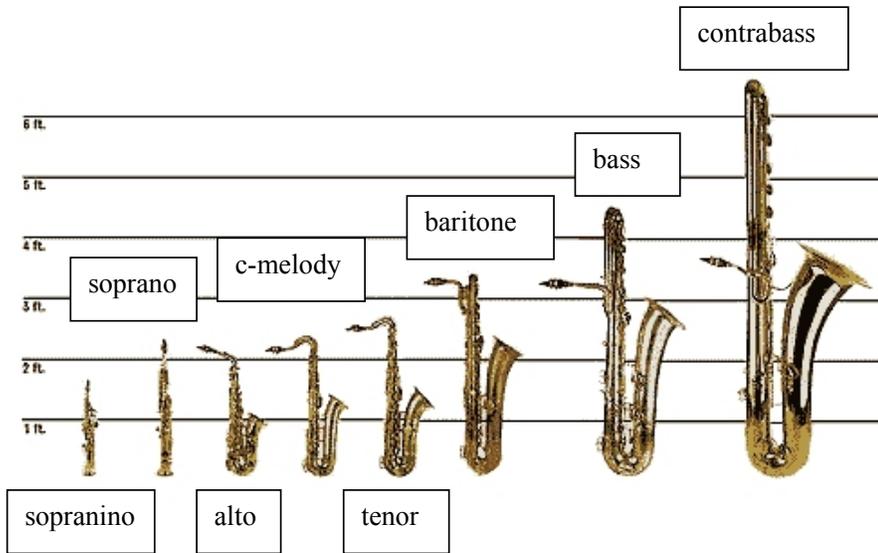
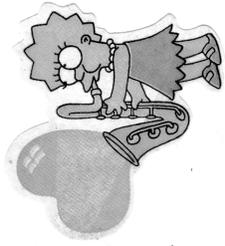
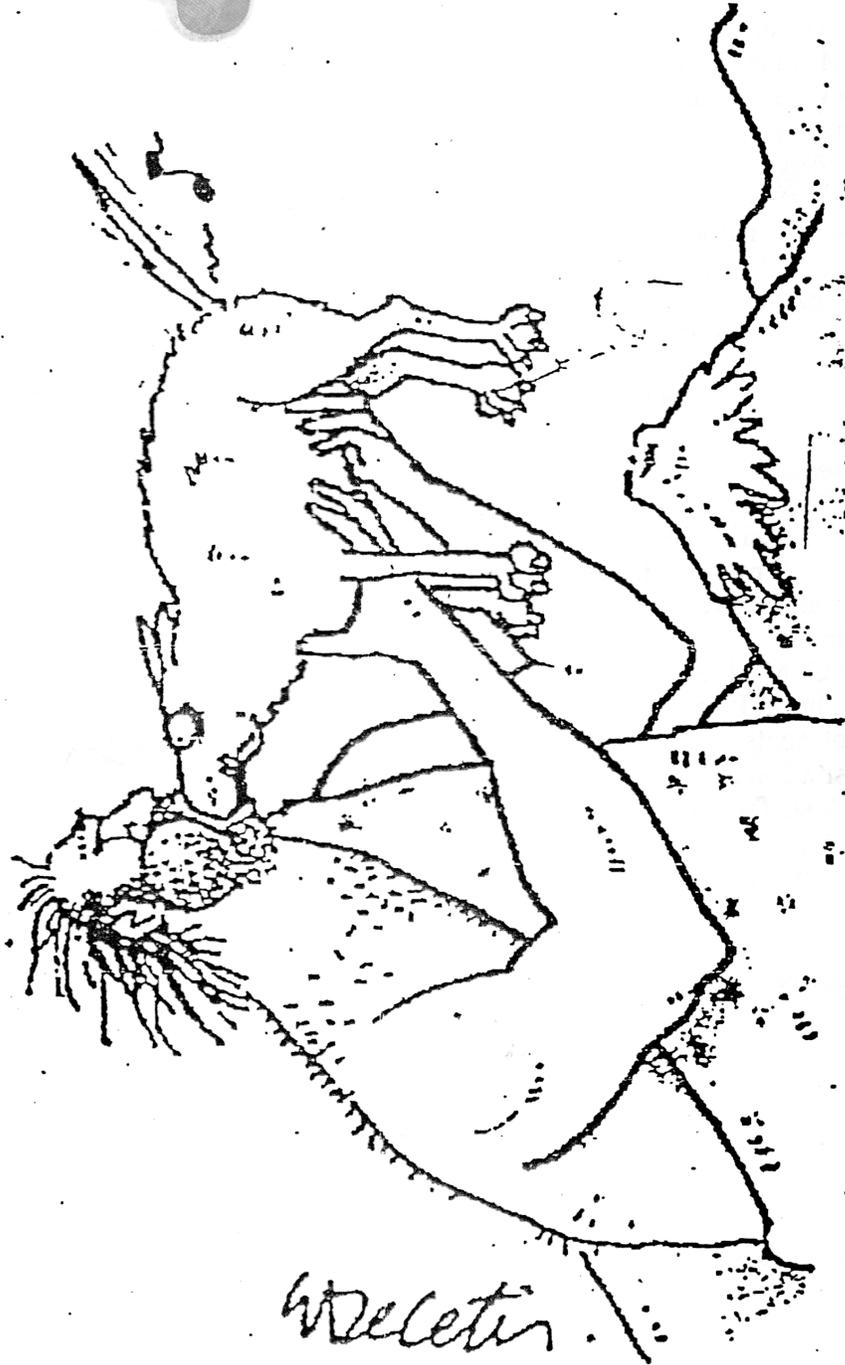


