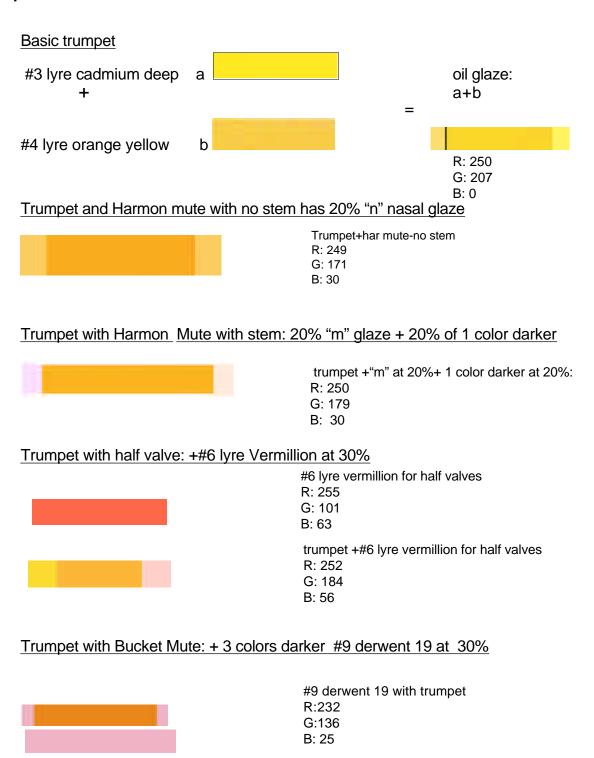
Brass GRP 5

Trumpets + Mutes



Trumpet with Plunger Mute: +#32 vandyke brown, paint is asphal t at 30%

#32 vandyke brown
R:215
G:210
B:206

Trumpet with plunger
R: 208
G:160
B: 27

Trumpet with Straight Mute: #23 berol prismc. ultr bl 902 at 20%

staright mute
R: 207
G: 223
B: 236
trumpet with straight mute

R: 201 G: 171 B: 31

Trumpet with cup mute: "m" + 10% 2 colors darker (#13 + #6)

cup mute+ "m' at 10% + 2color darker at 30% R: 254 G:195 B:200

Trumpet with cup mute R: 249 G:163 B: 32

1. Horns + Mutes

Basic Horn from #4 and #5 (60% on top)
R:209

G: 92 B: 0

Horn with half valve with #7 over at 40%

french horn with #7 over 40% for half valve R: 209 G: 69

Horn with bell in air or bell down (only on unmuted and loudly played) for up add #2

and down add #22

horn unmuted played loudly bell in air #2 %40

R: 218 G: 141 B:0



horn unmuted played loudly bell down + 22 at 40%

R:111 G: 33 B:0

Horn with hand mute + #13 for nasal sound



hand mute at 30% of #13 over Horn

R: 204 G: 64 B: 0

Horn with straight mute + #26 lyra Prussian blue at 20% complimentary over for a bright sound without edge--less resonance-lower overtones are gone



straight mute at 20% of #26 over Horn

R:167 G: 78 B: 0

Horn with harmon mute/no stem #12 + #13 +# 2 at 20% opacity



Horn with harmon mute/no stem "n" + 2 colors lighter

horn with cup mute "m" + 2 colors darker at 30%

over horn R: 180 G: 115 B:0

Horn with cup mute: #13 + #7 or "m" + 10% 2 colors darker at 30%



B: 43

Horn with plunger mute: #32 at 30% + Horn



horn with plunger mute #32 at 30%

R: 191 G: 101 B: 48

Horn with bucket mute: 3 colors darker at 30% # 8 lyra scarlet lake



horn bucket mute: #8 at 30%

R: 209 G: 72 B: 0

Trombones + Mutes

Basic Trombone

basic trombone #5 lyra light orange + #6 lyra vermillion

R: 209 G:48 B: 8



Trombone and harmon mute with stem: 1 color darker 20% #7 + "m" 20%#13



trombone, harmon with stem: 20% #13"m"+ #7 $\,$ 20%

R: 200 G:8 B: 3

Trombone and harmon mute without stem: "n" at 20% + 2 col liter #3at 20%



trombone, harmon without stem: 20% "n" + #3 at 20%

R: 157 G: 43 B: 0

Trombone with cup mute: "m" #13 at 10% + 2 color darker #9 at 30%



trombone and cup mute: "m" 10% + 2 col dark #9 at 30%

R: 207 G:30 B: 6

<u>Trombone with straight mute: + 20% complimentary= #25</u>



trombone with str. mute: #5 + #6 & 20% comp-#25

R:168 G: 43 B: 7

Trombone bell in stand: + 10% comp= #25 at 10%

trombone bell in stand: 10% #25 (complimentary)

