

2D ANIMATION II: APPLICATIONS- FIL2723C

LIP SYNCH

ASSIGNMENT:

- Create a set of 14-frame Male and Female phonetic animations.
- Breakdown 2 dialogues onto exposure sheets and organize phonetic frames to create 2 different animated lip synchs.

PHONETICS

The first thing to keep in mind, is that you're not really lip synching to words or even letters...but to sound.

For example- Let's take the dialogue, "I ran much farther". If it is spoken by someone from the deep South it may sound like, "Ah reen much further". Whereas, if spoken by someone British might sound like, "I rahn much fah-thah".

This is why it's so important to listen to the actual audio and not just read the dialogue.

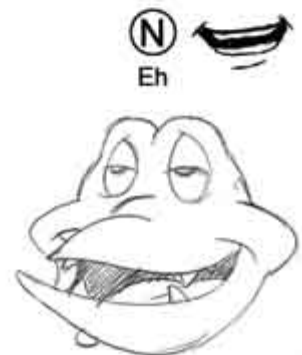
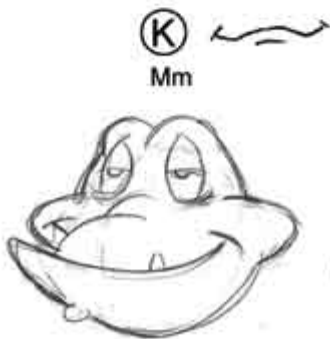
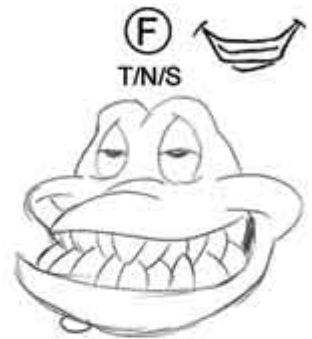
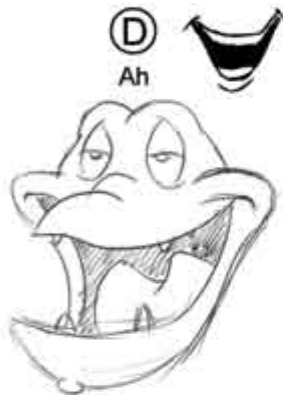
The first step is to create your phonetic animation. You'll need a set of 14 Male head frames and 14 Female head frames. These are Key Frames that will not be tweened for this exercise. As you will see, they are enough frames to create a believable speaking character.

Use the Phonics Chart on the following page to reference the mouth shapes.

The circled letters in the chart represent the name of the picture. **Be sure to name your drawings the same.** Under the name is the *sound* that can be associated with that mouth shape. You'll notice that there is no picture associated specifically with the "k" or "ph" sound, among others. You should be able to find a suitable mouth shape within these 14 to create any sound out there.

If you can, turn this assignment into a character study. It's a good idea to use a character you wish to really develop.

14 Basic Phonetic Mouth Shapes

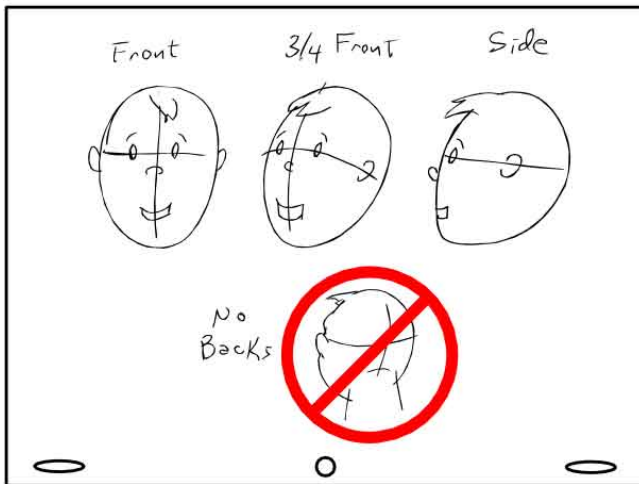


When designing characters, avoid the old-school Mickey Mouse method-



Don't simply trace the guys head and add a bow and some eye lashes to make the Female.