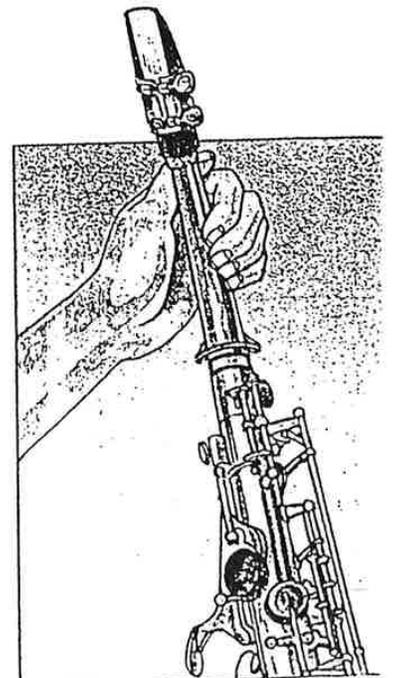
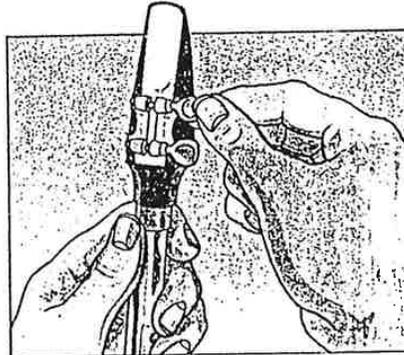
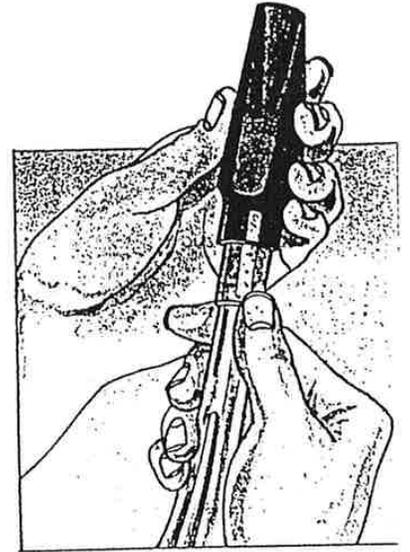
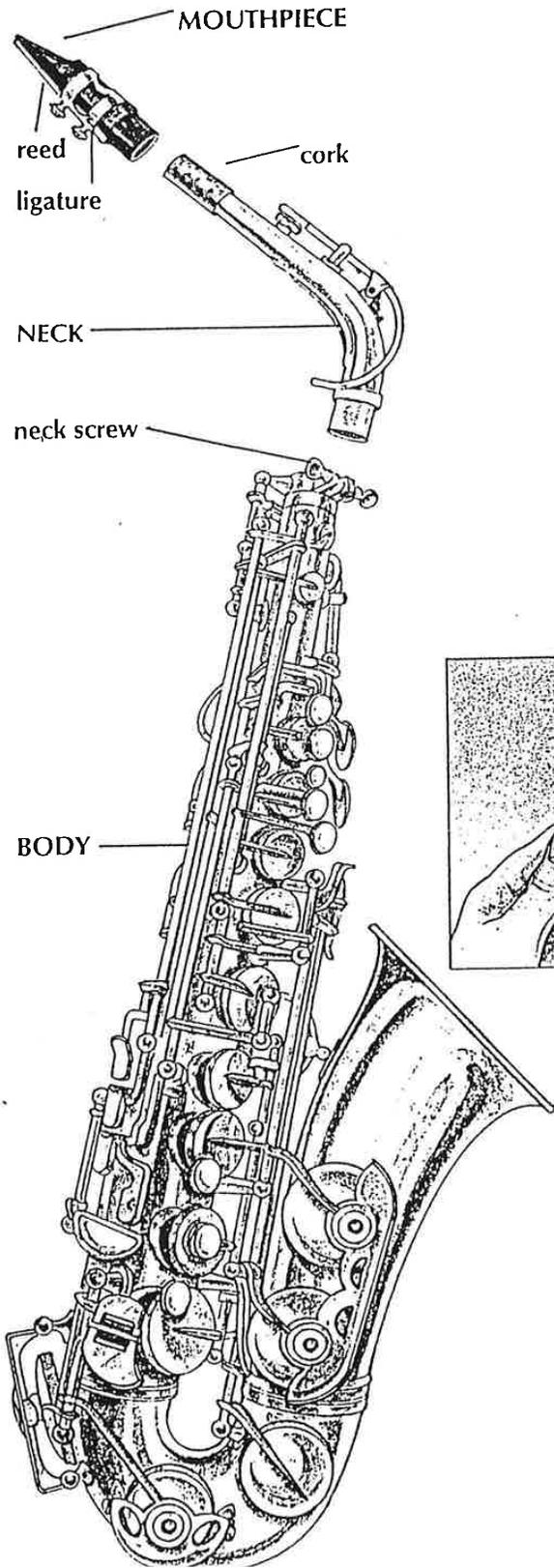
The Saxophone Family



The first saxophone



PUTTING YOUR ALTO SAXOPHONE TOGETHER



The Mouthpiece, Ligature and Reed

Together, the mouthpiece, ligature and reed make the sound on the clarinet and saxophone. The rest of the instrument is basically a fancy tube. If we can make a good sound on the mouthpiece, the sound on the instrument will be the best it can be.

Look at the reed. You'll notice that one side of it is flat and has writing on it, and the other is half rounded, and half shaved to a thin tip. This thin part is what vibrates to make the sound. It is very fragile and breaks easily. If it chips or cracks, it will not vibrate well and will need to be replaced. Try to make your reeds last as long as possible. **Never touch the tip with your fingers!!!**

The reed must be wet in order to vibrate. Put the thin part of the reed in your mouth or cup of water to moisten it. While doing that, try putting the ligature around the mouthpiece. You will notice that it only goes on one way. If you try to put it on backwards, it gets stuck half way down. If this happens, pull it off and turn it around so that it slides all the way onto the mouthpiece. Never force the ligature onto the mouthpiece. If you have to use any force it's probably on backwards. Once you've figured out how the ligature goes on the mouthpiece, leave it loosely on the mouthpiece.