R: 196 G: 75 B: 43



Trombone and plunger mute: +#32 vandyke brown at 30%

trombone + plunger: #32 at 30% R: 179 :G 70

B: 45

Trombone with bucket mute: + 3 colors darker, #16 at 30%

trombone with bucket mute: + 3 col darker,#16 30% R: 173

G: 50 B: 32

Trombone with whisper mute-darker and weaker than straight mute: + #23 prismacolor Ult. 902

trombone/whisper mute: + #23 (ult. blue) at 50%

R: 145 G: 87 B: 74

Tubas + Mutes

Basic Tuba: #7 (lyra Scarlet Red) and #8 (lyra scarlet lake)

basic tuba: #7 and #8 R: 194 G: 11 B: 0

Tuba with felt mute: deadened= loses higher harmonics, add cooler than comp #20

(lyra Juniper green) at 50%

tuba with felt mute: add #20 at 50%

R: 118 G: 9 B: 0

Tuba with straight mute: 20% of #18 (lyra viridian)

tuba with straight mute: #7 + #8 + 20% #18 R: 204 G: 129 B: 109

Tuba with half valve: add 40% #11 (Prismacolor 924 Crimson Red)

tuba with half valve: #7 and #8 + 40% #11 R: 255 G:68 B: 88

Strings Group 4

Violins

```
Violins: #12 (derwent 48 may green)
                                         violin: #12
                                         R: 174
                                         G: 255
                                         B: 0
Violin sul pont.: add #1 (lyra zinc yellow) at 30 %
                                        violin sul pont: #12 + #1 at 30%
                                        R:198
                                        G: 252
                                        B: 1
Violin with sul tasto: add #17 (Karismacolor True Green) at 30%
                                        violin sul tasto: #12 + #17 at 30%
                                        R: 138
                                        G: 252
                                        B: 1
Violin with mute: add 30% #20 (lyra juniper green)
                                        violin with mute: #12 + #20 at 30%
                                        R: 151
                                        G: 221
                                        B: 1
Violin with natural harmonics: #13 (complimentary color of #12 violin) at 30%
                                       violin with natural harmonics: 30% #13 on #12
                                       R: 193
                                       G: 176
                                       B: 1
Violin with open strings: add 20 % #5
                                        violin with open strings: add 20% #5 (lyra light or) to #12
                                        R:193
                                        G: 223
                                        B: 1
Violins with crush tone: add #32 (lyra van dyke brown) at 40 %
                                      violins #13 with crush tone + 40% #32
                                      R: 167
                                      G:195
                                      B:83
Violins with col legno battuto (clb.) and clt, or col legno tratto: + 40% #36(lyre burnt
ochre)
                                      violins #13 with clb. or clt.+ 40% #36
                                      R: 186
                                      G: 185
```

Violins played pizz. add 30%#21(lyra bordeaux to darken the color



violins #13 played pizz: + 30% #21

R: 154 G: 178 B: 0

Violas

Violas are #17 (derwent 46 Emerald Green)



viola #17 (karisma true green)

R: 0 G: 254 B: 51

Viola with sul pont.: Add 30% #31 (karisma yellow Brice) over #17



viola #17 with sul pont.+ 30% of #31(karisma yel brice)

R: 109 G: 249 B: 4

Viola with sul tasto: Add 30% of #10 (derwent jade green) over #17



viola #17with sul tasto + 30% of #10 (derwent jade green)

R: 30 G: 249 B: 100

Viola with mute: add 30% of#25 (lyra peacock blue53) over #17



viola #17 with mute + 30% of #25 (lya peacock blue)