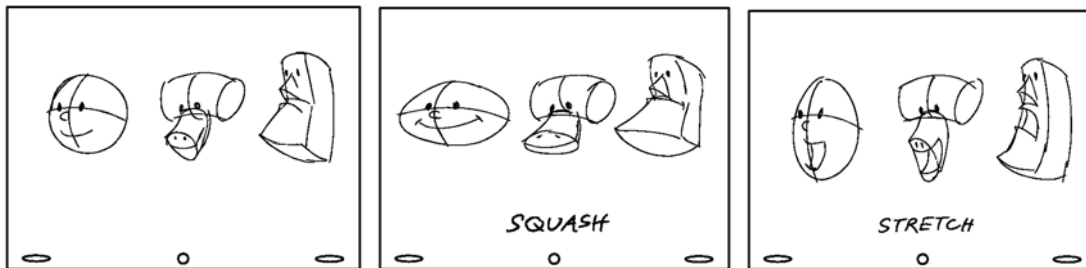
For this reason, each character must be drawn at a different angle-



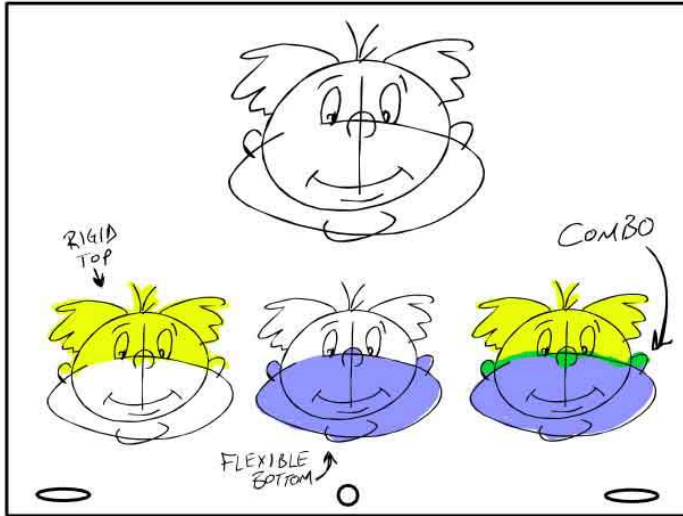
If the Male is a Front view then the Female can be a 3/4 or Side view...it doesn't matter which angle you choose, just make sure one is different from the other.

The characters can be human, animal, alien, vegetable, appliances...you name it! The two are independent as well, so you can even choose different styles for each if you wish.

Don't forget the basic rules of animation when drawing your faces:
Squash and Stretch!-

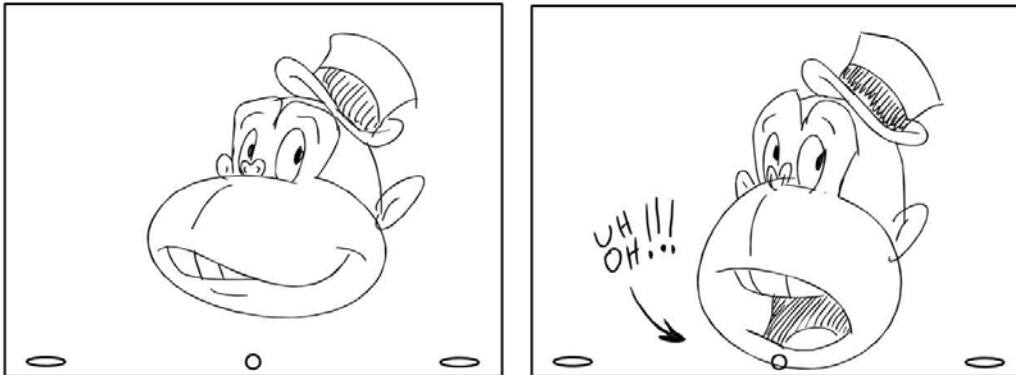


Since the character is in a fixed position while it talks, keep in mind that the top portion of the characters head should remain still while the mouth and jaw do all the moving. Remember, this is an exercise in **lip synch** only...performance is the next lesson.