Check the reed. Look at the thinnest edge, or tip of the reed. If it is straight without any waviness, then it is wet enough. If it is wavy at all, moisten it a little longer.

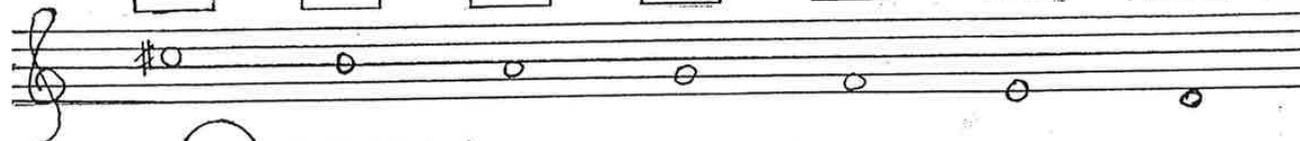
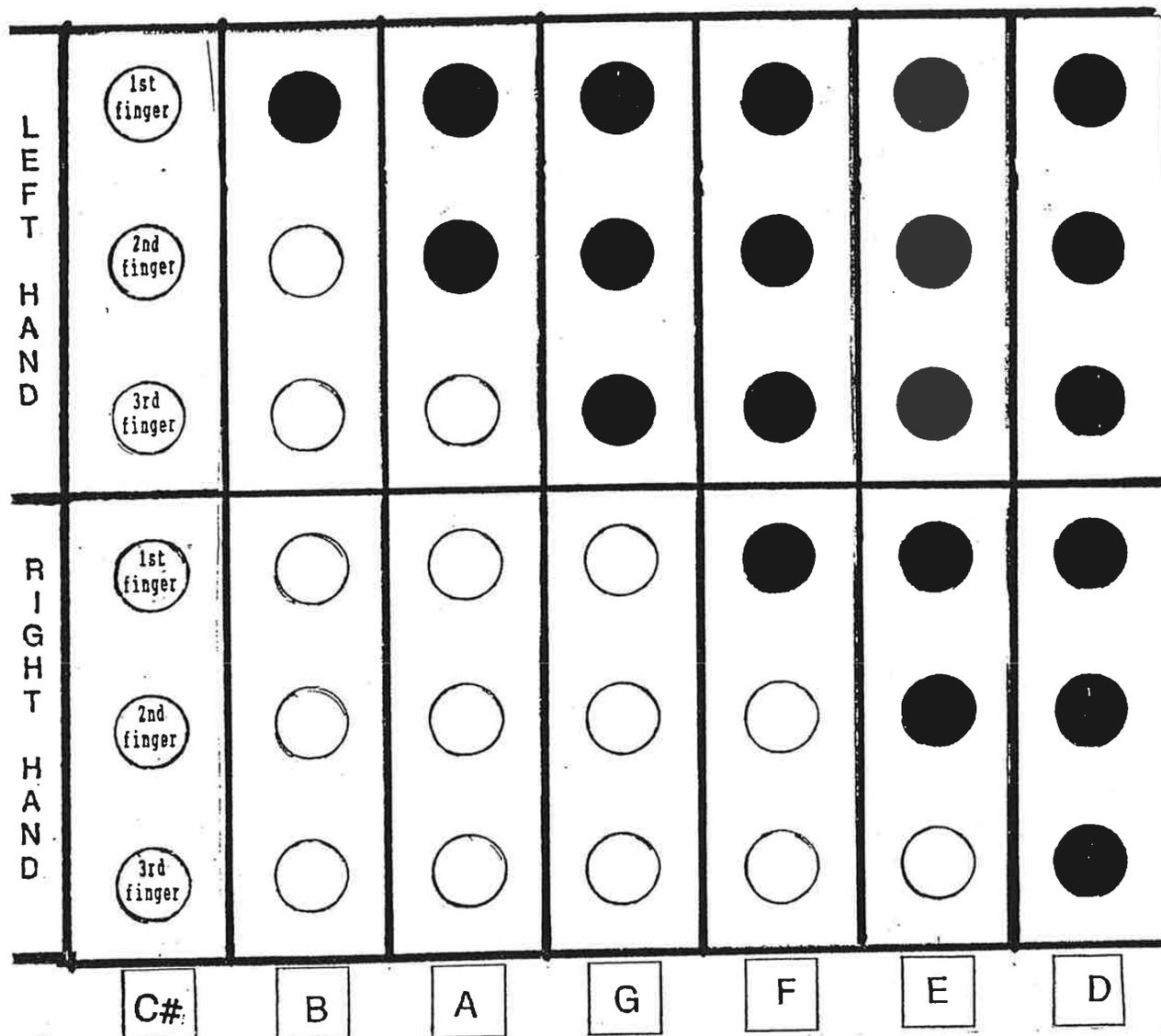
Look at the mouthpiece. You'll notice that one end is round. This is the end that connects to the rest of the instrument. The other end narrows down to a pointy tip, and has a rectangular opening and a long flat surface on one side. This flat part is where the flat part of the reed will go, with the tip of the mouthpiece lined up with the tip of the reed.

When the reed is wet enough, place the flat side of the reed against the flat part of the mouthpiece, sliding the thick back part of the reed towards the back round end of the mouthpiece under the ligature, which should already be on the mouthpiece. This way you avoid possibly cracking the reed by trying to slide the ligature past the tip of the reed.