R: 0 G: 198 B: 43

Viola with natural harmonics: #17 + #9 (derwent 19) at 30%



viola #17 + 30% of #9 for natural harmonic

R: 109 G: 172 B: 3

Viola with crush tone:add #32 (lyra v. dyke br) at 40%



violo #17 with crush tone + #32 at 40%

R: 128 G: 194 B: 132

Viola with clb. and clt.:#17 + 40% #36 (lyra burnt ochre)

viola #17 with clb. adn clt. : + #36 at 40%

R: 146 G: 185

B: 98

Viola with pizzicato: #17 + 40% #21(lyra Bordeaux



viola #17 played pizzicato

R: 0 G: 152 B: 35

Cellos

Cellos: #10 (derwent 41 jade green



cello is #10 (derwent 41 jade green)

R: 49 G: 249 B: 177

Cello with sul pont.: add #12 (derwent 48 may green) at 30%



cello #10 sul pont. + #12 at 30%

R: 44 G: 249 B: 124

Cello with sul tasto: add #25 (lyra peacock blue) at 30%



cello #10 with sul tasto: + #25 at 30%

R: 35 G: 207 B: 157

Cello with mute: add 40% of #26(lyra prussian blue)



cello #10 with mute: + #26(lyra prussian blue)

R: 32 G: 183 B: 162

Cello with natural harmonics:add #8 (lyra scarlet lake) at 40%



cello #10 with nat. harmonics: + #8 (lyra scar lk)30%

R: 49 G: 176 B: 119

Cellos with crush tone: add #32 (lyra van dyke br) at 40%



cello #10 with crush tone: + #32(lyra v. dyke br)40%

R: 90 G: 191 B: 148

Cellos with clb. and clt.: add #36(lyre burnt ochre) at 40%



cello #10 with clb. or clt.: + 36 at 40%

R: 109 G: 182 B: 114

Cellos played pizzicato: add to #10(dewent 41 jade green) 40% of #21



cello #10(derwent jade) pizzicato+ 30% #21

R: 42 G: 149 B: 123

Contrabasses

Contrabasses are #25 (lyra peacock blue) and #26 at 50% each



contrabass =50% each #25 and #26

R: 20 G: 69 B: 155

Contrabass with sul pont.: Add 40% #17 (derwent 46 emerald green)



contrabass #25-26 and sul pont.: + 30%#17

R: 23 G: 110 B: 121

Contrabass with sul tasto: Add 30% #23(prismacolor Ult. 902)



contrabass #25-26 sul tasto: + #23 (prism Ult. 902)

R: 14 G: 48 B: 142

Contrabass with mute: Add 30% #22(lyra blue-violet)



contrabass #25-26 with mute: + 30% #23(ult.)

R: 16 G: 48 B: 155

Contrabass with natural harmonics: Add 30% #5 (lyra light orange)



contrabass #25-26 with nat. harmonics: + #30% #5

R: 0 G: 70

B: 104

Contrabass with crush tone: Add #32 (lyra v. dyke br) at50%



contrabass #25-26 with crush tone: + 50% #32

R: 93 G: 119

G: 119 B: 135

Contrabass with clb. and clt.: Add 50% # 36(lyra burnt ochre)



contrabass #25-26 with clb. and clt. + 50% #36

R: 116 G: 107 B: 93

Contrabass with all pizz(thumb or snap pizz).: Add40% #21



contrabass #25-26 with thumb or snap pizz. + 40% #21

R: 0 G: 52 B: 103

Woodwinds Group 2

Piccolo

Piccolo: #31 (Ikarisma yellow brice)



piccolo is #31 (karisma yellow brice)

R: 219 G: 250 B: 6

Flutes

Flute: #2 (lyra light chrome)

flute is #2 (lyra light Chrome)

R: 255 G: 251 B: 0

Alto Flute: #2 at40% over #12 at 100 %



alto flute is mixture of #2 (lyra light Chrome) and #12

R: 196 G: 251 B: 0

Bass Flute: #2 at 80% over 60%#17



bass flute is mixture of #2 over #17

R: 89 G: 250 B: 0

Oboe

Oboe is #12 (derwent 48 may green) with #11 (Prismacolor 924) on top at 20%



oboe: #12 (may gr) under 20% #11(crimson red)

