**Percussion Basics**

**Snare Drum**

Holding the sticks:

* Thumb and first finger form a “T”. This is important for both “matched” and “traditional” playing.
* The fulcrum is between thumb and the second joint of first finger.
* The other fingers are wrapped loosely around the stick. There should be no gap between thumb and first finger/hand.
* The back of the hand should be flat, the palm to the ground. For traditional grip, the left hand should be vertical. The first finger, not the thumb, provides the control.
* Stick should naturally be 90 degrees to one another (matched or traditional). Check to see the back of stick is between wrist and base of pinky finger.
* Motion is from wrist, not from arm, shoulder, etc. It’s a knocking on a door motion. For traditional grip, the motion is from the rotation of the wrist, like turning a door knob.
* Where on the stick to hold depends on how efficient the stick bounces, usually this is 1/3 way from the butt to the tip. Does is make as many bounces as possible?
* Where on the head to play depends on dynamics: just off center of head for most playing, go to the edge for softer playing.
* Make sure we are playing over our snares on the bottom, always listening for that snare sound at all dynamics. Always set the drum with the snare strainer facing toward the performer. This will help playing over the snares and allow the performer to quickly turn on/off the snares.

Types of strokes:

* Legato strokes and taps: bounced strokes that have continuous motion, they start and end in the same position.
* Down stroke: a accent without a rebound, stick starts in up position and ends in down position.
* Up stroke: a tap with a large rebound (preparing for accent), stick starts in a down position, ends in an up position.

Rudiments:

* It’s important to understand basic rudiments
* Rudiments are essentially scales. These combinations must be thought of musically and not just as a technical exercises.
* Seven essential rudiments of the Percussive Arts Society in order of recommended learning:
  + Single stroke roll
  + Multiple bounce roll
  + Double stroke roll
  + Five stroke roll
  + Single paradiddle
  + Flam
  + Drag

Equipment Specific items:

* Arms of the stand should not touch the head
* When tuning the drum, use a cross pattern
* Tuning the batter head lower than the top head gives drum a deeper tone and slight fall-off in decay (pop, funk, rock styles)
* Tuning bottom head higher reduces sustain and tone is more articulate (orchestral and marching)

**Bass Drum**

Playing the bass drum:

* Holding the mallet is the same as the snare drum, usually with the right hand
* Where we play on the head determines articulation
  + Playing in dead center will give us a very dry pop or cannon type sound.
  + Playing just off center is for our usual general purpose playing
  + Playing near the edge with a pair of lighter mallets works best for rolls. Like suspended cymbol, playing on the head at 4 o’clock and 8 o’clock position works best.
* The arm is used more to add weight to the strok
* Speed of hit determines volume and note length to a degree, following through (like hitting a baseball) will yield a longer note than a quick hit, which works well for staccato notes.
* The left hand is very important, it determines note length and articulation. Left hand is usually placed a quarter to a third of the way to the center and is on the head almost always (unless you want a long half or whole note)
* Using traditional grip makes playing rolls much easier.
* For very short notes, with no sustain or repeated short notes, put your foot on a chair and use your knee to dampen the batter head with your left hand on the resonant head.
* Listen to low brass for articulation (notation should be taken with a grain of salt!)

Equipment Specific Items:

* The type of mallet determines the character of the sound (hard, soft, heavy, light)
* Having a soft mallet, hard mallet, and a pair of soft mallets for rolls should be kept handy
* Like a snare drum, have resonating head looser will give a deeper tone and fall off in decay (preferred). Sometimes a more articulate sound is preferred: resonating head can be tuned slightly higher in pitch. Do not have both heads the same, this will make it sound like timpani.

**Crash Cymbals**

Holding Crash Cymbals:

* Make sure straps are in good condition. Learn how to tie a cymbal knot!
* Get rid of leather/wool pads which only damped the instrument.
* The thumb and first finger (snare drum T) are pinching and pulling the strap from the bell.
* Have the least amount of skin possible touching the cymbal- you want it to vibrate.
* Loops in cymbals are not for hands (unless you’re marching)

Performing a crash:

* You are dealing with air, we don’t want an air lock where the cymbals don’t speak.
* One cymbal is the anvil (doesn’t move) the other is the hammer. Ye motion of the hammer hitting the anvil.
  + Angle of cymbals to each other, the larger the angle for louder crashes, less angle for quiet crashes.
  + Offset of cymbals to each other, larger offset for louder crashes, almost together for quiet crashes.
  + Speed and weight of hit will determine dynamics. Do not force the cymbals together, let the react freely with each other.
* Direction of cymbals determines projection:
  + Having the edges face the audience will not project as much as having largest surface are facing audience, what you decide will depend on what you want or what is needed musically.
  + Most times it is desirable to have cymbal crashes blend and thus playing them horizontal is most common (and easier)
  + Having cymbals vertical and facing the audience will be quite loud. Figuring out how to crash cymbals and end up with cymbals vertical becomes fun and musical at the same time.
* Avoid large and extraneous arm movements (circular motion), this will help accuracy.