This is where it gets tricky! You must now adjust the reed, mouthpiece and ligature so that they are in position to make the best possible sound. Keep adjusting, never fully tightening the ligature screws until you have reached this position: the tip of the reed should be perfectly lined up with the tip of the mouthpiece, and the ligature should be below the curve in the reed where the shaving of the wood starts to taper down to the tip. Check the alignment of the tip of the reed and tip of the mouthpiece by pressing (lightly!) the reed with your thumb until it actually touches the tip of the mouthpiece. It should not overlap, or underlap. When the tips are perfectly lined up, tighten the ligature screws until they are hand tight, not super tight. This may seem like a lot of juggling at first, but if the three pieces are even a little bit out of alignment, it can make a big difference in the sound you produce.

Congratulations! You are now ready to make your first sound on the mouthpiece!

Going Down the Stack on: Saxophone



○ = open hole
 ● = closed hole

Playing Songs By Ear

To play a song by ear, all you need is a song, your instrument, and your ears! Basically, you listen to the song and then play it on your instrument. The main thing is to match the notes of the song you are hearing to the notes you are playing on your instrument.

The songs Mary Had A Little Lamb, Hot Cross Buns and Au Clair De La Lune (also known as Pierrot) are good songs to start with, because they are familiar and you only need to know how to play three notes on your instrument in order to play them! Sing these songs a few times to make sure you remember how they go. You don't have to sound like your favorite singer or one of the people in the movie "Pitch Perfect" or one of the people on "American Idol" or "Glee". You just need to basically sing the song!

Pitch

Your teacher will give you three notes (or itches). Play them on your instrument and listen to the difference between them. Identify which note is highest, which one is in the middle, and which one is lowest.

Note Order

- Pick one of the songs mentioned. Mary and Hot start on the highest note, and Clair starts on the lowest.
- Play the first note on your instrument. Sing that note out loud. Sing the song once, starting on that note.
- Play the first note again on your instrument, and start to sing the song again but this time in your head. As you sing the song, try to match the three notes you've been given on your instrument to the ones you're singing in your head. Try to hear if the note needs to change or stay the same. If it needs to change, does it need to go up or down? Go slowly, one or a few notes at a time, and let your ear tell you if it sounds right. If you're not sure, pick one and try it! If it doesn't sound right, it's got to be one of the other two.

Articulation

When you go from one note to a different note, keep blowing and just move your finger(s) to the next note. This is called slurring. If you need to repeat a note, keep blowing and "tounge" that note.

Tounging means lightly touching the tip of your tounge to the tip of the reed (on sax and clarinet), or lightly touching the tip of your tounge behind the back of your top teeth (on flute). Tounging is like lightly saying "tih".

Phrasing

Think of the words to the song. Wherever there would be a punctuation mark, a period or a comma, that's where you breathe. This is called breathing between phrases. Don't take separate breaths for each note! This is a very hard habit to break once developed.

Rhythm

The song should have a steady pulse to it like a heartbeat. This is called the beat. The beat is the thing that tells us how long to play a note for, or how long to wait (called a rest) before playing again. Your ear should take care of this naturally!

Playing Songs By Ear Help Sheet

Mary Had A Little Lamb

high middle low middle high high high,
Ma- ry had a lit- tle lamb,

middle middle middle, high high high.
lit- tle lamb, lit- tle lamb.

high middle low middle high high high,
Ma- ry had a lit- tle lamb,

high middle middle high middle low.
it's fleece was white as snow.

Hot Cross Buns

high middle low,
Hot cross buns.

high middle low,
Hot cross buns.

low low low low middle middle middle middle
One a pen- ny two a pen- ny,

high middle low.
hot cross buns.

Au Clair De La Lune (Pierrot)

low low low middle high middle, low high middle middle low.
In the shi- ning moon- light, Pier- rot stands at night.