R: 174 G: 208 B: 0

Oboe into stand (darker & duller) add #16 at 30 % on top



Oboe #11 into stand + #16 at 30% on top

R: 199 G: 182 B: 121

Oboe into knee (darker and muted) add #10 at 20% on top

oboe #11-12 into knee: + #10 at 20% on top

R: 181 G: 216 B: 19

English Horn

English Horn is #13 (derwent magenta 22) with #12 (derwent 48 may gr) at40 %



english horn is #13 under and #12 at 40% over

R: 195 G: 0 B: 122

Clarinets

Clarinet is #17 (Berol true green) with 40% # 16 (lyra dark violet) on top

clarinet is #17 under and #16 at 40% on top

R: 60 G: 153

B: 116

Soprano Clarinet is #13at 30% (derwent mag 22) with # 14 (lyra light green) at

100% on top

soprano clarinet eflat: #13 at 30% under, #14 100% on top

R: 131 G: 178 B: 72

Alto Clarinet #20 (lyra juniper Green) under and #21 (lyra bordeux) over



alto clarinet:#20 under and #21 over

R: 129 G: 51 B: 67

Bass Clarinet #19 (lyra Mag) under w/#18(lyra viridian) at 30%over



Bass clarinet: #9 under #18 at 30%over

R: 36 G: 92 B: 145

Bassoon has #22(lyra blue violet 75%) under #3(lyra cad yel dp 40%) over



Bassoon has #22 at 75%under #3 at 40% over

R: 77 G: 0 B: 32

Contra Bassoon has #23(Prismacolor Ult. bl) under and #4 (lyra or. yel) at 40%

over

Contra Bassoon has #23 under 40% #4

R: 0 G: 0



Soprano Saxophone is full strength #3 [ly cad ye-dp] + 30% #22 [ly bl-violet]

Sop.Sax=100%#3[ly cad dp ye]+30%#22[lybl-vio]
R: 192
G: 163
B: 34

Saxophone is #22 (lyra bl vio) and #4 (lyra Or-yel) and #5(lyra lite or)

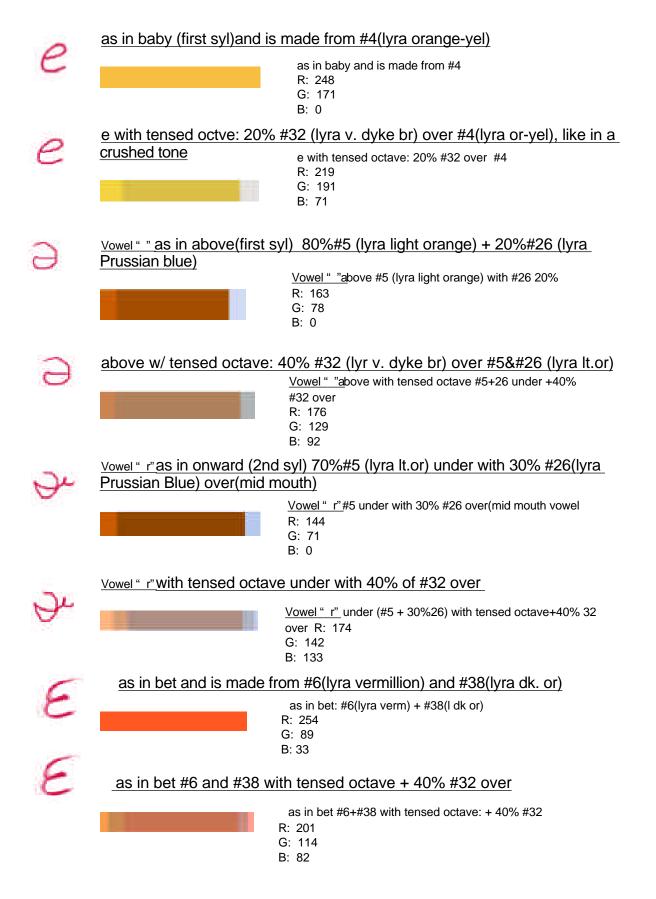
Saxophone has #22 with #4&5 R: 165 G: 64 B: 0