Don't be tempted to make the eyes blink or hair blow in the wind unless they are on separate layers. As you can see above, noses and ears may be a little flexible, inheriting some of the jaws movement.

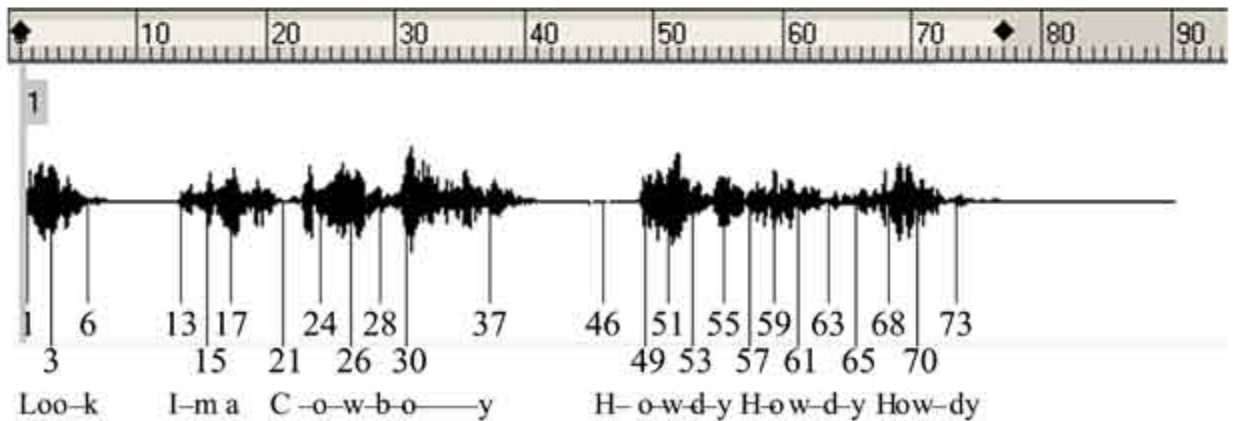
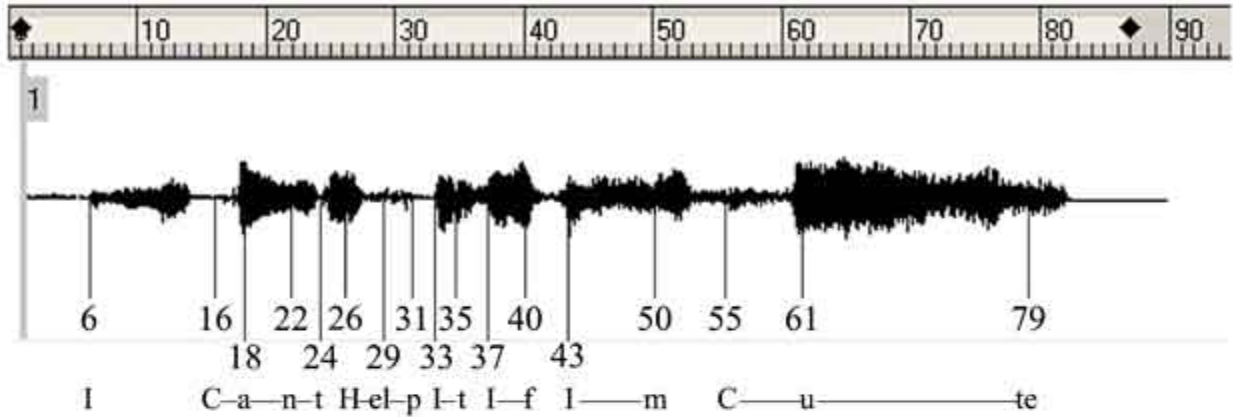
Be careful when doing your layout. Make sure you give plenty of room and account for how tall your character's head will get during the animation...but don't draw the head too tiny either.



