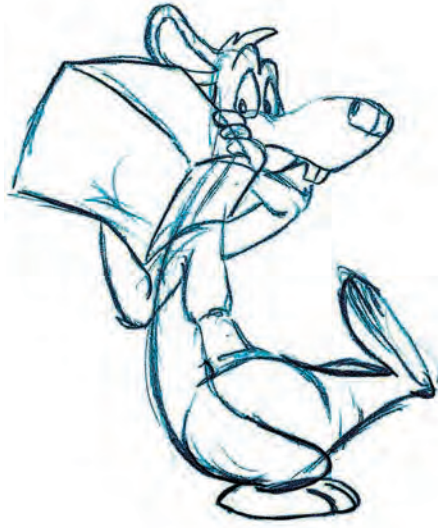








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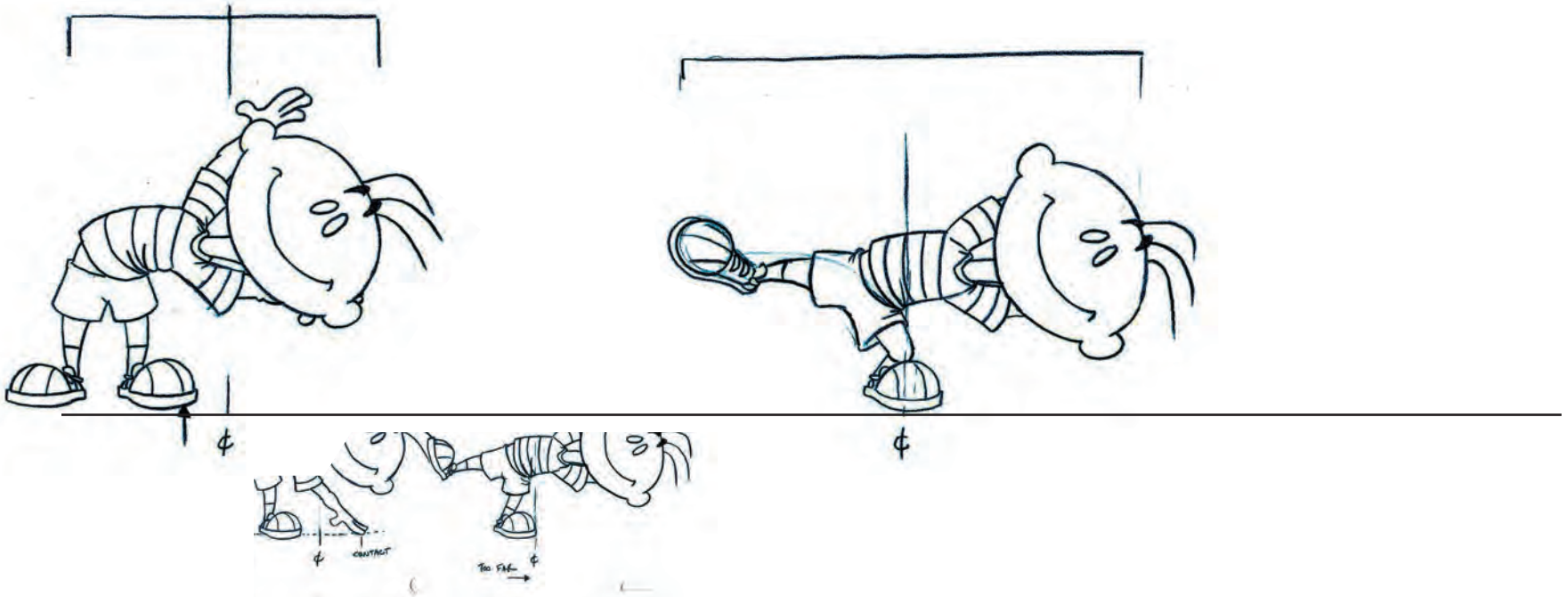


⑤

For my animation in the weightlift I'm going to make the mouse excited by the smell of the cheese - sniffing the aroma and rubbing his hands in anticipation. This attitude will also effect the way he reaches down to pick up the cheese. Once he starts to lift the cheese and realizes how much it weighs, his attitude can change.

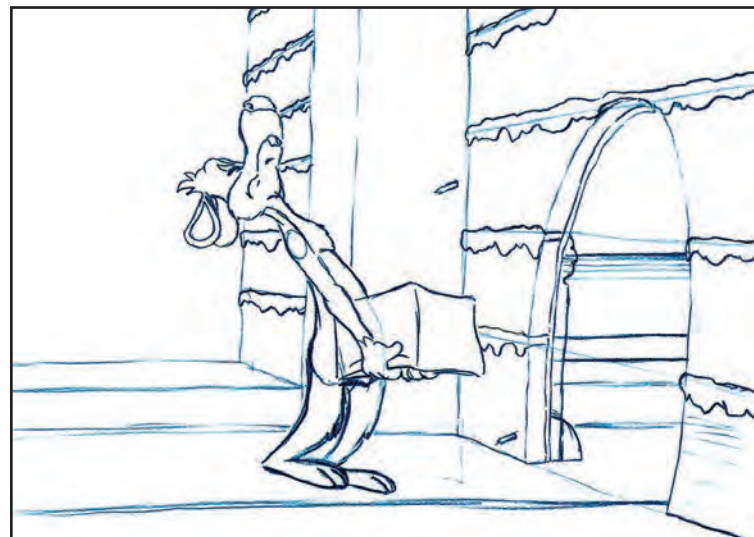
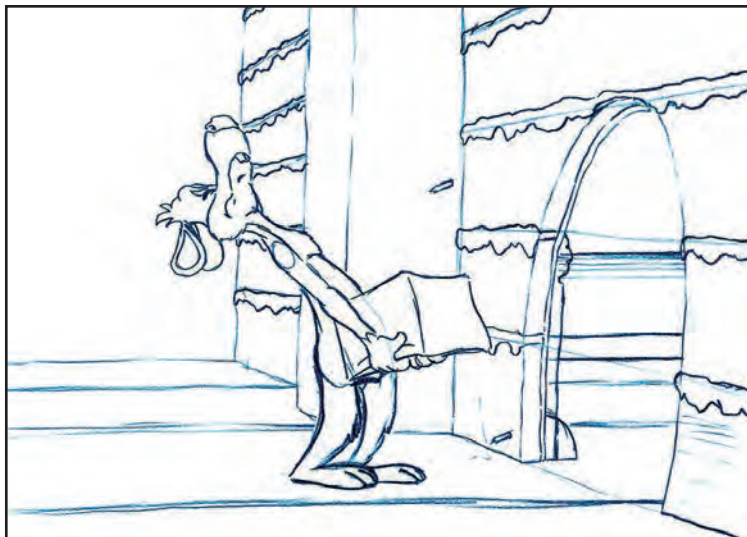
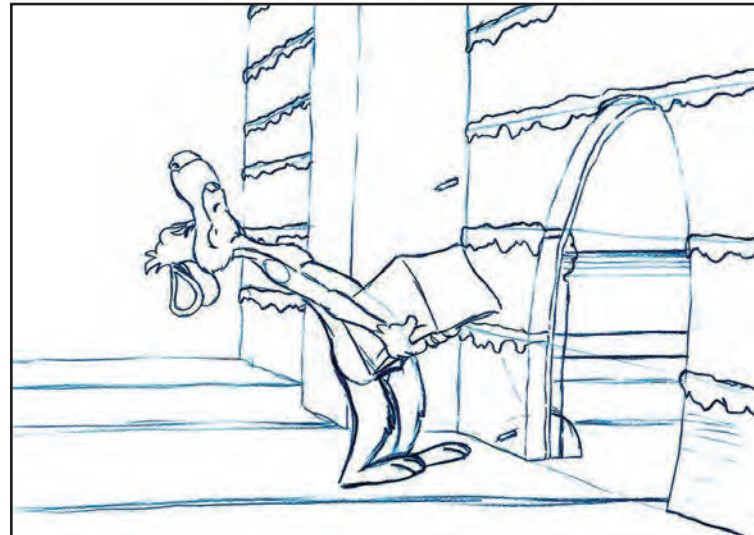
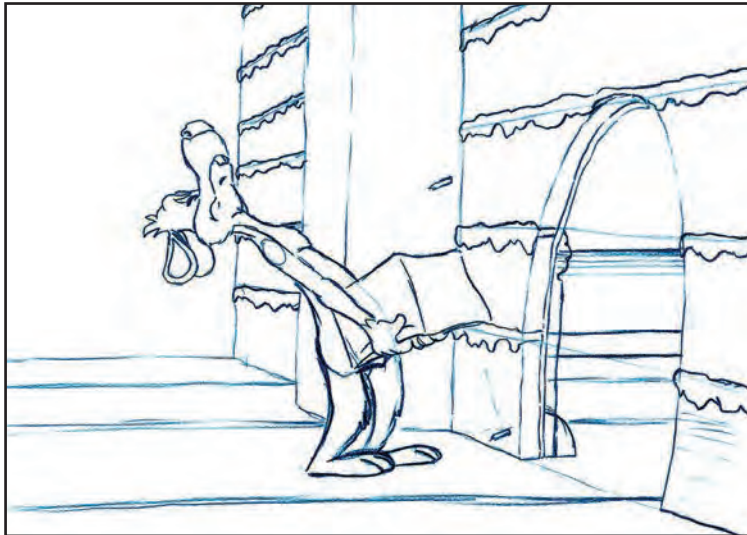
The Center of Gravity