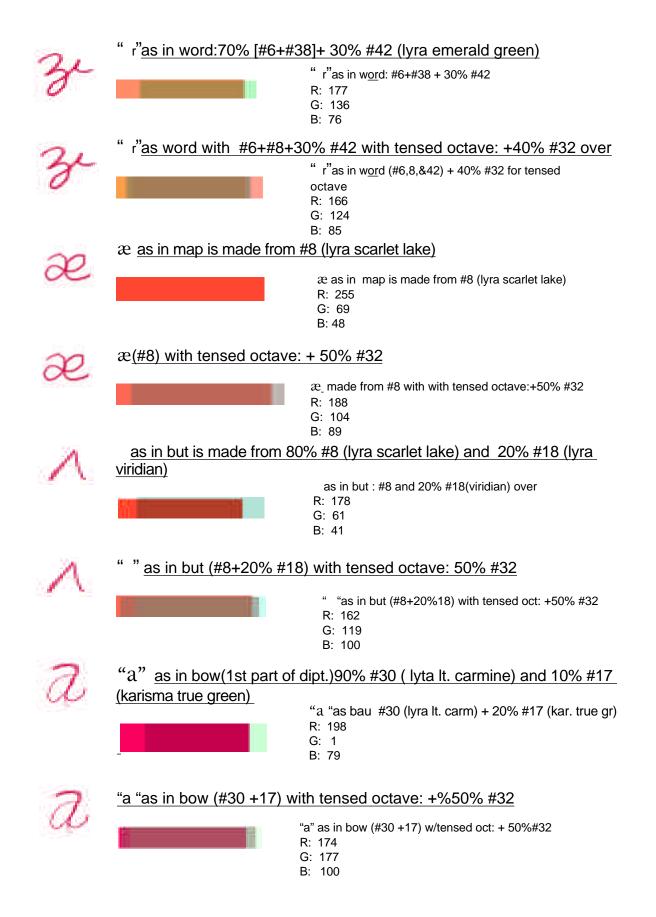
Vocals Group 1

I have considered the various voice levels, baritone, soprano, etc. as a pitch issue. Because the mouth chamber changes its very shape through vowel production, I have made the **vocal timbre** reflect vowel changes, based on the **vowel color chart** in notes. Following are color mixing of all vowels and their permutation with events like a vocal crush tone.

un-rounded vowels

"i" as in beat is made from #31(yellow brice) "i" as in beat is made from #31 (yellow brice) R: 236 G: 250 B: 6 "i" with #32(lyra van dyke brown) at 20 % for tensed octave over #31 tensed octave and i--ad 20% over #31 R: 215 G: 225 B: 120 "I"as in bit is made from #2 & #3(lt. chrome + canary yel) with 10% layer over of #16 (lyra dk. violet) as in bit and is made from #2 & #3 +10% layer over of #16 R: 246 G: 236 B: 64 ${
m i}$ with tensed octave; 20% #32(lyra v. dyke br) over #31 I with tensed octave-20% #32 over #2,3,17 R: 222 G: 202

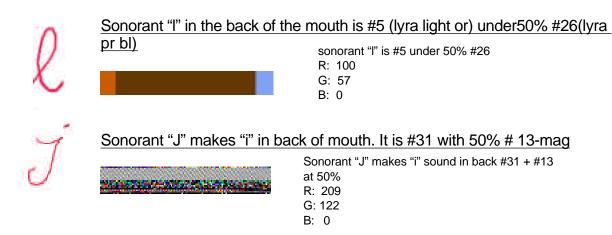




Rounded Vowels

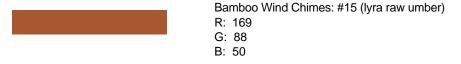
u	"u" as in fool: 50%[#14(I lt gr)+#31(yel.brice)] + 50% #21(lyra bordeaux) "u"=50%[#14+#31]+10% #21(under) R: 160 G:153 B: 3
u	"u" w/ tensed octave: #14+#31+#21and 30%#32(lyra v dyke br) "u" w/ tensed octave(#14,31,21) + 30% #32 over R: 193 G: 155 B: 21
Y	"Y" as in fümms: 90% #42 (lyra emerald gr+ 10% #8 Scarlet lake) "Y" =90% #42 (ly em gr)+10% #8 (Scar lk) R: 0 G: 158 B: 98
U	"U" as in full: 60%#42(lyra emeral green+ 40% #8(lyra Scarlet lake) "U"=60%#42+40%#8(lyra scarlet lake) R: 79 G: 100 B: 39
U	"U" & tensed octave: #42+#8 and 40% #32 over "U" & tensed octave (#42,8) with 40%#32 over R: 134 G: 145 B: 108
0	vowel "O" is 50% #6(lyra vermillion)under with 50% #18(lyra viridian) over "O" = 50% #6(lyra vermillion) under 50% #18 R: 23 G: 87 B: 57
0	Vowel "O" (#6,#18) with tensed octave: 50% #32(lyra v. dy.br) over vowel "O" (#6, 18)with tensed oct: +50% #32 over R: 110 G: 120 B: 100
0	Vowel " ?" as in hot is 50% #44(lyra deep cobalt) with 50% #4(lyra or-yel) Vowel ? ? 50% #44 and 50% #4 (lyra or-yel) R: 82 G: 88 B: 125

