Day Five: Lighting Design

By: Ms. Hayes, Mr. Meyer, Ms. Yung

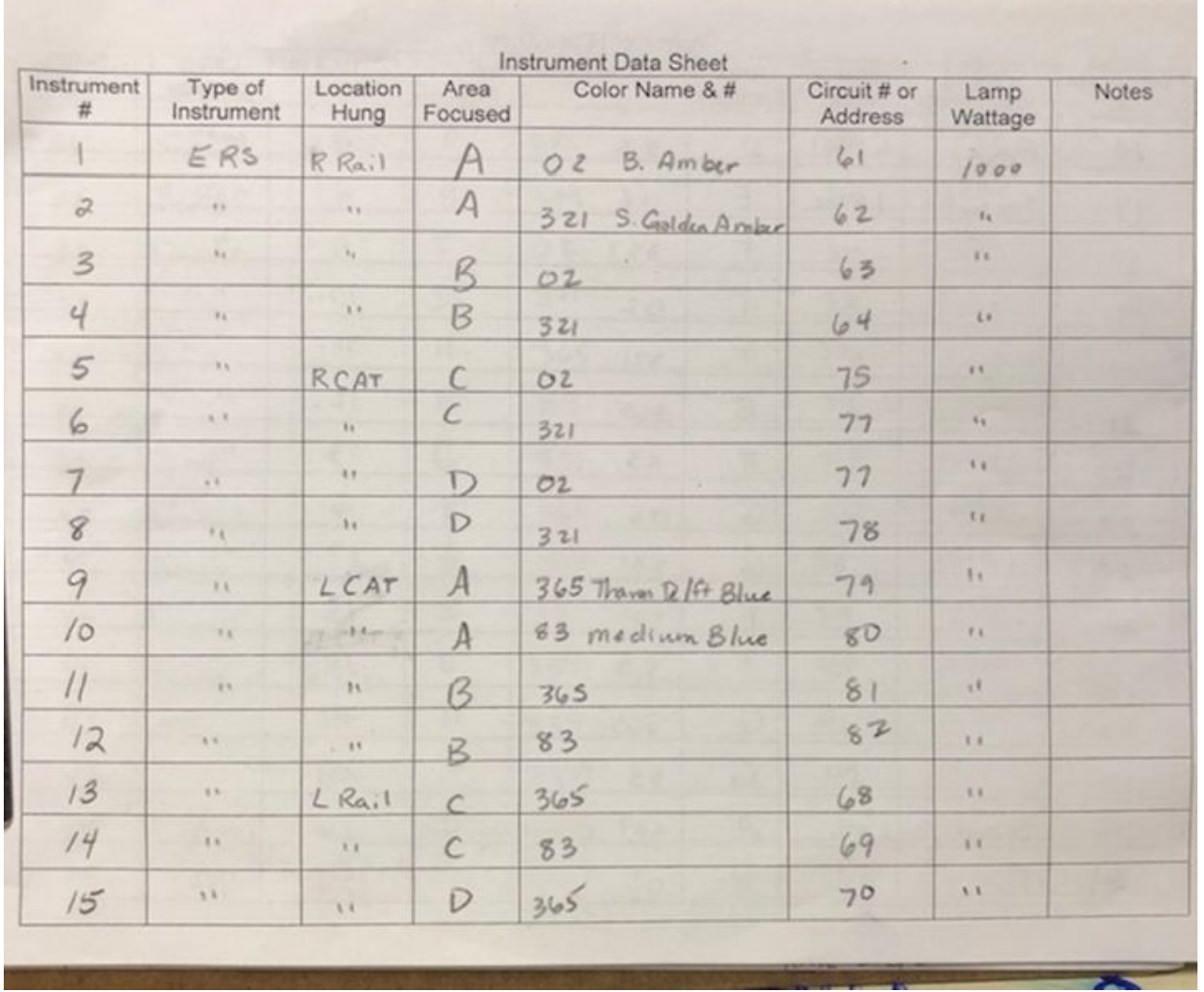
Learning Target: How to fill out a data sheet


Lighting for Stage

Explanation of Data sheet

- The instrument number refers to the number inside the instrument.
- Type refers to the type of instrument. Fresnel, ERS, Scoop…
- Location means where the instrument is hanging
- Area means where the instrument is focused
- Color name & number needs the number of the gel and its name. You only have to put the name on the first time you use it.
- Circuit refers to where you plug it in (explained in slide after data sheets)
- Lamp refers to the total watts in the instrument. This can vary, but for our purposes we will assume ERS & Scoop are 1,000 watts and Fresenels are 750 watts.