We all have a center of gravity - a balance point within our bodies where our weight is evenly distributed along a line that runs down to the ground. If you stand straight up and down, your center of gravity will be right between your two feet. If you tilt your shoulders and head to the right, the center of gravity will move to the right. The more to shift your upper torso over, the more the center goes until it moves beyond your toes and you either fall over or you compensate by sticking your leg out to counter-balance yourself.



If you stand on one foot, you will automatically try to balance yourself by moving your leg out or flailing your arms around. This action attempts to keep your center of gravity right under you. In your drawings, you need to maintain your character's center of gravity as well, or attempt to balance them properly. I know you're probably saying something like, "Well, duhhh." For some people, it's just second nature to draw your character properly balanced. For others it's a real struggle.

The balance of your drawing is relative to the background they are in and usually only applies if you can see the character in contact with the ground in the field of vision. Which of these four is the character best balanced?



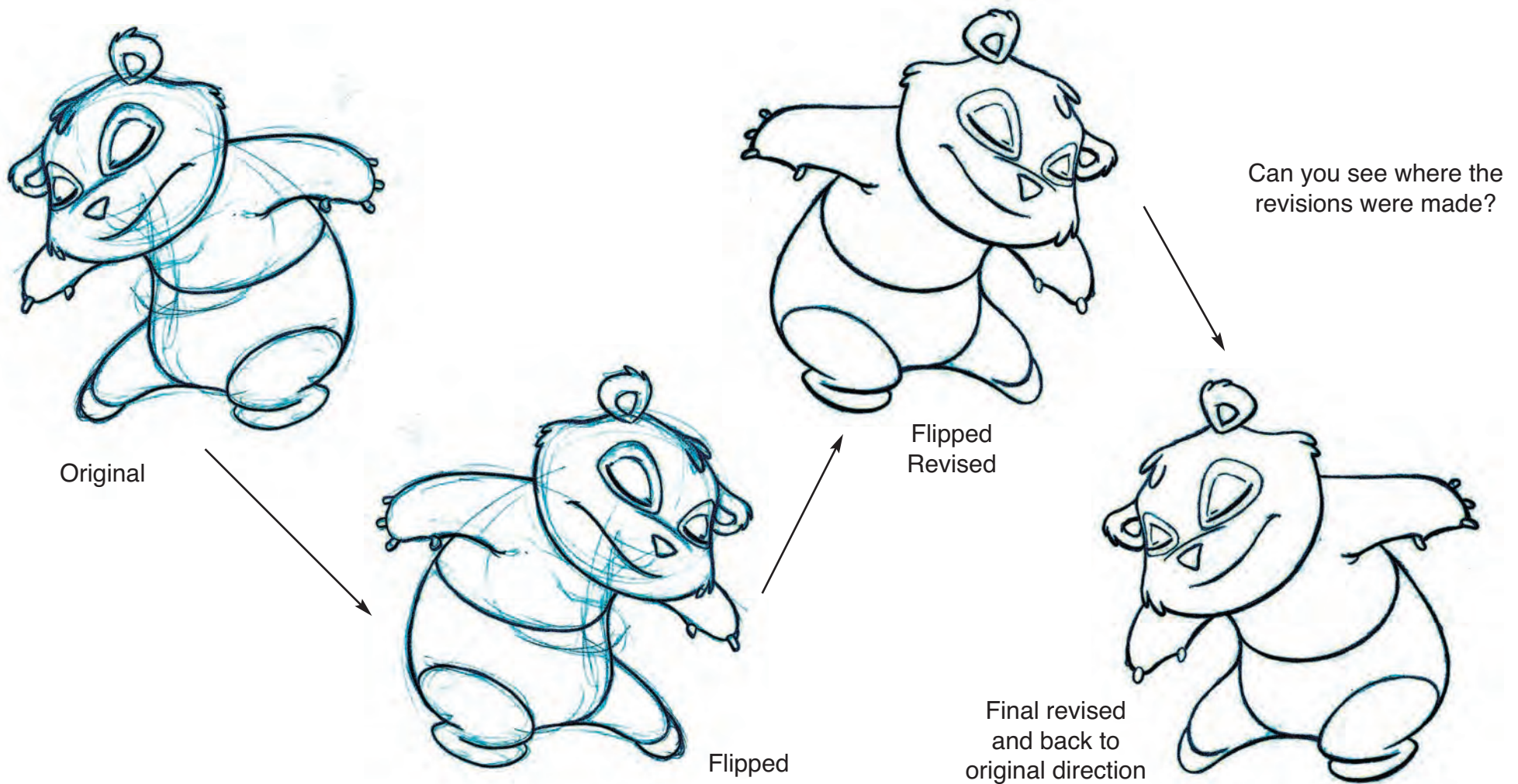
You can move your character off balance so long as it's part of an action from one position to another, Usually this always happens naturally, we don't even consciously think about it. However, as animator, we DO need to think about this stuff if we want our characters to move nicely as opposed to looking like "Super Friends" from the 1980's.

A simple assignment like the Sidestep requires the character to shift their weight and lift there leg so they can step sideways. Without the off balance movements, the action will look awkward.



