Name: ______________________________

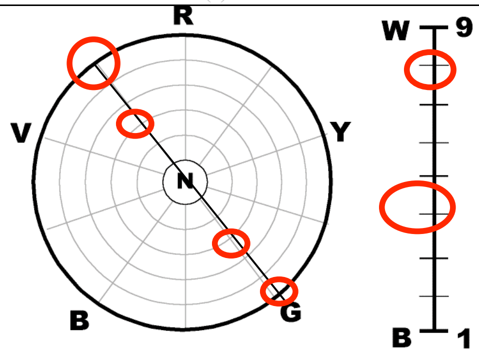
COMPLETED PROBLEMS

Color Planning Problem 1: (solution)

Plan and chart the 8 colors produced by a strict interpretation of this scheme:

Hue Scheme: Complementary
Dominant Hue: Red-Violet
Dominant Value: 4
Dominant Chroma: Middle Low
Out-of-Scheme Accent(s): none

Subordinate Hue(s): _______**GREEN**______
Subordinate Value(s): 8
Subordinate Chroma(s): High



	Limited To	Dominant
Value	4, 8	4
Hue	RV, G	RV
Chroma	ML, H	ML

Scheme Complementary

Color 1: Hue: ___**RV**_ **Val:** ___**4**__ **Chroma:** ____**ML**__

Color 2: Hue: __**RV**_ **Val:** __**8**__ **Chroma:** ___**ML**__

Color 3: Hue: _**RV**___ **Val:** _**4**____ **Chroma:** ____**H**__

Color 4: Hue: __**RV**___ **Val:** _**8**____ **Chroma:** ___**H**___

Color 5: Hue: __**GRN** **Val:** ___**4**__ **Chroma:** ___**ML**__

Color 6: Hue: __**GRN** **Val:** __**8**__ **Chroma:** __**ML**__

Color 7: Hue: _**GRN**__ **Val:** _**4**__ **Chroma:** _**H**__

Color 8: Hue: __**GRN**__ **Val:** _**8**__ **Chroma:** ___**H**___

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Note: the order of "Color1" , "Color2", etc. does NOT matter. Just make sure that each color within the scheme is identified and specified.

Notice that the "RV" color specs are repeated in the "Grn" colors – that is, the Value-Chroma specs are repeated.

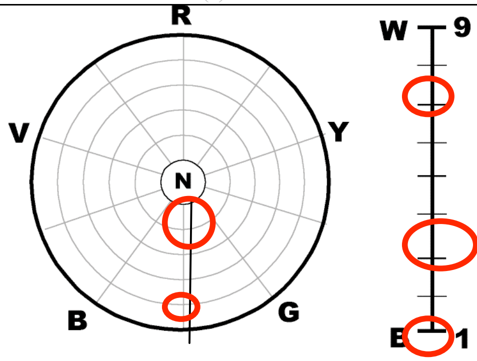
RV 7 H (high chroma not possible at a value 7)
G 7 H (H chroma likely not possible at value 7 -- though Munsell allows any chroma over 10 to be considered 'high'

Name: ____________________________

Color Planning Problem 2: (solution)

Plan and chart the 6 colors produced by a strict interpretation of this scheme:

Hue Scheme: Monochromatic
Dominant Hue: Blue Green — **Subordinate Hue(s):** _______(NONE)_____
Dominant Value: 3 — **Subordinate Value(s): 1, 7**
Dominant Chroma: Low — **Subordinate Chroma(s): Middle High**
Out-of-Scheme Accent(s): none



	Limited To	Dominant
Value	1, 3, 7	3
Hue	BG	BG
Chroma	ML, L	L

Scheme Monochromatic

Color 1: Hue: __BG__ **Val:** _1___ **Chroma:** __L___

Color 2: Hue: __BG__ **Val:** __3__ **Chroma:** __L___

Color 3: Hue: __BG__ **Val:** _7__ **Chroma:** ___L__

Color 4: Hue: __BG__ **Val:** __1___ **Chroma:** __MH___

Color 5: Hue: __BG__ **Val:** __3__ **Chroma:** __MH___

Color 6: Hue: __BG_ **Val:** __7__ **Chroma:** __MH__

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Note: the *order* of "Color1" , "Color2", etc. does *NOT* matter. Just make sure that each color within the scheme is identified and specified.