TIMELINES & X-SHEETS

Let's hear what your characters have to say!

There are two dialogues. In the sound chart below, you can see how the frame numbers are marked where the sounds of the words are heard.



You will need to mark this "sound" information onto a chart and then organize your drawings so that the character will appear to say the dialogue. For this, you will use the Exposure Sheet on the following page. The Exposure Sheet is also known as a dope sheet or X-sheet. It is an animators organizational chart.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	0									
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	0									
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	4									
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	7									
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	1									
	2									
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	4									
	5									
	6									
	7									
	8									
	9									
	0									
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	0									

Dialogue: _____

Before you fill this out, let's break it down so we know what is what.

The "Seconds" column is where we list time based on the frames per second we are using or 'fps' for short. Film moves at 24 fps and video at 30 fps. It is important to know this because each row represents a single frame. Therefore, there is more time on the sheet for film than there is for video.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
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	8									
	9									
	10									
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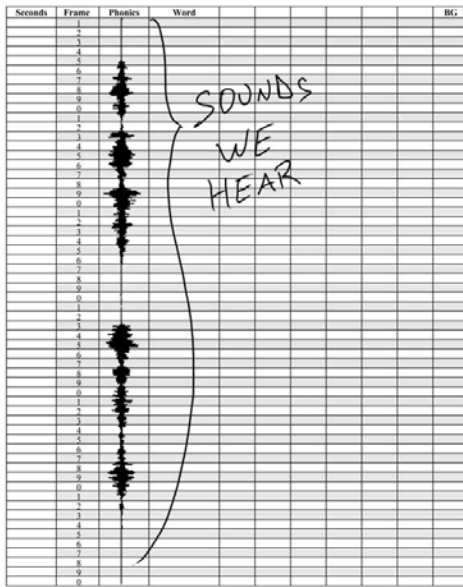
Dialogue:

The "Frame" column is set up in multiples of 10 to speed up the process of filling it out. It is usually customary to write in every tenth frame to start, then fill in the other frames as you encounter them in the timeline or sound chart.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
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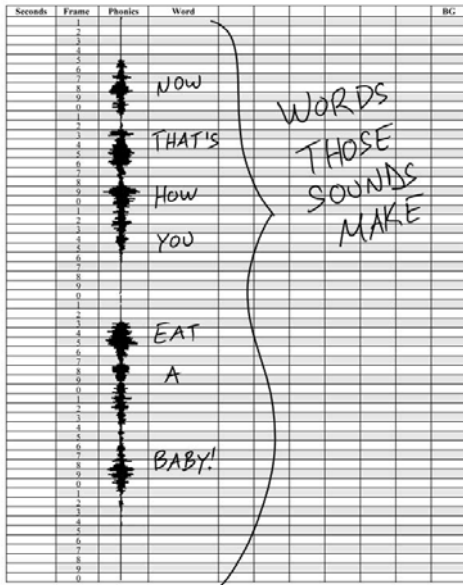
Dialogue:

The "Phonics" column is where we write the sounds we hear in the timeline. An audio track is used here but later you will see how we verbalize the audio for this column.



Dialogue:

The "Word" column is where we communicate clearly what is in the Phonics column. Since English and many other languages are normally not written from top to bottom, it can get a bit confusing once it is stacked up.



Dialogue:

The last few columns are for our Animation Drawings. When it is necessary to draw multiple characters or even parts of a character on separate layers, this is where you organize the order and timing for everything. Notice how the layers stack bottom to top from the right.