A Neat Trick

I learned this many years ago when I first started assistant animating at Nelvana. (An assistant animator is the person who takes the animator's rough keys and traces them off with a clean line, correcting any model or proportion mistakes.) The trick is mostly used if the drawing you are going to do is for an advertisement such as a magazine or poster - not so much animation, but it can still help you spot any potential errors. What you do is, take the drawing you have done and turn it over on your light table so you see the reverse. Suddenly, all your off balance issues spring out at you. The reason this is useful for advertising is, sometimes the image may need to be reversed to work with a different format page or type. The advertising agency will do this arbitrarily at their own discretion. If the drawing looks horrible when it's reversed, they can't use it, so it's a good idea to see what it looks like first and make the corrections.

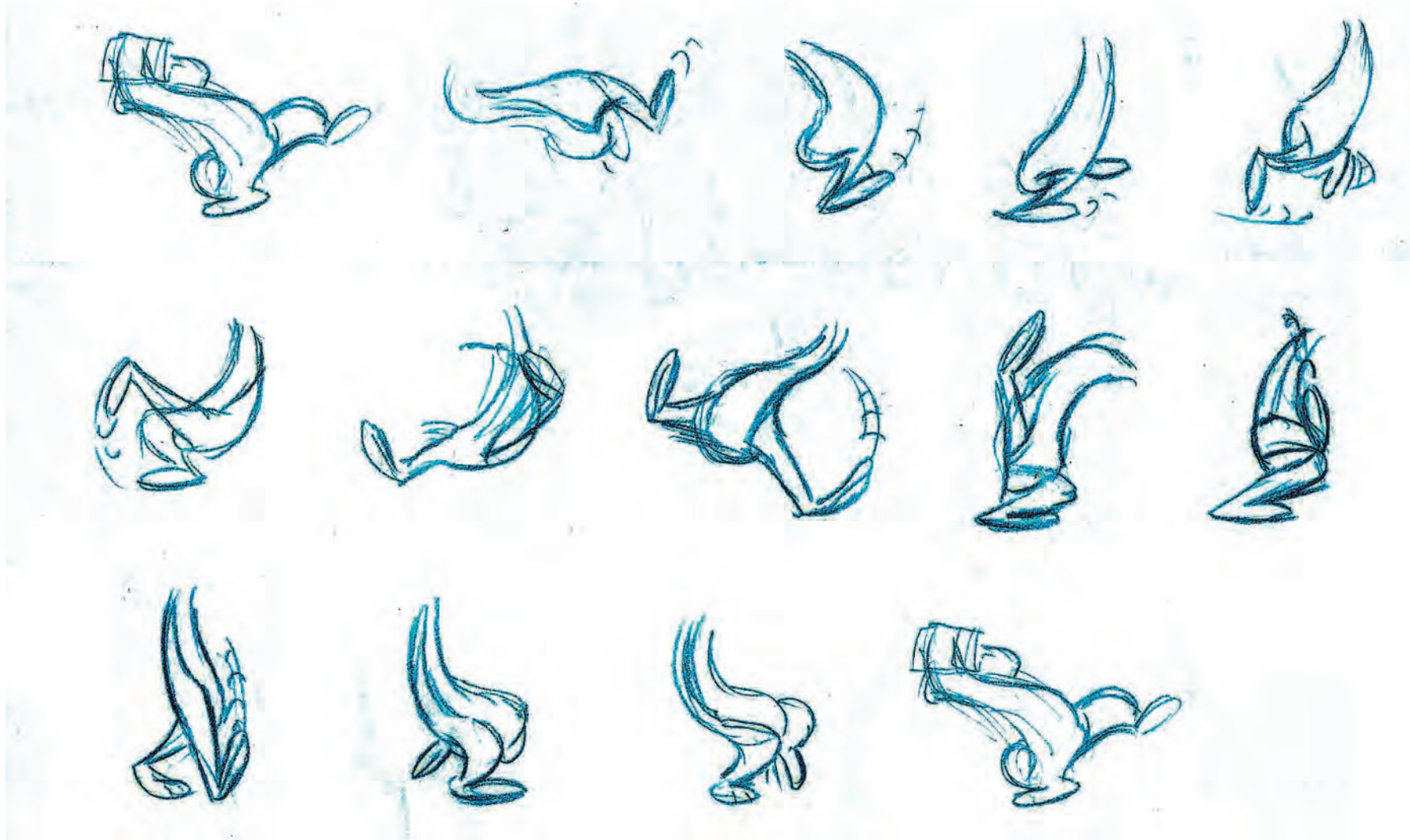


Posing

I mentioned earlier, the idea of doing a series of poses of your character doing variety of different things. This is always a helpful way of getting to know what your character can and can't do. When selecting the types of poses, be sure to pick the ones that the character might actually do within the context of your project. Don't do a drawing of your character ironing their pants or brushing their teeth if they never actually do it.



Sometimes thinking of alternate scenarios can help you come up with some interesting poses, even if you eventually decide not to follow that train of thought. One option I had thought about for the weightlift is to have the character lifting the object on ice. Once they get the object up on their shoulder, their feet begin to slip and slide out from underneath them and they try to maintain their balance without falling down. I did a short series of thumbnail sketches to plot out the foot and body action for the slipping portion.



I just played out the action in my mind using the seaweed principle for the body and just moving the legs through a looping path of action that could cycle through or continue on in a different series of patterns. From these thumbnails I can then go back and clean up some poses for future reference.

It would be great if you could get a friend to pose for you. Explain to them what the character is doing and show them the pose, then if necessary, treat them like a poseable doll - pushing them into the position. Just be sure that they have adequate support for suspended legs or arms if you're going to get them to hold the pose for 2 minutes. That should be enough time for you to get the rough gesture down. Another option would be for you to pose yourself and using a video camera, capture the pose and then print it out for reference. There are books out there that have generic poses of models, some nude and some costumed. These are generally unsatisfactory if you have a specific pose in mind. The same is usually true for any online reference websites. They mean well but aren't quite what you need.



I might be able to use pose #4 but not any of the others. These sites are primarily just for life drawing purposes and they're fine for that.