Vowel " ?" as in hot(#44 and #4)with tensed octave" 50% #32 over Vowel " 1" 50% #44 and 50% #4 w/tensed oc: +50% #32 G: 105 B: 94 Vowel "œ" as in Töne #22 [lyra Blue-violet] + 10% #4 {lyra or-yel} vowel "œ" 90% #22 _ 10% #4 R: 66 G: 0 B: 181 Vowel " as in calm with 50% #16(lyra dark violet) and 50% #2 (lyra light chrome) vowel " " is 50% #16 and 50% #2(lyra light chriome) R: 176 G: 121 B: 0 Vowel " "(50% #16 and #2) with tensed octave: + 50% #32 over vowel " " (50% #16 and 50% #2) w/tensed octave + 50% #32 over R: 168 G: 145 B: 127 Sonorants (acting as vowels) Sonorant "m" is #13 (derwent Mag.22) sonorant "m" is #13 (Derwent Magenta 22) R: 234 G: 0 B: 255 Sonorant "n" is #13 + 30% #12 (Derwent May Green) over sonorant "n" is #12 at 30% over #13 R: 217 G: 74 B: 178 Sonorant "N" (ng) is #13 (derwent Mag. 22) + #10 (Derwent Jade Green vowel N (ng) with #13 Magenta R: 148 G: 189 B: 216



Wood

Group 4:Bamboo Wind Chimes :pitched= #15 (lyre raw umber)



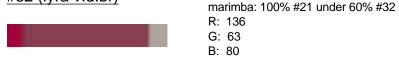
Group 4:Wood Blocks: pitched = #32 (lyre Vandyke Brown



Group 4:Temple Blocks: pitched= #9 at 100% under 60% #32 (lyre v.dyke br)

temple blocks: 100% #9 under 60% #32 R: 154 G: 63 B: 82

Group 5:Marimba: specific pitches-100 #21 (lyra bordeaux) at 60% under % of #32 (lyra v.d.br)



Group 5:Xylophone: specific pitches-100 % #13(dewent magenta) and 60% #15(lyre raw umber) over.



Skin

Group 3:Tambourine: a light sound-at 8, with pitched jingles (metal) the skin is not pitched, is noise. The skin is #31(Berol Karima ye. rice) and #15(lyre raw umber) and #24(Spectacolor silver)

- - -

tambourine is 100%#31 and 30%# 15(lyre raw umber) over

silver R: 210 G: 193

B: 4

Group 4: Snare drum: is a "7" (I/d) and timbre has a high rattle. #14 (lyre light green) and #15 (lyre raw umber) and when a rim shot: over silver metal #24.



snare drum= #14 (l.light gr) and 50% #15 (I raw umber) over silver metal for rim shot

R: 66 G: 171

B: 0

Group 4:Timpani: is a "2" and is 100% #18 (lyre viridian)under + 50% #32 (lyra v.dybr)



timpani= #18(I. viridian) + #32 (I v.dyke br)

R: 0 G: 113 B: 87

Group 4:Bass drum is a Nº1" or very dark. Combine 100% #23(prisma ultr. bl) under and 50% #32 (lyre v. dyke br).



bass drum= #23 under 50% #32 (l.v.dykebr)

R: 0 G: 0 B: 129

Metal

Group 6:Glockenspiel I/d Nº. 10--lightest of silver instuments. Put #31(karisma yel brice) over a bright silver surface.



glockenspiel has #31(karisma yellow brice

R: 219 G: 250 B: 6

Group 3:Triangle III/d N°. 9.5 and is pitched=#45 (prisma purple metal) and #46 (lyre ochre)



triangle has #45(Pri-pur-met) + #46(lyra ochre) over silver

R: 163 G: 43 B: 81

Group 3:Crotales L/d Nº 8.5 is pitched: #4 (lyra yel-or) and #28 gold



Crotales has #4(lyra or-yellow) over gold metal texture

R: 247 G: 207 B: 70 Group 3:Kin: pitched is #6 (lyra vermillion) over #40 (prisma metalic copper) or over metalic surface texture map.