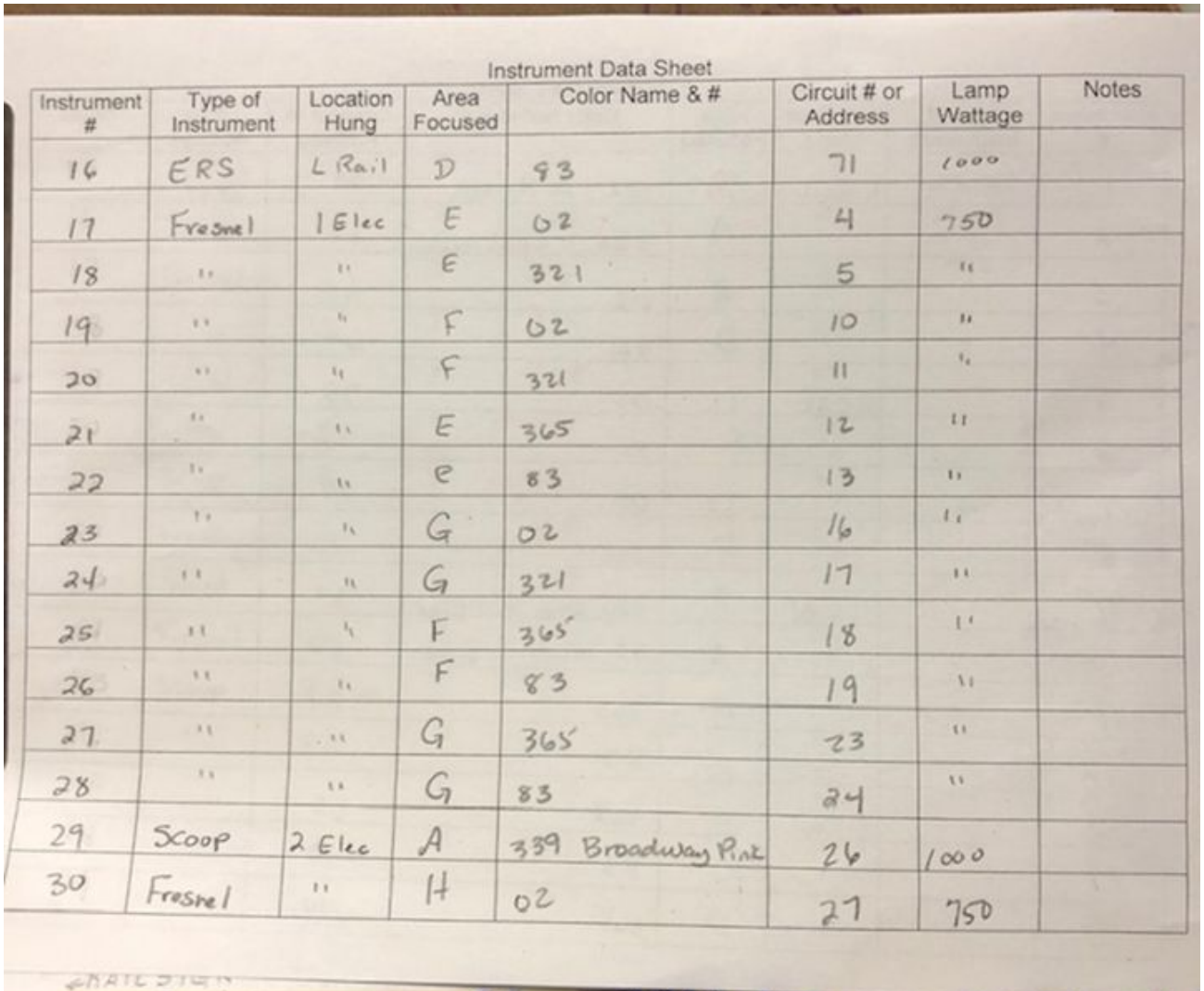
Step 7:
Fill out the data sheet for each instrument



Instrument Data Sheet

Instrument #	Type of Instrument	Location Hung	Area Focused	Color Name & #	Circuit # or Address	Lamp Wattage	Notes
1	ERS	R Rail	A	02 B. Amber	61	1000	
2	"	"	A	321 S. Golden Amber	62	"	
3	"	"	B	02	63	"	
4	"	"	B	321	64	"	
5	"	RCAT	C	02	75	"	
6	"	"	C	321	77	"	
7	"	"	D	02	77	"	
8	"	"	D	321	78	"	
9	"	LCAT	A	365 Thayer D/ft Blue	79	"	
10	"	"	A	83 medium Blue	80	"	
11	"	"	B	365	81	"	
12	"	"	B	83	82	"	
13	"	L Rail	C	365	68	"	
14	"	"	C	83	69	"	
15	"	"	D	365	70	"	