Equipment Specific Items:

* Thickness of cymbals determines dynamics.
  + Light weight cymbals (French) are good for quiet passages but will distort when played loudly.
  + Medium weight cymbals (Viennese) are good for most passages.
  + Heavy weight cymbals (German) are needed for specifically loud passages. These work well for composers like Wagner, Mahler, and marching band.
* Care and storage of cymbals is important- always put them back in the bag.
* Watch brilliant finish cymbals, if you drop them they are more likely to crack.
* Like bass drum, be wary of notation. Listen for instruments you usually play with and compliment (usually brass) and overall musical phrasing and form/dynamics to determine volume and duration of cymbal notes played.

**Suspended Cymbal**

Playing the suspended cymbal

* Basic Mallet grip is the same as snare drum
* Mallets are usually yard covered and of heavier weight than usual vibe/marimba mallet
* Stroke is not heavy, cymbal must vibrate
* Keep wrists loose, speed of roll does not need to be too fast
* Where you play on the cymbal is most always on the edge, location of mallets usually spread apart when performing a roll, around 4 o’clock and 8 o’clock
* Note length similar to bass drum, pay attention to dynamics and articulations
* Crescendo similar to brass, don’t get too loud too soon
* Stick sounds are usually played in the bow of the cymbal, ½ way from the edge to the bell of the cymbal. Using the shoulder of the cymbal will produce the loudest, fullest crash, not the tip.

Equipment Specific Items:

* Make sure the stand has a proper cymbal felt to prevent cracks
* Thinner cymbals have a larger dynamic range

**Mallet Instruments**

**(Bells, xylophone, marimba, vibraphone, chimes, crotales)**

Playing a mallet instrument:

* Basic grip is same as snare, mallets are 90 degrees from each other
* Height of instrument is vital to proper technique and dynamic ability
* Wrists are low
* The basic stroke must be a flowing one, or legato stroke. This starts in up position and returns to up position. This is the hardest thing to learn for students who play a lot of snare. Think of bouncing a basketball.
* Having the wrists low and the mallets up will allow you to be able to play any note with any hand without having issues of mallets crossing.
* Where the mallet hits the bar is equidistant from center node of bar (where cord and screw goes through), we want a combination of fundamental and overtones as it will project the best and have the best tone.
  + Hitting the center of the bar will get fundamental and is not desired in the lower ranges (and will crack lower marimba bars)
  + Hitting above the node will give all overtones
  + On accidentals, hitting the very edge of the bar will also get the same tone as hitting ½ way from the center to node. Some marimbas and xylophones have this area rounded off for a reason. Use this area for fast passages only, not for vibraphone, always for crotales.
* For chimes only: we need to hit perpendicular to the tube. Turning the mallet parallel to the ground will help the player not hit knuckles on frame of chimes when playing accidentals. If we play straight down, the tone will not project as well. Over time, this will cause a lot of cord damage.
* Mallet instruments are the only melodic instruments in the ensemble that you must look at to play, however, music should be lifted so the director can be seen with peripheral vision.
* Memorization must be done visually, not by muscle memory.

Musical items:

* Velocity equals volume, not a heavy stroke (remember Newton’s 2nd law: F=MA)
* A lighter mallet will get an articulate tone, a heavier mallet will get a fuller tone. It is possible to have too heavy of a mallet which prevents the bar from speaking.
* Brass mallets are often too much for bells
* Play 2 octave scales with alternate sticking, this allows versatility with both hands

Equipment Specific Items:

* Do not set anything on the mallet instruments (or any percussion instrument for that matter)
* Move instruments by the ends of the instrument, not by the rails.
* Resonators help with volume and tone. They are tuned specifically for the instrument and need to be free of garbage and dents.
* The real difference between marimba and xylophone is how the bars are tuned. What makes these instruments expensive is the tuning involved. The fundamental and all overtones to three octaves are tuned!
  + A marimba is tuned so the octave and fifth are predominant in the overtone series
  + A xylophone is tuned so the third is predominant in the overtone series

**Timpani**

Playing the timpani:

* Timpani drumheads are very thin, stroke must come up like mallets. Sound on timpani goes in and out through the one head
* Holding the mallet is different, thumb is on top and hand is in vertical position (called French grip). Timpani mallets are held parallel to one another, the arm rotates as the mallet goes down.
* Like mallet instruments, the rest position of the mallet is up. The stroke is similar, a down-up motion. Again, think of bouncing a basketball.
* Where the mallet hits the drum is usually a quarter of the way from the edge to the center or 3-4 inches from the edge.
* Too often we play timpani like tom-toms. This is not good for tone or speed.
* You can play timpani with the palm down method (German grip) but you must have the same technique of mallet coming to up position.
* The weight and softness of the mallet affects the tone and articulation. Too often students do not use hard enough mallets and 8ths/16ths get muddy. Keep differing mallets close by.
* Like bass drum, listen to low winds to ensure pitch and articulations match. Timpani must always be in tune!

Equipment specific items:

* Timpani need to be taken care of, do not play with tuning of heads and always work to prevent dents.
* Pedals need to be taken care of and not played with- they control tuning!
* Typical timpani tuning: 32” D, 29” F, 26” Bb, 23” D. each drum has the range of a fifth
* When moving the timpani, never hold by the rim and always have the pedal in the up position.

**Triangle**

Playing the triangle:

* The triangle is like a cymbal, it has a definite plane and we must strike with a motion perpendicular to the plane, not parallel.
* Hold the triangle clip with the left hand as if holding a cup of water or making a table with your thumb and middle finger. The left hand is also used as a dampener.
* The right hand holds the beater with a French timpani grip: thumb on top
* Hit the triangle with the tip of the beater and at the corner of the triangle
* The size of the beater determines volume (Newton! F=MA)
* We must always see the triangle. It’s hard to hear if its not in your line of sight with the conductor.

**Tambourine**

Playing the tambourine:

* For most playing, a dry, staccato sound is desired. Instrument needs to be at a 45 degree angle to ensure dry sound. Having the instrument vertical or horizontal allows the jingles to move around too much.
* Hold the tambourine with left hand thumb and fingers dampening head on bottom. Right hand can use either fist or combination of fingers to play rhythms.
* For quiet passages using fingers, experiment playing over/not over the jingles.
* When playing fast rhythms:
  + Put your foot on a chair or box to help elevate the knee
  + For quiet passages, tambourine head or shell rests on knee, both hands play using either all fingers and down to one finger
  + For loud passages, alternate between fist and knee
  + Loud 16ths can also be played with an alternating front to back motion of the wrist
* Playing rolls
  + For quiet passages, thumb rolls are preferred and not too hard to learn. Hold the instrument in your left hand as usual, drag your thumb over the head with you palm down to vibrate over the head. Thumb rolls can be helped with beeswax.
  + For loud passages, shaking the instrument with the wrist gets the most volume. The instrument is held vertically and the wrist rotates with a doorknob turning motion. This motion perfected can also yield nice 16th notes.

**Tam-Tam**

Playing the tam-tam

* Stand where you can easily damped both sides, usually at the side.
* Using a heavy mallet half way from the edge to center will get the most fundamental overtones. Playing at the edge gives all overtones, playing at the center is all fundamental.
* On large tam tams (over 40”) using your leg or butt is necessary.
* Instrument should face the director/audience for maximum effect.
* Mallets are much heavier than bass drum mallets
* Experiment and find the sweet spot for each dynamic level.
* Most composers want a tam-tam, not a gong. Yes, there is a difference. Gongs have a specific pitch and has no overtones.

**Drum Set**

Setting up the drums:

* Make sure the set up allows you to reach all drums and cymbals
* Do not have your equipment at too steep an angle- you need to be able to play dynamically. Drum surfaces need to flow from on to the other.
* Use a carpet. Bass and high hat will slide across smooth floors.
* Make sure cymbals have felts and sleeves. We don’t want cracks!

Specific Genre and equipment items:

* Rock, pop, and funk drumming
  + Matched grip is most often used. This is partly due to the large amount of tom drums and cymbals used- the set up is simply bigger.
  + The bass drum and snare drum are the most important instruments in the kit that need to be heard by the ensemble. The right foot and left hand are essential.
* Jazz/Latin drumming
  + Traditional grip is most often used. This is mainly due to the ease of playing shuffle with the left hand and is also when utilizing cross stick rhythms.
  + The ride cymbal and hi-hat are the most important instruments in the kit that need to be heard by the ensemble. This is crucial, essentially the left foot and right hand.
  + Utilizing a French timpani grip in the right hand on the ride cymbal will help facilitate a good tone on the cymbal.