Unlikely Colors in the scheme:
BG 1/MH is somewhat unlikely – particularly since "value 1" we treat as black (the Actual Munsell color model, value 1 is quite dark, but not black.) However, a pigment such as Thalo Green does have a lot of chroma range, but it is so dark that we looks its effective chroma.
BG 7/MH is also unlikely.

Name: ____________________________

Color Planning Problem 3: (solution)

Plan and chart the 9 colors produced by a strict interpretation of this scheme:

Hue Scheme: Monochromatic

Dominant Hue: Red-Orange

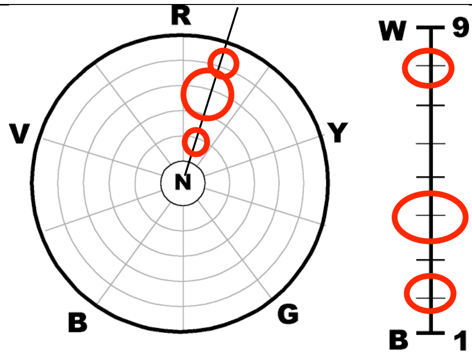
Dominant Value: 4

Dominant Chroma: Middle

Subordinate Hue(s): _____NONE_______

Subordinate Value(s): 2, 8

Subordinate Chroma(s): Middle High, Low



	Limited To	Dominant
Value	2, 4, 8	4
Hue	RO	RO
Chroma	L, M, MH	M

Scheme MonoChromatic

Color1	Hue:	RO	Val:	4	Chr:	M
Color2	Hue:	RO	Val:	2	Chr:	M
Color3	Hue:	RO	Val:	8	Chr:	M
Color4	Hue:	RO	Val:	4	Chr:	MH
Color5	Hue:	RO	Val:	2	Chr:	MH
Color6	Hue:	RO	Val:	8	Chr:	MH
Color7	Hue:	RO	Val:	4	Chr:	L
Color8	Hue:	RO	Val:	2	Chr:	L
Color9	Hue:	RO	Val:	8	Chr:	L

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Name: ____________________________

Color Planning Problem 4: (Solution)

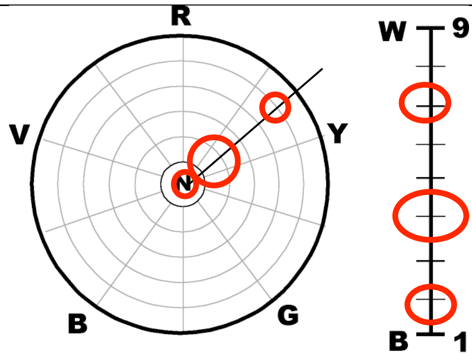
Plan and chart the 9 colors produced by a strict interpretation of this scheme:

Hue Scheme: Monochromatic (with neutral) **Out-of-Scheme Accent(s): none**

Dominant Hue: Yellow-Orange **Subordinate Hue(s): ______NONE_______**

Dominant Value: 3 **Subordinate Value(s): 1, 7**

Dominant Chroma: Low **Subordinate Chroma(s): Middle High, Neutral**



Color1	Hue:	**YO**	Val:	**3**	Chr:	**L**
Color2	Hue:	**YO**	Val:	**1**	Chr:	**L**
Color3	Hue:	**YO**	Val:	**7**	Chr:	**L**
Color4	Hue:	**YO**	Val:	**3**	Chr:	**MH**
Color5	Hue:	**YO**	Val:	**1**	Chr:	**MH**
Color6	Hue:	**YO**	Val:	**7**	Chr:	**MH**
Color7	Hue:	**YO (N)**	Val:	**3**	Chr:	**N**
Color8	Hue:	**YO (N)**	Val:	**1**	Chr:	**N**
Color9	Hue:	**YO (N)**	Val:	**7**	Chr:	**N**

	Limited To	Dominant
Value	3, 1, 7	3
Hue	YO, N	YO
Chroma	L, MH, H	L

Scheme _MonoChromatic_________

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

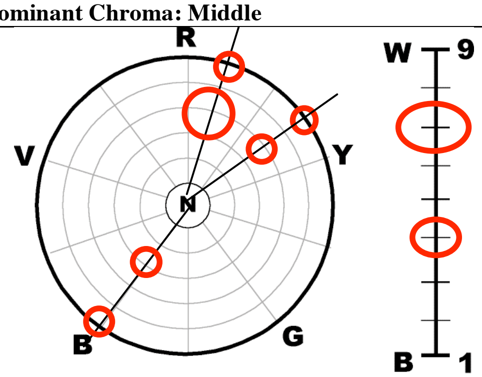
Unlikely or impossible colors in the scheme:
YO 1/MH is the least likely color in the scheme. YO at value 1 (a very dark brown), has very little range of chroma.