Seconds	Frame	Phonics	Word			EYES	MOUTH	BODY	BG
	1								
	2								
	3								
	4								
	5						5		
	6								
	7						8		
	8								
	9						2		
	0								
	1						1		
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	0								
	1								
	2								
	3								
	4								
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LIP SYNCHING

Time to give your characters a voice!

I'll walk you through the steps in filling out the first X-sheet for the Female dialogue. In the end, both Female and Male dialogues will require two X-sheets apiece.

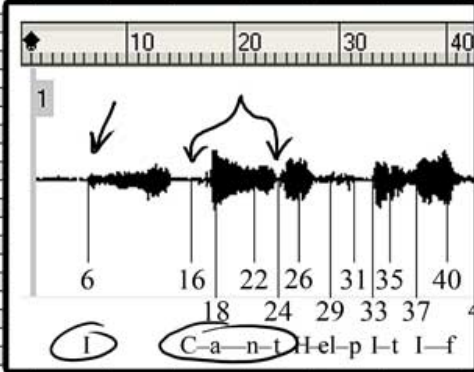
1) First, mark your Frames at every 10th and your Seconds for 30 fps. It is also a good idea to include the dialogue you are about to lip synch.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
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	9									
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	2									
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	4									
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	8									
	9									
	10									
2	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									

Dialogue: "I Can't Help It If I'm Cute"

2) Next, fill out the Phonics as they are heard in the timeline or listed in the sound chart. Don't forget to mark the frame number the sounds are heard on.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
	6	I								
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16	C								
	17									
	18	A								
	19									
	20									
	21									
	22	N								
	23									
	24	T								
	25									
	26									
	27									
	28									
	29									
	30									
1	31									
	32									
	33									
	34									
	35									
	36									
	37									
	38									
	39									
	40									
	41									
	42									
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	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
2	60									



Dialogue: "I Can't Help It If I'm Cute"

3) It is a good idea to fill out the Word column as you go to avoid confusion later on.

Seconds	Frame	Phonics	Word							BG	
	1										
	2										
	3										
	4										
	5										
	6	I - I									
	7										
	8										
	9										
	10										
	1										
	2										
	3										
	4										
	5										
	16	C	} Can't								
	17	A									
	18										
	19										
	20										
	1										
	2	N									
	3										
	4	T									
	5										
	6										
	7										
	8										
	9										
1	30										
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	40										
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	50										
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
2	60										

Dialogue: "I Can't Help It If I'm Cute"

Here is the first page with all the Frames, Phonics and Words filled in.

Seconds	Frame	Phonics	Word							BG
	1									
	2									
	3									
	4									
	5									
	6	I	- I							
	7									
	8									
	9									
	10									
	1									
	2									
	3									
	4									
	5									
	16	C	} Can't							
	17	A								
	18									
	20									
	1									
	22	N	} Help							
	23									
	24	T								
	25									
	26	H	} It							
	27									
	28									
	29	EL								
1	30	P	} IF							
	31									
	32	I								
	33	T								
	34		} I'm							
	35									
	36									
	37	I								
	38		} Cute							
	39									
	40	F								
	41									
	42		} I'm							
	43	I								
	44									
	45									
	46		} I'm							
	47									
	48									
	49	M								
	50		} Cute							
	51									
	52									
	53	C								
	54		} Cute							
	55									
	56									
	57									
2	60									

Dialogue: "I Can't Help It IF I'm Cute"

Notice how the word "Cute" spills over into the next X-sheet. This is indicated with an arrow showing the sound continuing.

4) Once we know where our sound exists on paper, pick one of the remaining columns and assign the mouth positions that go best with that sound.

In the Phonics Chart supplied, notice how Drawing "K" looks perfect as a closed mouth. Aside from the 'mm' sound, we can use that frame any time the character is not speaking. The 'I' sound is nice and wide, so can be represented by Drawing "D".