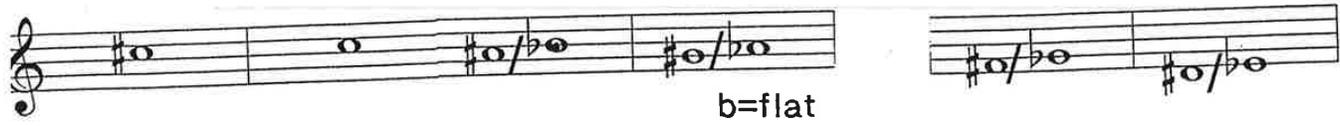
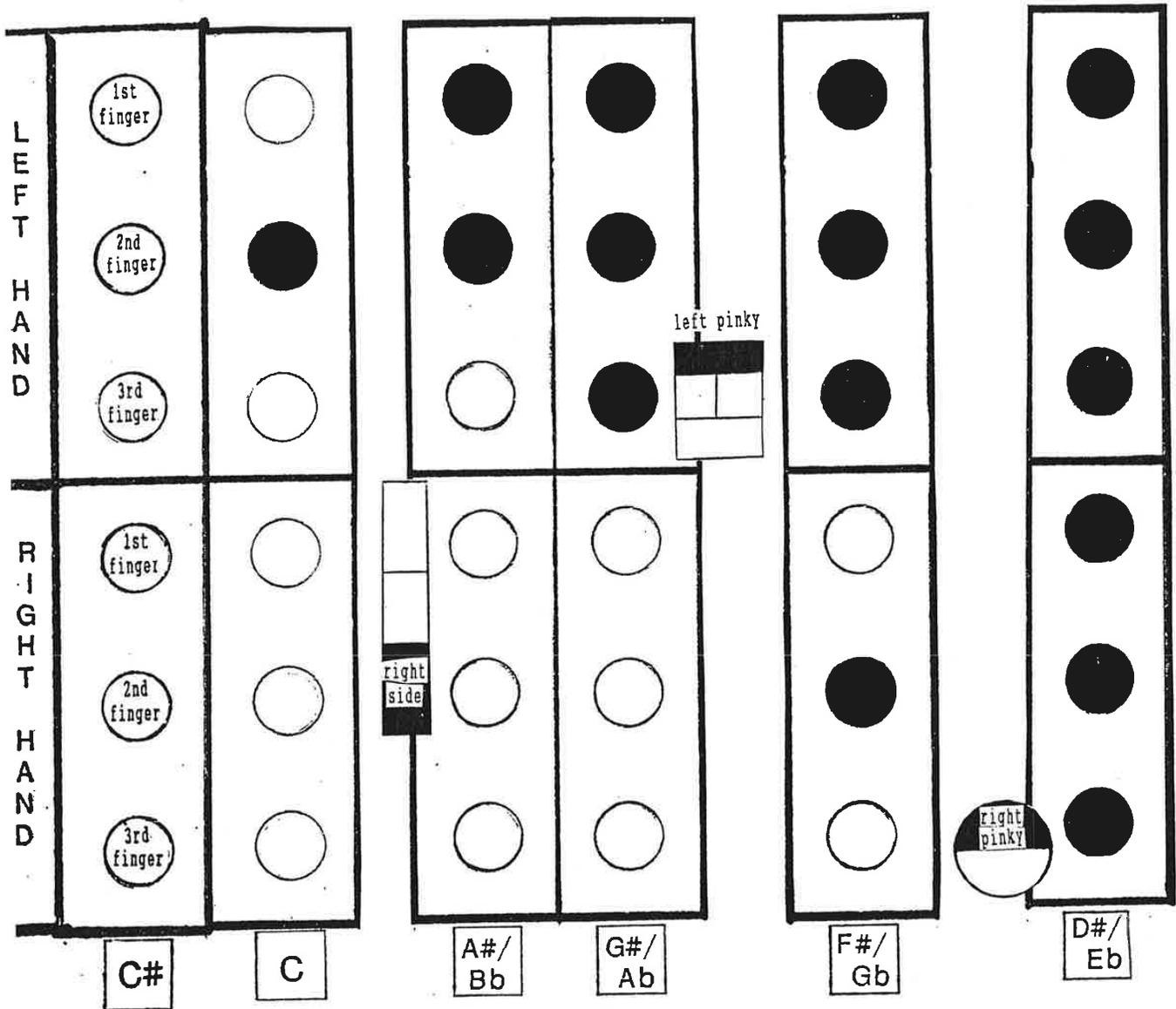
low low low middle high middle, low high middle middle low.
As- king for a pen- cil, as- king for some light.

Remember:

Slur everything except the repeated notes, which you tounge.

Breathe at commas or periods in the words only!

More Notes on: Saxophone



b=flat
#=sharp

Half-Step Check List

This is what one "octave" looks like on a piano, with the letter-names for each note:

	C# / Db	D# / Eb		F# / Gb	G# / Ab	A# / Bb	
C	D	E	F	G	A	B	C

An octave is the number of notes that you can play before you come to a note with the same name as the note you started on.

The octave shown above goes from C to C.

When you reach that starting note the pattern starts over again.

The next note (after the C on the right) of the pattern above would be C#/Db.

The distance between each note and its upper or lower neighbor is one half-step.

= "Sharp", a half-step higher,
and
b = "Flat", a half-step lower.

```

*****
*                               *
*           The Half-Step Rule:           *
* If you go up one half-step from any note (X), that note *
* becomes that note sharp (X#). *
* *
* If you go down one half-step from any note (X), that note *
* becomes that note flat (Xb). *
*****
    
```

The skinny notes have two names because they are a half-step higher than one neighbor, and a half-step lower than the other neighbor:

C#/Db is a half-step higher than C, and a half-step lower than D,
 D#/Eb is a half-step higher than D, and a half-step lower than E,
 F#/Gb is a half-step higher than F, and a half-step lower than G,
 G#/Ab is a half-step higher than G, and a half-step lower than A,
 A#/Bb is a half-step higher than A, and a half-step lower than B.

Half-Step Checklist, pg. 2

Actually, all of the notes are a half-step away from their upper and lower neighbors, so each note has two names.

For example, the note a half-step above C# is D. It could also be called C##, "C double-sharp". But it's easier to just call it D.

Which name you use for any note depends on key (which we will discuss later), and ease of reading.

For now, we will not use double sharps (##) or double flats (bb) when naming notes.

Looking at the octave on page 1, notice that there is no note between E and F. They are neighbors, and are one half-step apart.

The same is true of B and C.

Keep these points in mind while filling out the check list that follows.

Fill in the blanks:

A# = ___

Ab = ___

*B# = ___

Bb = ___

C# = ___

*Cb = ___

D# = ___

Db = ___

*E# = ___

Eb = ___

F# = ___

*Fb = ___

G# = ___

Gb = ___

* = these are tricky ones! Keep the Half-Step Rule in mind and refer to the octave on page one.

Four Step Approach For Practicing A Song

1. Play the correct notes (pitches) in the correct order

Practice going from one note to the next. While you are blowing one note, look at the next note. When you are sure of what it is, switch to that note and look to the next note. Teach your fingers how to switch from one note to the other. Go back and forth between tricky switches slowly. Gradually increase speed, making sure it always feels comfortable and relaxed.

2. Play the notes with the correct timing

Timing has to do with how long we hold the notes. Some notes are long, some short. The amount of time we are silent between notes is called rests.

The way we measure each note or rest is with a beat. Longer notes and rests can equal more than one beat, and shorter notes and rests can equal less than one beat. It is very important that your beat be steady. Using a metronome will help you with that. Start slowly and gradually increase the speed of the beat.