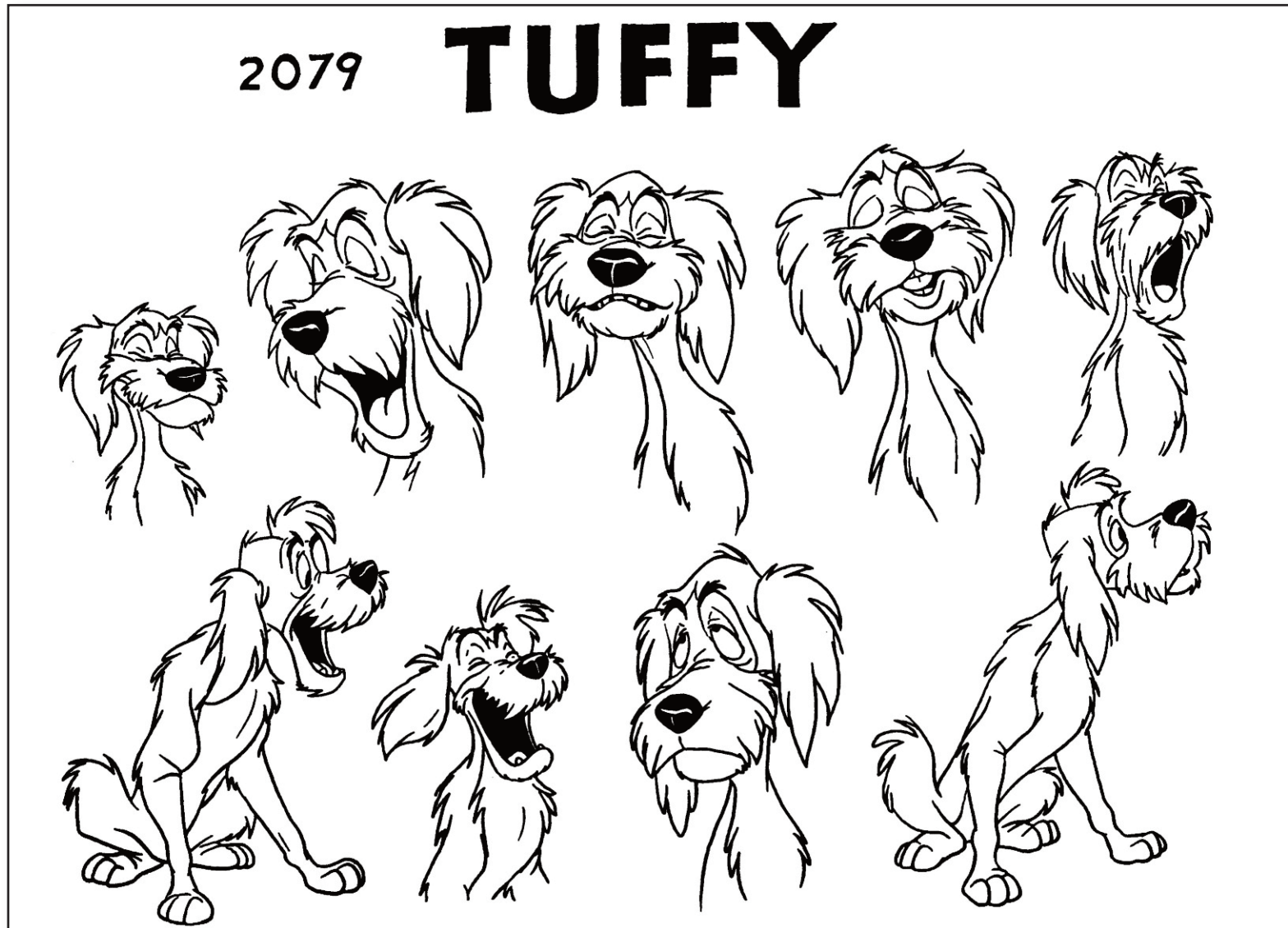


Another source of reference is comic books, but be wary here because not all comic artists draw well. Some very famous artists are so appallingly bad that there are websites dedicated to making fun of their drawings. Your own imagination is usually your best resource. Now having said that, some people can imagine the pose but they can't translate that into a drawn image. This takes a lot of practice.

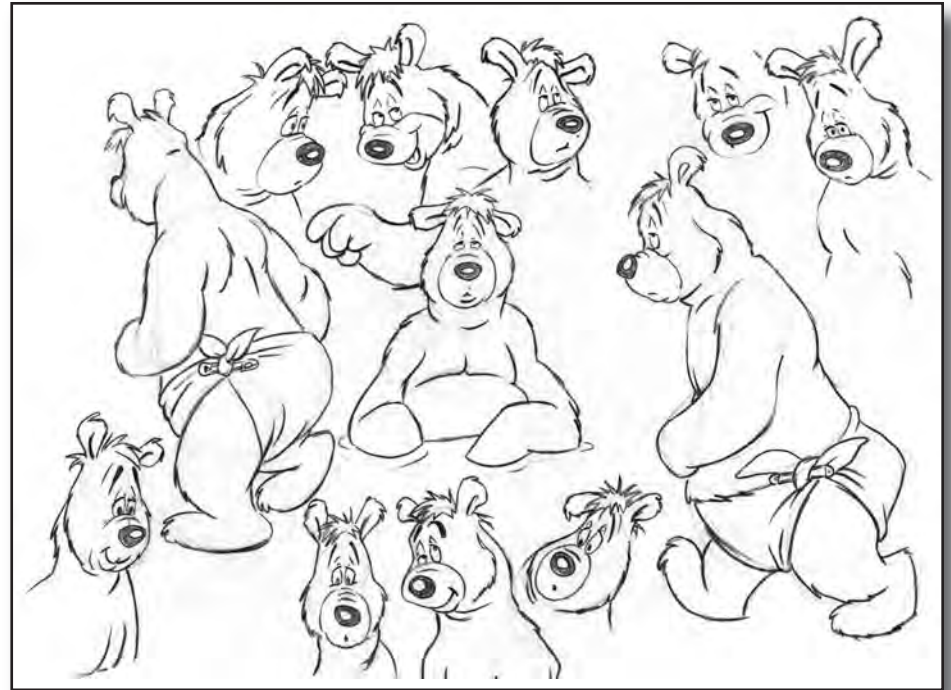
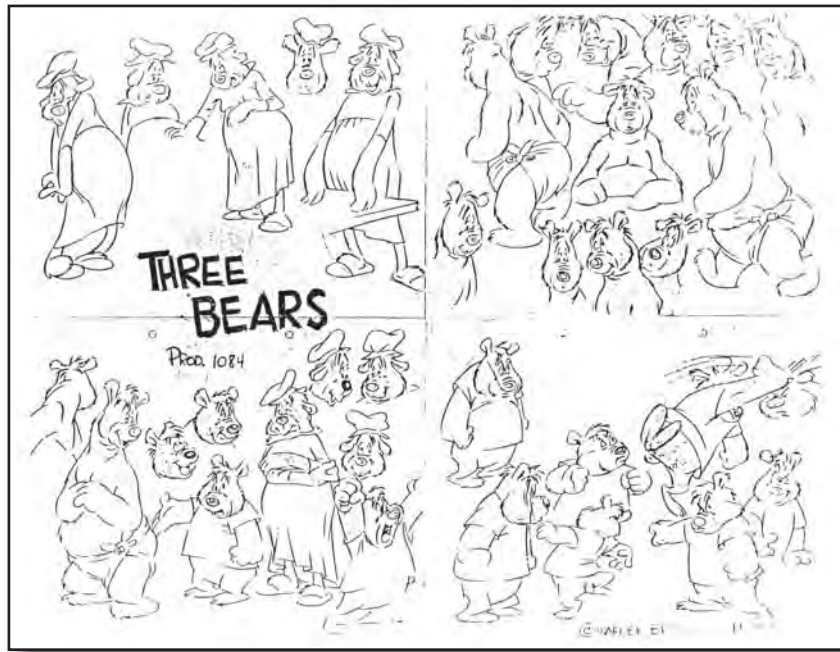