Name: ___________________________

Color Planning Problem 5: (solution)

Plan and chart the 12 colors produced by a strict interpretation of this scheme:

Hue Scheme: Split Complement
Dominant Hue: RRO **Subordinate Hue(s): YYO, ____ BLUE _______**
Dominant Value: 7 **Subordinate Value(s): 4**
Dominant Chroma: Middle **Subordinate Chroma(s): High**



	Limited To	Dominant
Value	7, 4	7
Hue	RRO, YYO, B	RRO
Chroma	M, H	M

Scheme Split Complement

Color1	Hue:	**RRO**	Val:	**7**	Chr:	**M**
Color2	Hue:	**RRO**	Val:	**7**	Chr:	**H**
Color3	Hue:	**RRO**	Val:	**4**	Chr:	**M**
Color4	Hue:	**RRO**	Val:	**4**	Chr:	**H**
Color5	Hue:	**YYO**	Val:	**7**	Chr:	**M**
Color6	Hue:	**YYO**	Val:	**7**	Chr:	**H**
Color7	Hue:	**YYO**	Val:	**4**	Chr:	**M**
Color8	Hue:	**YYO**	Val:	**4**	Chr:	**H**
Color9	Hue:	**B**	Val:	**7**	Chr:	**M**
Clr 10	Hue:	**B**	Val:	**7**	Chr:	**H**
Clr 11	Hue:	**B**	Val:	**4**	Chr:	**M**
Clr 12	Hue:	**B**	Val:	**4**	Chr:	**H**

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Impossible or unlikely colors in the scheme:
The high-chroma colors will often be impossible. The following are most likely impossible:
RRO 7/H
YYO 4/H
B 7/H
Each of these chroma-value combinations are a long way from each hue's intrinsic value.

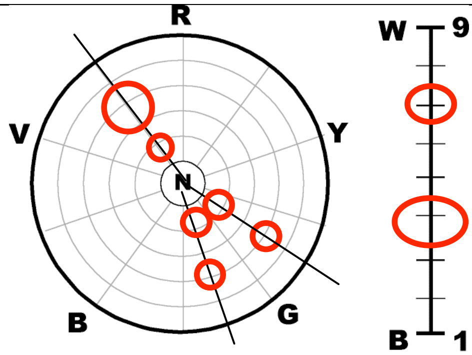
Name: ___________________________

Color Planning Problem 6: (solution)

Plan and chart the 12 colors produced by a strict interpretation of this scheme:

Hue Scheme: Split Complement
Dominant Hue: _____ RV ______
Dominant Value: 4
Dominant Chroma: Middle

Subordinate Hue(s): GYG, GBG
Subordinate Value(s): 7
Subordinate Chroma(s): Low



	Limited To	Dominant
Value	4, 7	4
Hue	RV, GYG, GBG	RV
Chroma	L, M	M

Scheme Split Complement

Color1	Hue:	RV	Val:	4	Chr:	M
Color2	Hue:	RV	Val:	4	Chr:	L
Color3	Hue:	RV	Val:	7	Chr:	M
Color4	Hue:	RV	Val:	7	Chr:	L
Color5	Hue:	GYG	Val:	4	Chr:	M
Color6	Hue:	GYG	Val:	4	Chr:	L
Color7	Hue:	GYG	Val:	7	Chr:	M
Color8	Hue:	GYG	Val:	7	Chr:	L
Color9	Hue:	GBG	Val:	4	Chr:	M
Clr 10	Hue:	GBG	Val:	4	Chr:	L
Clr 11	Hue:	GBG	Val:	7	Chr:	M
Clr 12	Hue:	GBG	Val:	7	Chr:	L

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

These color are likely all possible – since the highest chroma in the scheme is Middle, most hues can at mid-values (4 and 7 , here)

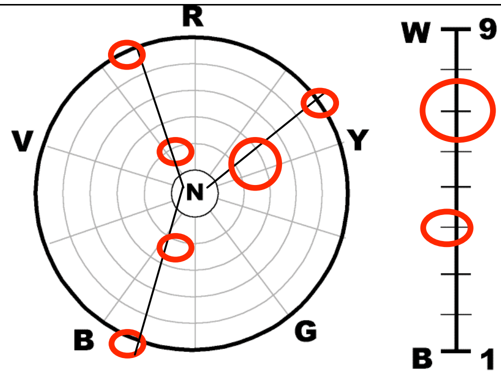
Name: ______________________________

Color Planning Problem 7: (solution)

Plan and chart the 12 colors produced by a strict interpretation of this scheme. Then select instances/colors of subordinate hues so that dominant chroma and dominant value are used to relate all hues. (that is, you *will eliminate some colors* that are possible in this scheme in order to create a smaller, more limited and more manageable palette.)