Combinations of long and short notes and rests are called rhythms. In order to be able to read rhythms, you need to understand what a time signature means, and what the different kinds of notes and rests look like (See “Music Reading Basics” sheet).

It helps to practice clapping the rhythms of a song separately from playing the notes. Then put notes and rhythm together.

3. Play with correct phrasing.

Just like in speaking, we play music in phrases. In speech, certain groups of words go together to make phrases and sentences. In between phrases and sentences, there are commas and periods. In between musical phrases there are breath marks. We play all the notes between breath marks in one breath, otherwise, the music sounds choppy, or doesn't make as much sense.

4. Use correct articulation.

There are two basic ways to go from one note to the next on wind instruments: slurring, and tonguing. Slurring is when you just blow and move your fingers from one note to the next. Tonguing is needed when you have repeated notes, the same note more than once in a row, in the same breath. In order to make separate notes while blowing one breath, we lightly touch the tip of our tongue to the tip of the reed (on sax and clarinet) or to the back of the top front teeth (on flute). This is like lightly saying “tih”.

Slur everything except repeated notes at first. Then you can experiment with different combinations of slurring and tonguing.

The Major Scale

A major scale always has the sound: do - re - mi - fa - so - la - ti - do.

It always starts on "do", going forward through each letter in the musical alphabet (a,b,c,d,e,f,g) until it comes back to "do" an octave higher.

A major scale can be built starting on each of the 12 notes in the chromatic scale.

Figuring out major scales by ear:

- 1) Start on any note of the chromatic scale and call that "do".
- 2) Proceed forwards through the musical alphabet.
- 3) Stop when a note doesn't "sound" like: do - re - mi...etc.
- 4) Determine whether the note needs to be: raised (sharp - \sharp) or
lowered (flat - \flat)
- 5) Go back to "do" and start up the alphabet again, remembering any altered notes.
- 6) Stop at, and alter, any other notes that don't sound like: do - re - mi...etc.
- 7) Repeat steps 5 and 6 until you reach the next "do" an octave higher than the "do" you started on.
- 8) Keep track of the alterations on the Alteration List (next page)

Remember:

- There can only be either sharps or flats in any scale, but not both.
- The note "a" comes after "g" (a,b,c,d,e,f,g, → a,b,c...etc.)
- There can only be one kind of each letter: not a and a \sharp , g and g \flat etc.

Alteration List

"do" "scale name" (the first note)	the musical alphabet: notes that may need to be altered into sharps (#) or flats (b)							Total number of sharps or flats (count across and add up # 's and b 's) <u>Key Signature</u>
	A	B	C	D	E	F	G	
1	G							
2	F							
3	C							
4	B _b							
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

	1 _# :	2 _# :	3 _# :	4 _# :	5 _# :	6 _# :	7 _# :	
0 _{#/b} :	1 _b :	2 _b :	3 _b :	4 _b :	5 _b :	6 _b :	7 _b :	re-order key signatures <--- here

Key Signatures

C major



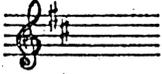
F major



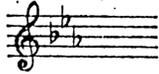
G major



D major or B minor



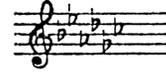
E♭ major or C minor



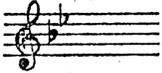
B major or G# minor



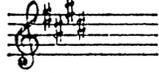
G♭ major or E♭ minor



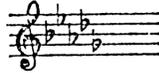
B♭ major or G minor



E major or C# minor



D♭ major or B♭ minor



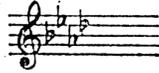
C# major or A# minor



A major or F# minor



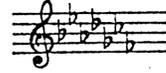
A♭ major or F minor



F# major or D# minor

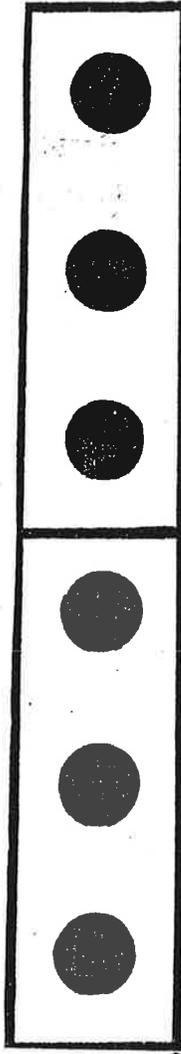


C♭ major or A♭ minor



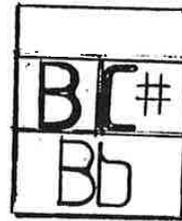
Pinky Notes on the Saxophone

Low C:



plus any one of these pinky notes

creates the note indicated,



left



Music Reading Basics

Key Signature
Treble or "G" Clef
Time Signature
bar or measure line
The Staff has 5 lines and 4 spaces between the lines
a measure
Top Number = number of beats per measure
Bottom Number = what kind of note gets one beat

The names of the notes on the staff go according to the **Musical Alphabet**, line/space/line/space, etc. As the notes get higher, the names go forward through the alphabet, and as the notes get lower, their names go backwards through the alphabet.

Kinds of Notes:

Whole Half Quarter Eighth Sixteenth

Kinds of Rests:

= sharp ♭ = flat ♮ = natural

What words do these notes spell?