Kin is #6(lyra verm) over #40 (prism metallic copper)

R: 213 G: 64 B: 42

Group 3:Kin on head of timpani--with pedal depressed/pressed. There is wawa of expanding lower fundamentals. Must make this wawa.



Kin on head of timpani #21 over metalic copper

R: 137 G: 1 B: 47

Group 6:Tubular Chimes, No3 on dark, pitched #37 (berol metalic green).



Tubular chimes are #37 berol metalic green

R: 17 G: 208 B: 164

Group 3:Suspended Cymbal, 22"=N°7.5, non-pitched with aperiodic rhythmic units= #34 (lyra brown ochre)+#33(lyra dark flesh) over #28(Prisma gold).



Cymbal 22" = #34(lyra br ochre)+#33(lyra dk fl)over gold

R: 182 G: 94 B: 44

Group 3:TamTam with hard mallet is broad spectrum, low formats, non-pitched= #29(lyra burnt carmine) over #28(prisma gold)



Tam tam w/hard mallet=#29(I. burnt carmine)over #28(prismagold)

R: 166 G: 89 B: 71

Group 3:Tam tam with soft mallet--darker: non-pitched=#29(lyra burnt carmine)+#16(lyra dark violet) over #28(prismagold)



Tam tam soft mallet=#29(burnt car) + #16 (dk v iolet)over pr-gold

R:135

G: 54

B: 65

Group 3:Tam tam with metal stick--brighter: non-pitched+#29(I burnt carm)+ #3(I cad yel dp)over #28(prismagold)



Tam tim with metal stick #29(lyra burnt carm)+#3(cad. yel dp)over gold

R: 212 G: 157

Group 3:Tam tam on the rim add #4(lyra or-yel)+#5(lyra lt.or) over #29 (l.burnt carmine) over #28(primsa gold)



Tam tam on rim +#4,#5,#29 over #28 gold

R: 187 G: 107 B: 5

Group 3:Elephant bells

Group 3:Cowbells

Group 10:Sheep bells

Group 10:Thunder Sheet is #27 (lyra cold dk grey) over silver metal



Thumder Sheet is #27 (ly cold dk grey) over silver R: 21

G: 22 B: 76

Glass

Grp: 7 Cloud Chamber Bowl is darkest of glass+ #39(metalic blue), always hit with soft mallet, many pitches, but not in mathematical ration, many enharmonic pitches. So-it has a dissonance-therefore compl color #4+#5.



Cloud Chamber Bowl #39 + [#4] under glass

R: 143 G: 129 B: 87

Grp: 7 Glass Harmonica is middle pitched between windchimes-higher than chamberbowl--is resonant and ringing: #4 [or-yel]+ #19[lyra magenta]



glass harmonical #4[lyra or-yel]+#19{lyra magenta] R: 213

G: 64 B: 104

Grp: 7 Glass Windchimes tinkely-high pitched, bright-metalic:#4 (ly or-yel)+#23



Glass Wind Chimes is #4(ly or ye) + #23 Ult bl

R: 198 G: 141 B: 14

Earth

Group 9:Rocks, non-pitched-- are very dark grey--with no image underneath: #21(lyra bordeaux) and #18 (lyra viridian).



Rocks=#21 (lyra bord) + #18 (lyra viridian)

R: 0 G: 11 B: 5

Group 9:Sand Paper Blocks is #43 (lyra gold ochre)over sandpaper image-even though pitchless



Sand paper blocks have #43 (lyra gold ochre)

R: 235 G: 141 B: 9

Keyboard

Group 5:Piano is #9(derwent 19) with tone clusters in image displacement



piano is #9 R: 255 G: 0 B: 81

Group: 6Celeste is #10 (derwent jade gr) over silver #24



celeste is #10 (derwent jade gr) over silver #24

R: 49 G: 249 B: 177

Group 6: Kalimba thumb piano is oboe into knee +red from marimba(#11,12, 21) over metal piano



kalimba thumb piano (#11, 12, 21)

R: 156 G: 123 B: 0

Keyboard group 2

Group 2: (woodwinds)Pipe Organ: will be 4 strips with colors derived from Clarinet, Alto Clarinet, Bass Clarinet, Contra Bassoon



clarinet: R: 69 G: 153 B: 116 alto clarinet:R:129 G: 51 B: 67 bass clarinet: R: 149 G: 204 B: 229 contra-bassoon: R: 0 G: 0 B: 76