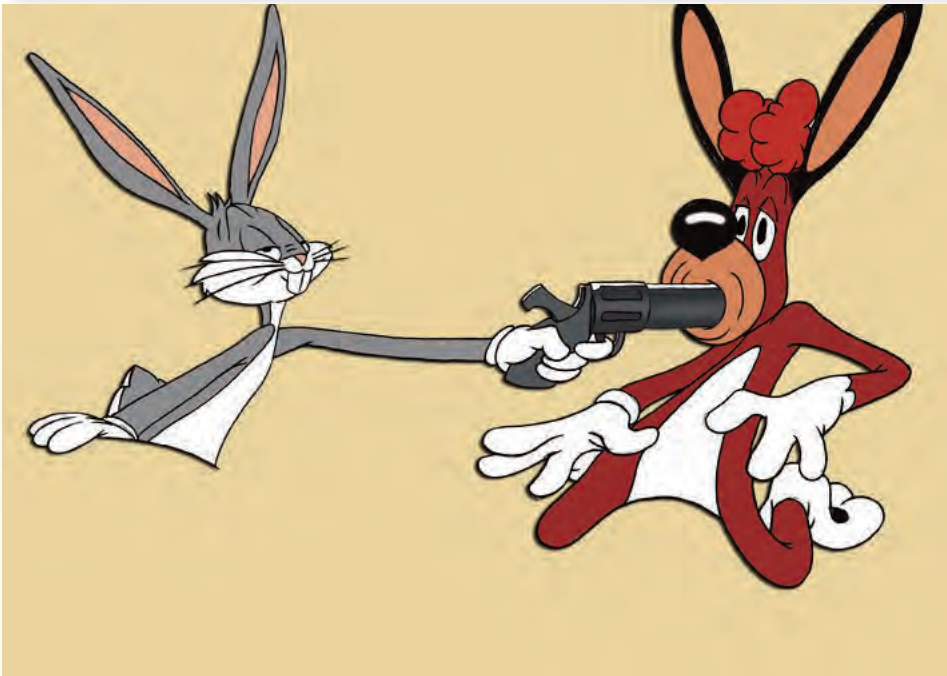
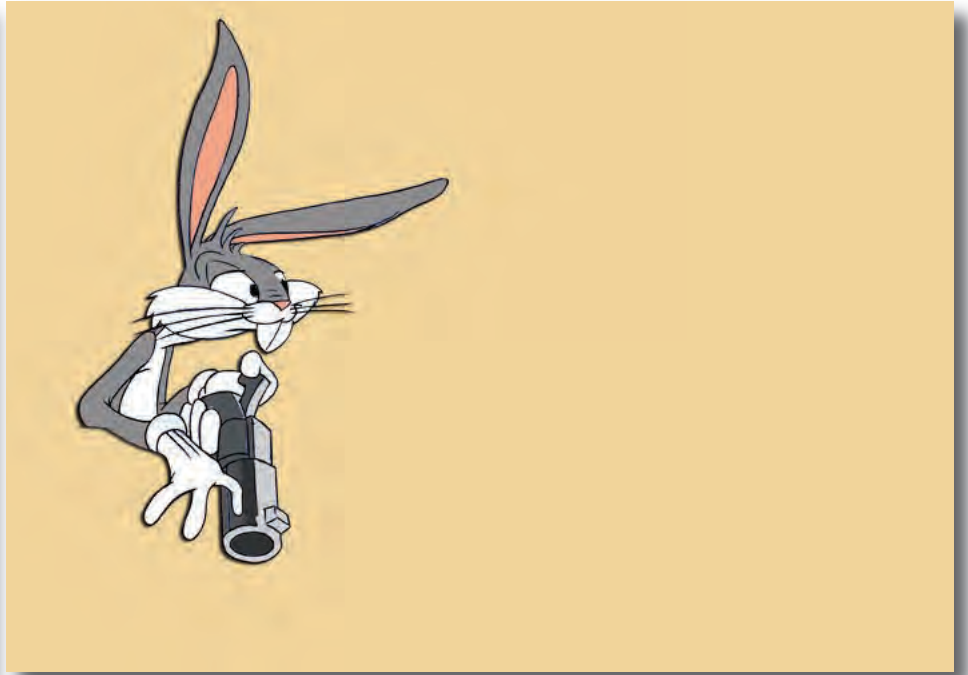
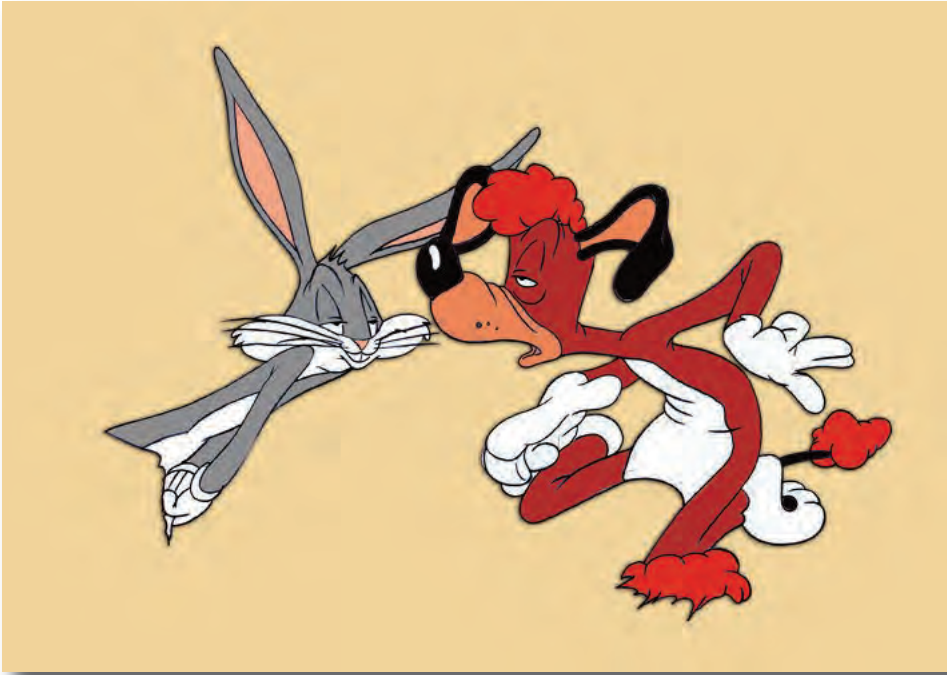
These drawings are appallingly bad. As co-ordinator at Seneca, I had to look at all incoming portfolios and sadly, many of them had copies of Rob Liefeld's drawing style in them. His proportions, muscle structure and anatomy are all wrong and should never be used for reference unless it's for satirical purposes.