— — — — — — — — — —



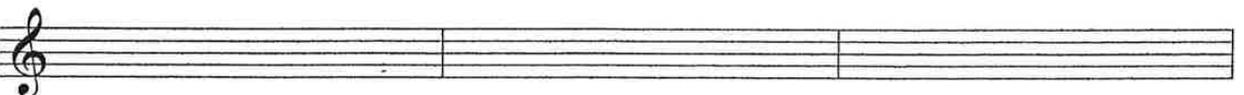
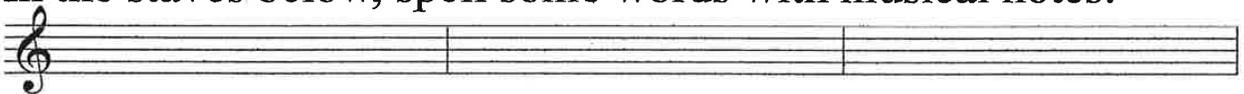
— — — — — — — — — —



— — — — — — — — — —



In the staves below, spell some words with musical notes:



Clapping Exercises

#1 **One note per beat:**

counting: 1 2 3 4 1 2 3 4 1 2 3 4

#2 **Two notes per beat:**

1 + 2 + 3 + 4 + 1 + 2 + 3 + 4 + 1 + 2 + 3 + 4 +

#3 **Off-beats: feel the beats (in parenthesis) but only clap on the "+"s**

(1) + (2) + (3) + (4) + (1) + (2) + (3) + (4) + (1) + (2) + (3) + (4) +

#4 **Clap and repeat each measure by itself, then clap as written**

1 (2) (3)(4) (1) + (2) (3)(4) (1) 2 (3)(4) (1) (2) + (3)(4)

(1)(2) 3 (4) (1)(2) (3) + (4) (1)(2) (3) 4 (1)(2) (3) (4) +

#5 **Fill in empty measures to look like #4, except in 4/2 time**

1 (2) (3)(4)

(1)(2) (3) (4) +

Mouthpiece Exercises

These exercises go through a progression, each one building on the one that came before it. Each exercise should start with a full breath, and that breath is used up over the course of the exercise.

The main idea with these exercises is to use only the muscles you need to use (don't work too hard!). This is called efficiency. Keep everything as relaxed as possible. It is very helpful to do these exercises in front of a mirror. The mouthpiece should come straight out of the mouth, not tilted up or down, and the chin should not look tight.

#1: Breathe normally through the mouthpiece

- use no muscles at all, just breathe easily

#2: Make the quietest possible sound

- add air pressure (blow harder) and pressure on the reed by bringing your top and bottom teeth together - the top teeth should be on the top of the mouthpiece and the bottom teeth, covered by the bottom lip - not too much lip - should be able to feel the reed.
- the sound should start easily - if it doesn't, try putting more mouthpiece in your mouth
- the sound you hear should not sound squeaky - if it does, try putting less mouthpiece in your mouth, and make sure your bottom teeth are not directly touching the reed
- each time you start the sound, lessen the air and reed pressures so that it stops (don't stop blowing altogether, though) and then start the sound again so you feel just how much of each pressure is needed to start the sound- it should sound like a series of "peeps"
- the goal of this exercise is to make about 10 peeps, as quietly as possible in one breath

#3: Make a sustained sound

- add a little more air pressure than you did for the quietest possible sound (a little louder)
- the sound should be continuous (should not stop), and should not get louder or softer
- the goal of this exercise is to be able to hold a note at least 10 seconds

#4: Crescendo/Decrescendo

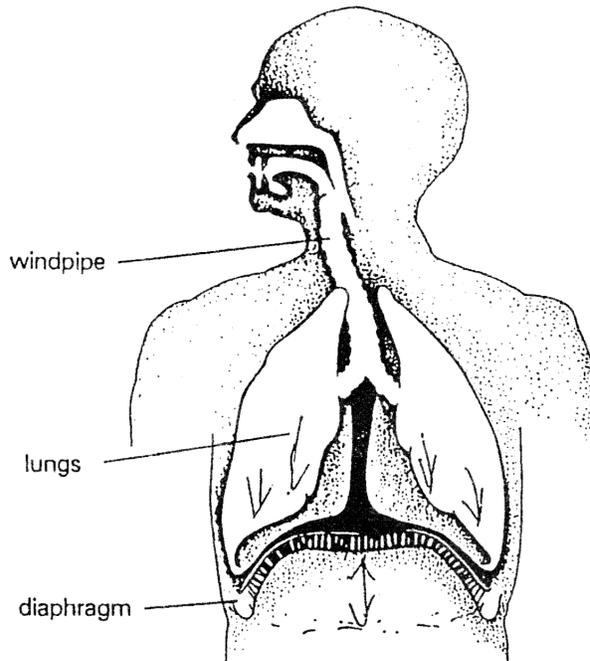
- these words are used in music to tell the performer to get louder (crescendo) and get softer (decrescendo)
- start with the quietest possible sound, add a little more air pressure like in the sustained sound, and then keep adding air until you are as loud as possible - you may have to decrease the reed pressure slightly so that the reed doesn't choke off
- when you get the loudest sound possible, start decreasing the air pressure until you are back at the quietest possible sound.
- the goal of this exercise is to go gradually from quietest to loudest and back to quietest in one breath without any pitch change (the sound should get louder and softer, but not higher and lower)

#5: Glissando:

- this word is used in music to mean change from high to low in a smooth, gradual way.
- the way you do this on the mouthpiece is by changing the pressure on the reed (less=lower, more=higher) and by changing the shape of your throat
- you change the shape of your throat by changing the vowel sound it would be making if you were speaking - it's like silently saying "eee" (for a high sound) and changing to "ahh" (for a low sound)
- remember that you can't take all the pressure off the reed, because you do need some to make a sound on the mouthpiece - so the change in pitch will be mostly done with the throat
- the goal of this exercise is to be able to glissando down and up one octave, and play simple songs just using the mouthpiece

It's useful to understand just what happens when you breathe. Everyone realises that there is a connection between breathing and the rhythmic expansion and contraction of the rib cage which accompanies it, but most people get the connection the wrong way around, thinking that the chest expands because the air that they breathe in pushes their ribs apart, as if their sides were the sides of a balloon. In a funny way, it does actually feel like that, but the reverse is true; air is drawn in *because* you expand your rib cage — the ribs move first.