Seconds	Frame	Phonics	Word							BG	
	1			Ⓚ							
	2										
	3										
	4										
	5										
	6	I - I		Ⓚ							
	7										
	8										
	9										
	10										
	1										
	2										
	3										
	4										
	5										
	16	C	} Can't								
	17	A									
	18										
	19										
	20										
	21	N									
	22										
	23	T									
	24										
	25										
	26	H	} Help								
	27										
	28	EL									
1	29										
	30	P	} It								
	31										
	32										
	33	I	} IF								
	34	T									
	35										
	36										
	37	I	} I'm								
	38										
	39										
	40	F									
	41										
	42										
	43	I	} I'm								
	44										
	45										
	46										
	47										
	48										
	49										
	50	M									
	51										
	52										
	53										
	54										
	55	C	} Cute								
	56										
	57										
	58										
	59										
2	60										

Dialogue: "I Can't Help It IF I'm Cute"

Continue filling out the column with the mouth positions that work best for the sounds. Remember, each mouth position has a lot to do with the sound heard before and after it. Act it out before choosing your phonetics. It helps to have a mirror handy or to really be able to feel what your own face does when saying this dialogue.

Don't forget about the second X-sheet needed for this dialogue.

Here is what your finished X-sheet may look like-

Seconds	Frame	Phonics	Word						BG	
	1			Ⓚ						
	2									
	3									
	4									
	5									
	6	I - I		Ⓚ						
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16	C	} Can't	Ⓚ						
	17									
	18	A			Ⓚ					
	19									
	20									
	21									
	22	N		Ⓚ						
	23									
	24	T								
	25									
	26	H		Ⓚ						
	27									
	28									
	29	EL	} Help	Ⓚ						
1	30									
	31	P		Ⓚ						
	32									
	33	I	} It	Ⓚ						
	34									
	35	T		Ⓚ						
	36									
	37	I		Ⓚ						
	38									
	39		} IF							
	40	F			Ⓚ					
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	42									
	43	I		Ⓚ						
	44									
	45		} I'm							
	46									
	47									
	48									
	49									
	50	M		Ⓚ						
	51									
	52									
	53									
	54									
	55	C	} Cute	Ⓚ						
	56									
	57									
	58									
2	60	↓		Ⓚ						

Dialogue: "I Can't Help It IF I'm Cute"

Notice how much use we got out of Drawing "D"- This mouth position shows up four times and we only had to draw it once! This occurs with some of the others as well.

Seconds	Frame	Phonics	Word							BG	
	1			(K)							
	2										
	3										
	4										
	5										
	6	I - I		(D)							
	7										
	8										
	9										
	10										
	11										
	12										
	13										
	14										
	15										
	16	C	} Can't	(N)							
	17	A		(D)							
	18										
	19										
	20										
	21	N		(E)							
	22										
	23	T									
	24										
	25										
	26	H	} Help	(N)							
	27										
	28	EL		(D)							
	29										
	30	P		(B)							
	31										
	32										
	33	I	} It	(G)							
	34	T		(M)							
	35										
	36										
	37	I	} IF	(D)							
	38										
	39	F		(E)							
	40										
	41										
	42										
	43	I	} I'm	(D)							
	44										
	45										
	46										
	47										
	48										
	49										
	50	M		(K)							
	51										
	52										
	53										
	54	C	} Cute	(N)							
	55										
	56										
	57										
	58										
	59										
2	60			(A)							



Dialogue: "I Can't Help It IF I'm Cute"

5) Finally, we are ready to shoot our Lip Synch animation!
 Be sure the capture device speed is set at 30 fps and records each drawing on 'Ones'.
 Now, expose each drawing the number of frames listed on the X-sheet (Drawing "K" from 1-5 then Drawing "D" from 6-15, etc).

Now, continue these steps and fill out the X-sheets used to shoot the Male "Cowboy" dialogue.