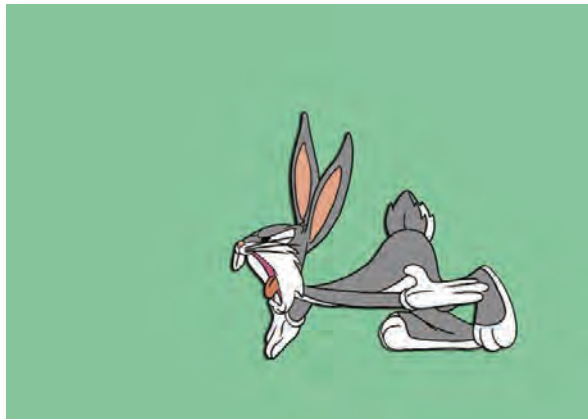
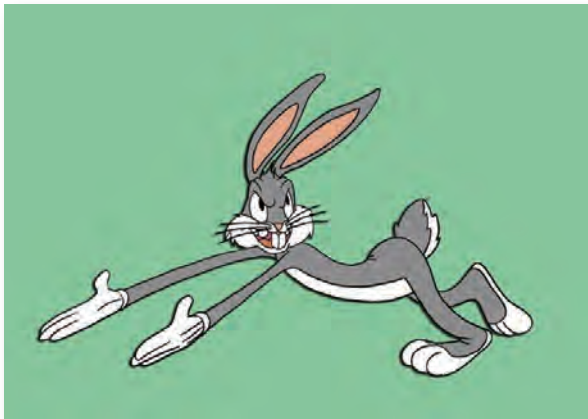
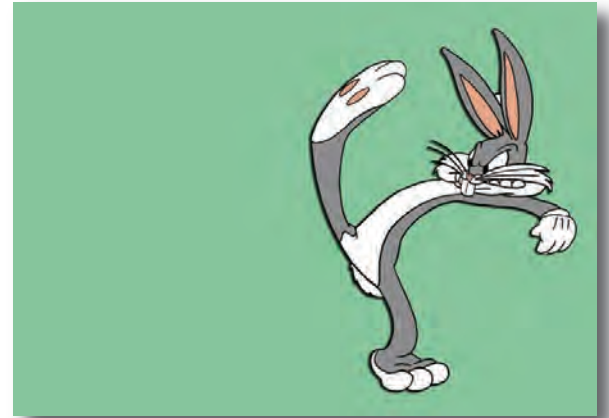
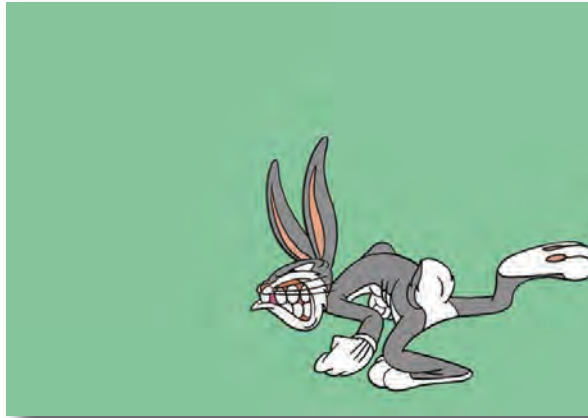
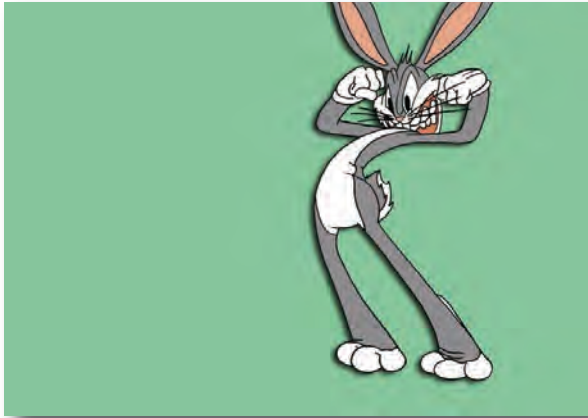
One of the exercises that I have used over the years both for myself and my students is to take an existing model sheet from a cartoon such as Bugs Bunny and the Three Bears and print out the sheet from an online search. I just type in: "animation model sheets" or even more specifically: "bugs bunny model sheets" and voila, theres a whole slew of model sheets that people have scanned in and put online. As an aside here, I once did this exercise for my students and I did some of the model sheets from Lady and the Tramp. If you go online right now and type in: "lady and the tramp model sheets" you'll eventually come across a model sheet of Tuffy. That is my drawing sheet from the exercise. I don't know how it got up there, but one of my students must have photocopied my page and posted it. There are several of my "redone" sheets up there.



Here are some samples of sheets that I have done showing both the original pages and my redos.