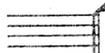
As you expand your chest, you create spaces inside you — in your lungs — and air rushes in through your nose and mouth to fill those spaces because air is like water and will fill every crack it can whenever it can. At the same time that you move your ribs outwards, you move a large muscle called the diaphragm downwards, thus creating even more room in your lungs. Your diaphragm is situated under your lungs and above your stomach.



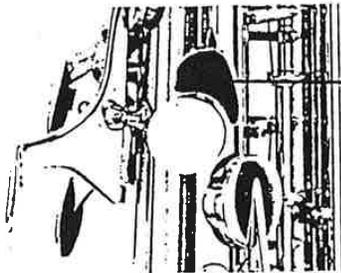
When most people breathe, they hardly use their diaphragms at all and make only small movements with their ribs. As a result, only a quarter of the potential capacity of the lungs is used. woodwind Every flute player has to get into the habit of breathing more deeply than this, making full use of the rib cage *and* the diaphragm. Avoid military style deep breathing in which the shoulders are raised, the chest puffed out and the tummy sucked in. That might look impressive but the lower, larger parts of the lungs are actually being *deflated*. If the diaphragm is used well, your stomach, back and sides will all bulge outwards as well as your chest. The shoulders shouldn't move.

Try taking a deep breath now. Try to fill your lungs from the bottom upwards. If you rest your hands on your waist, they should be pushed apart.

Glossary

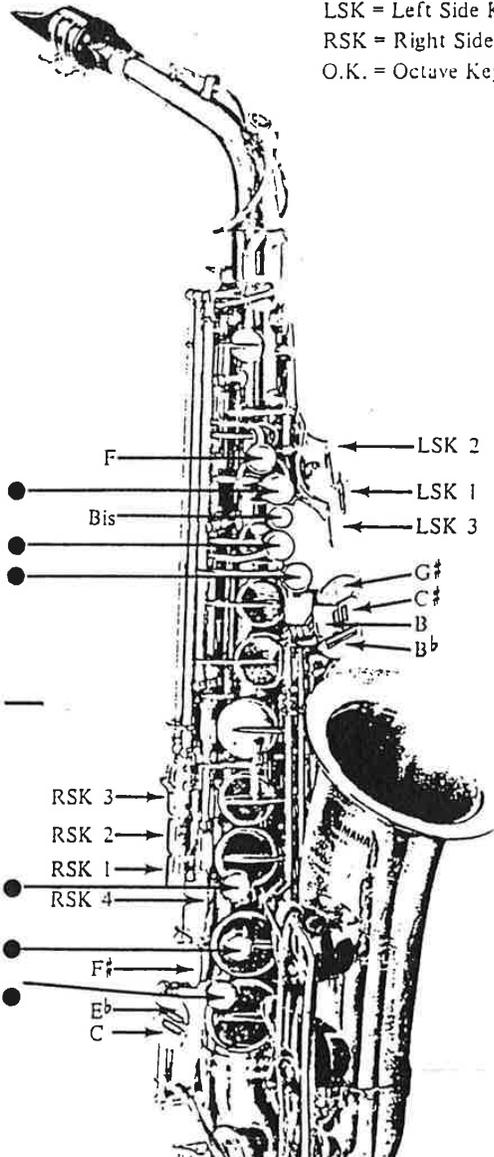
1.  staff.
2.  - treble clef sign.
3.  - bass clef sign.
4. $\frac{4}{4}$ - time signature.
5.  bar.
6.  double bar.
7.  measure.
8. \flat - flat - lowers a note a 1/2 step.
9. \sharp - sharp - raises a note 1/2 step.
10. \natural - natural - cancels a sharp or flat.
11.  leger lines.
12.  tie.
13.  slur.
14. C - common time. (Same as 4/4 time)
15.  repeat section between two sets of dots.
16. D.C. - Da Capo - go back to beginning.
17. D.S. - Del Segna - go back to sign (X).
18. Fine - finish - the end.
19.  - hold or fermata - give extra time.
20. X - repeat preceding measure.
21.  1st and 2nd endings. Play 1st ending the first time - then repeat strain and play 2nd ending the second time.
22. C - coda sign - go to coda.
23. X - sign.
24. Key Signature - Flats or sharps placed at the beginning of each line to indicate certain notes that are to be sharped or flatted.
25. *pp* - pianissimo - very soft.
26. *p* - piano - soft.
27. *mp* - mezzo piano - moderately soft.
28. *mf* - mezzo forte - moderately loud.
29. *f* - forte - loud.
30. *ff* - fortissimo - very loud.
31. \blacktriangleleft - increase volume.
32. \blacktriangleright - decrease volume.
33. rit. - ritard - gradually slower.
34. rall. - rallentando - gradually slower.
35. accel. - accelerando - gradually faster.
36. cresc. - crescendo - gradually louder.
37. dim. - diminuendo - gradually softer.
38. Chromatic scale - a scale that progresses by half steps.
39. C - alla breve, or cut time.
40. > - accent mark - play with force.
41. simile - continue in similar manner.
42.  - staccato - short and repeated.
43.  - triplets - three notes played in the time of two.

Fingering Chart



O.K.

Left Thumb



LSK = Left Side Key
RSK = Right Side Key
O.K. = Octave Key

A# Bb B C C# Db

Fingerings shown are for lower notes.
For upper notes add octave key.

D D# Eb E F

F# Gb G G# Ab A

A# Bb B C C# Db

D D# Eb E F F# Gb

O.K. LSK 1 O.K. LSK 1, 2 O.K. LSK 1, 2 RSK 3 1. O.K. LSK 1, 2, 3 RSK 3 2. O.K. LSK 1, 2, 3 RSK 3, 4