Hue Scheme: Split Complement
Dominant Hue: Yellow-Orange
Dominant Value: 7
Dominant Chroma: Middle Low

Subordinate Hue(s): RRV, BBG
Subordinate Value(s): 4
Subordinate Chroma(s): High



	Limited To	Dominant
Value	4, 7	7
Hue	YO, RRV, BBG	YO
Chroma	ML, H	ML

Scheme Split Complement

Color1	Hue:	YO	Val:	7	Chr:	ML
Color2	Hue:	YO	Val:	7	Chr:	H
Color3	Hue:	YO	Val:	4	Chr:	ML
Color4	Hue:	YO	Val:	4	Chr:	H
Color5	Hue:	RRV	Val:	7	Chr:	ML
Color6	Hue:	RRV	Val:	7	Chr:	H
Color7	Hue:	RRV	Val:	4	Chr:	ML
Color8	Hue:	RRV	Val:	4	Chr:	H
Color9	Hue:	BBG	Val:	7	Chr:	ML
Clr 10	Hue:	BBG	Val:	7	Chr:	H
Clr 11	Hue:	BBG	Val:	4	Chr:	ML
Clr 12	Hue:	BBG	Val:	4	Chr:	H

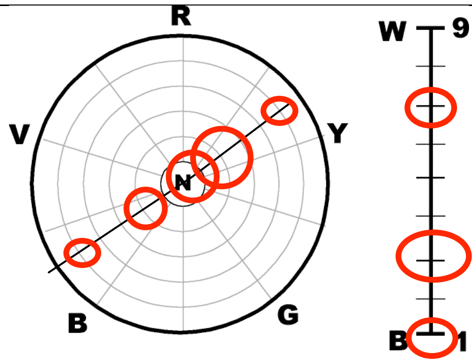
At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Name: ____________________________

Color Planning Problem 8: (solution)

Plan and chart the 15 distinct colors produced by a strict interpretation of this scheme:

Hue Scheme: Complementary (with neutral)
Dominant Hue: Yellow-Orange **Subordinate Hue(s): _____BBV______**
Dominant Value: 3 **Subordinate Value(s): 1, 7**
Dominant Chroma: Low **Subordinate Chroma(s): Middle High, Neutral**



	Limited To	Dominant
Value	3, 1, 7	3
Hue	YO, BBV	YO
Chroma	L, MH, N	L

Scheme Complement (w. Neutral)

Color1	Hue:	YO	Val:	3	Chr:	L
Color2	Hue:	YO	Val:	3	Chr:	MH
Color3	Hue:	YO(N)	Val:	3	Chr:	N
Color4	Hue:	YO	Val:	1	Chr:	L
Color5	Hue:	YO	Val:	1	Chr:	MH
Color6	Hue:	YO(N)	Val:	1	Chr:	N
Color7	Hue:	YO	Val:	7	Chr:	L
Color8	Hue:	YO	Val:	7	Chr:	MH
Color9	Hue:	YO(N)	Val:	7	Chr:	N
Clr 10	Hue:	BBV	Val:	3	Chr:	L
Clr 11	Hue:	BBV	Val:	3	Chr:	MH
Clr 12	Hue:	BBV	Val:	1	Chr:	L
Clr 13	Hue:	BBV	Val:	1	Chr:	MH
Clr 14	Hue:	BBV	Val:	7	Chr:	L
Clr 15	Hue:	BBV	Val:	7	Chr:	MH

At least one of these colors is impractical or impossible.
Which one(s)? And why can it/they not be used?

Note: the *order* of "Color1" , "Color2", etc. does *NOT* matter. Just make sure that each color within the scheme is identified and specified.

Note that some colors have been skipped since they are effectively repeats of the same color.
In particular,
— *YO 1/N* is the same color as *BBV 1/N*,
— *YO 3/N* is the same color as *BBV 3/N*,
— *YO 7/N* is the same color as *BBV 7/N*,
because they are each "neutral" (chroma) at the same value .