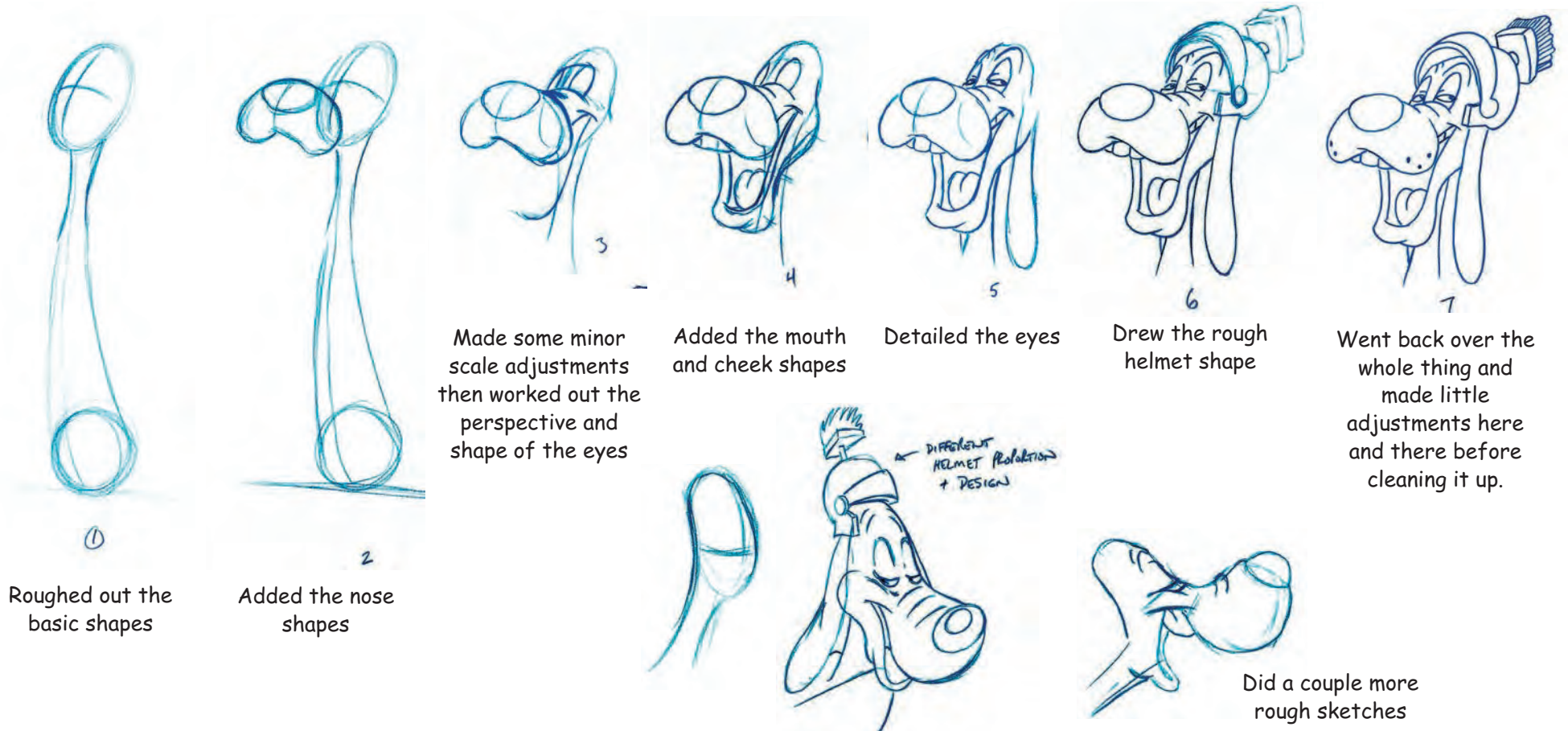






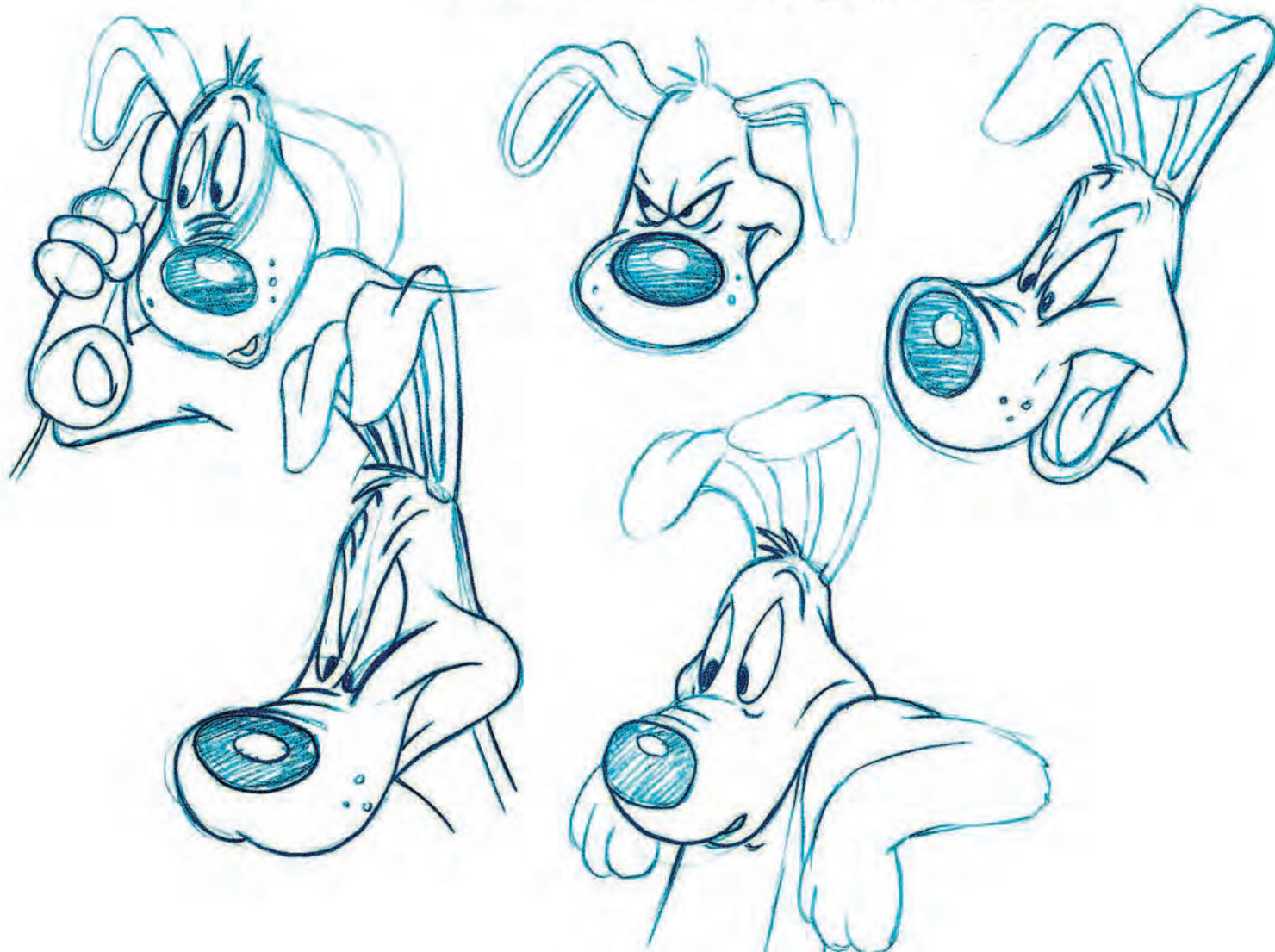
The purpose of this exercise is to train yourself to draw the same way the original artist did. The first step is to take the original sheet and trace over the drawings exactly. Copy them line-for-line. Take the time to think about what each line represents. Why it's there, the distance from the lines around it. All the proportions and volumes involved. Once you've completed the sheet, set the drawings aside and take out a fresh sheet of paper. Now copy the poses using your eyes - no tracing this time. Just look at the poses and copy them exactly as they are on the original sheet. Try to match all the proportions and volumes exactly. You can do a rough structural drawing underneath first to get the general shapes but get it to match the original. Again, ask yourself all the same questions. Begin to understand the "rules" of the character. Why is the head this shape? What is the ration of the head to the body? What is the length of the arm from shoulder to elbow? From elbow to wrist? These are the proportion rules. If you change these, it's no longer the character "on model".

Here are the seven basic steps I went through copying the Martian dog from the Bugs Bunny cartoon, "Haredevil Hare"

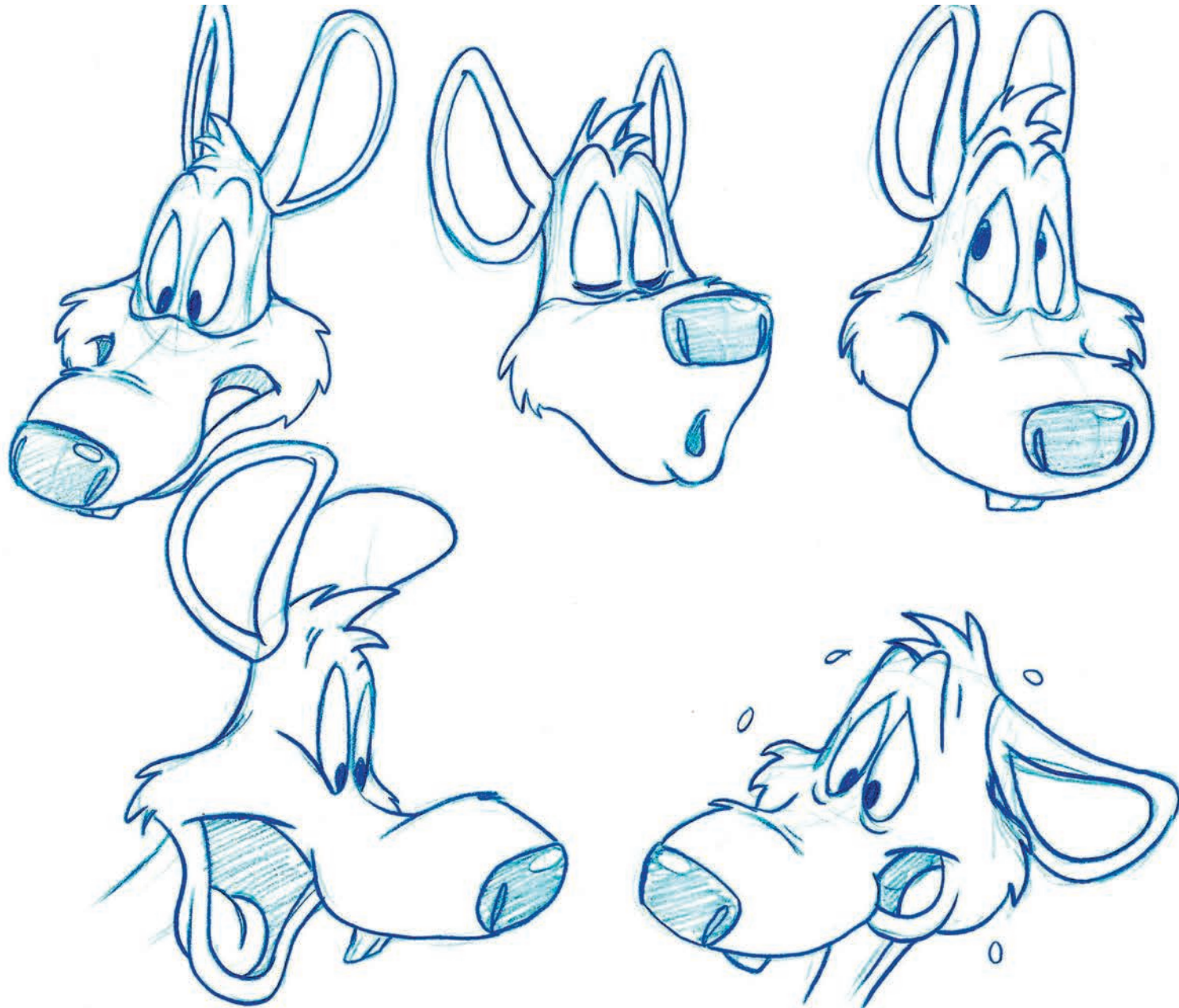


Once you can comfortably draw the character and match the design exactly, move on to posing the character in new positions that you imagine. Keep the character on model at all times and compare your poses to the original sheets. Do they match? If not, find where the differences are and fix them.

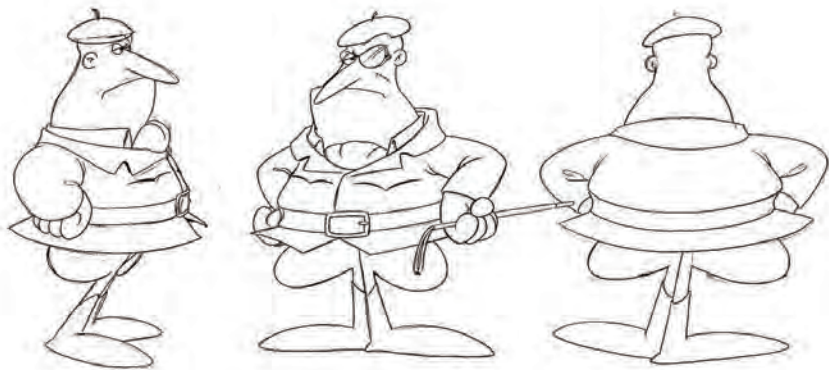
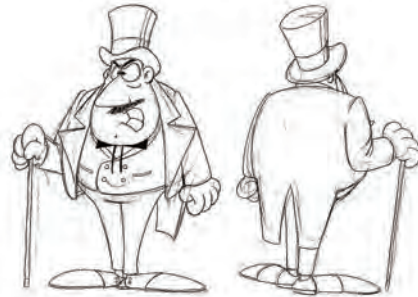
CHARLIE DOG From 'AWFUL ORPHANS' 1949



Use some of the poses to create your own character designs. Utilize some of the line style and incorporate it into your character.

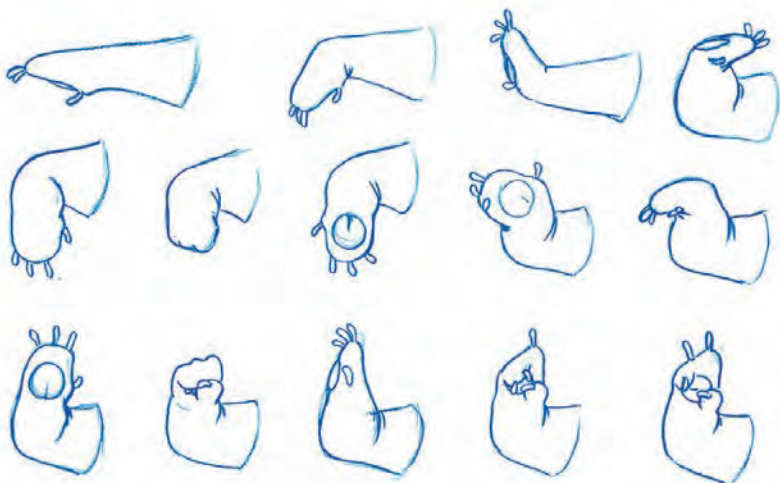
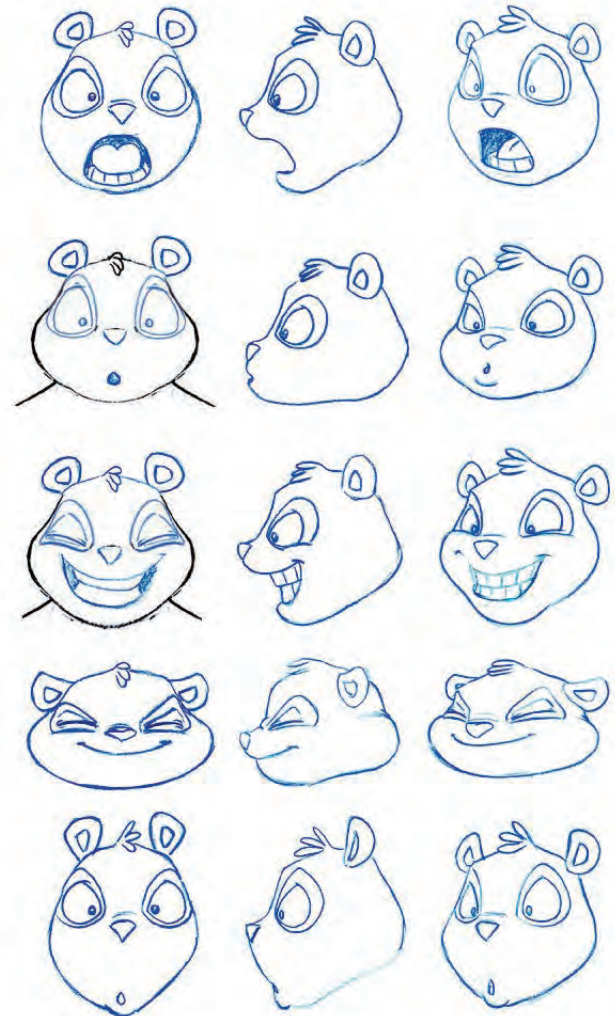


If you are working in an animation studio, the only time you get to draw from your own imagination would be if you were in the character design department, but even then, you'd probably be given a design style that you'd have to work with. When I was working on *Inspector Gadget*, my job was to come up with all the secondary characters in the show. *Gadget*, *Penny*, *Brain*, *Quimby*, *The Claw* and *Mad Cat* were all pre-designed as there was a pilot show already produced. I had to follow the design style of the established characters. I remember Bruno Bianci showing me some designs of characters from a Japanese show and saying he wanted the design style to match the drawings. The only problem was that the *Gadget* characters were not done in a Japanimation style, they were more European, along the lines of "Lucky Luke" or "Asterix". I came up with the major M.A.D. agents first and used the *Gadget* style blended slightly with my own style and a bit of *Asterix* style. They liked what I did, so from that point on I just used the same style. Now, they did end up modifying the designs slightly when they went overseas for animation but you can still see my core design style within them.



As a storyboard, layout artist and animator, you have to follow the model sheets. You can't change the designs. You must keep the characters on model. The above tracing, copying and drawing assignment I gave you is the same thing an artist learning to draw the characters for the show would follow.

To end off this edition, here's an exercise for you. Take the character design sheets on the next couple of pages and copy the character following the method I outlined before. 1) Trace the sheets, 2) Copy using your eyes, 3) Come up with your own poses.





Panda
Model Sheet 1