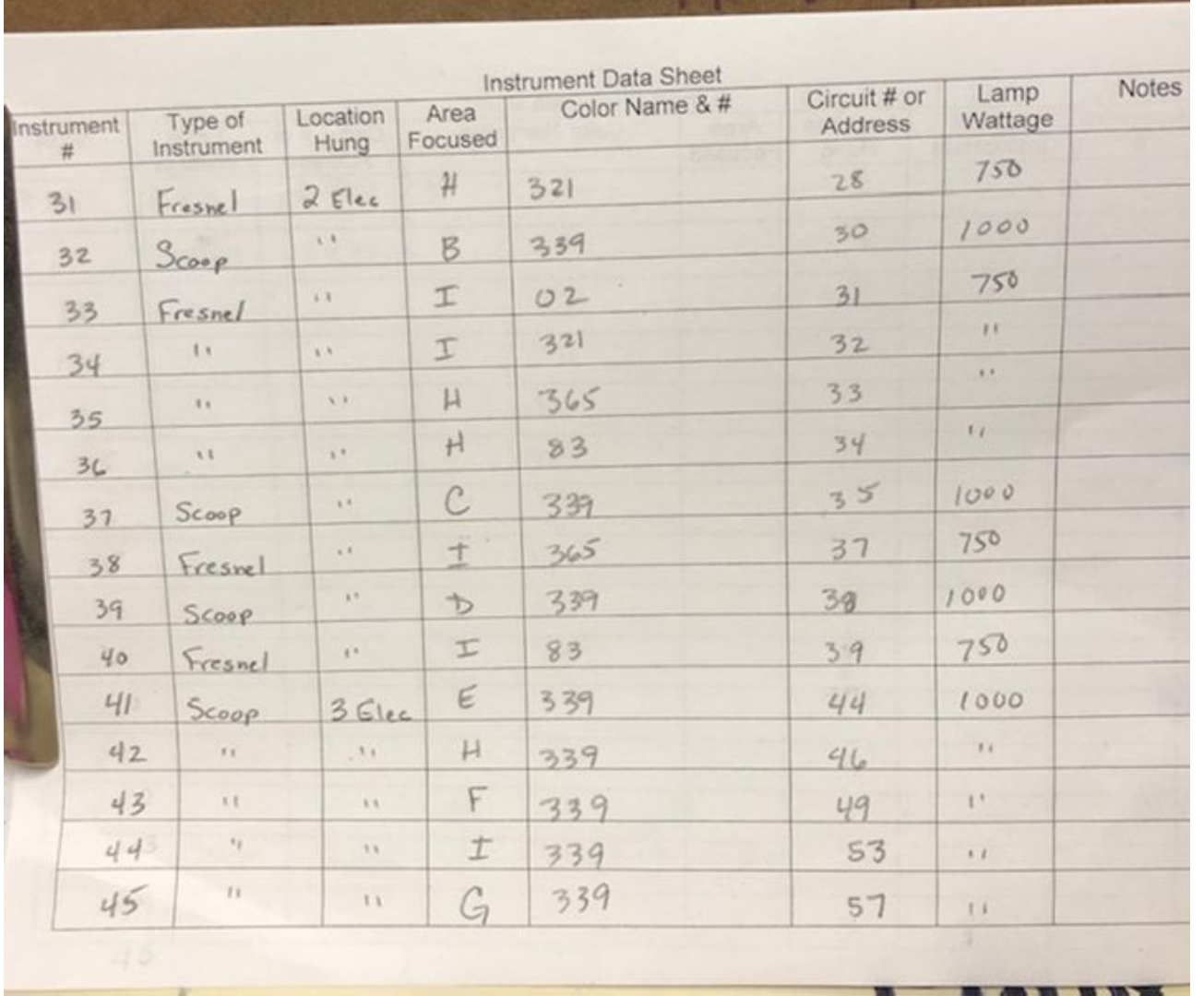
2nd sheet



Instrument Data Sheet

Instrument #	Type of Instrument	Location Hung	Area Focused	Color Name & #	Circuit # or Address	Lamp Wattage	Notes
16	ERS	L Rail	D	93	71	1000	
17	Fresnel	1 Elec	E	02	4	750	
18	"	"	E	321	5	"	
19	"	"	F	02	10	"	
20	"	"	F	321	11	"	
21	"	"	E	365	12	"	
22	"	"	e	83	13	"	
23	"	"	G	02	16	"	
24	"	"	G	321	17	"	
25	"	"	F	365	18	"	
26	"	"	F	83	19	"	
27	"	"	G	365	23	"	
28	"	"	G	83	24	"	
29	Scoop	2 Elec	A	339 Broadway Pink	26	1000	
30	Fresnel	"	H	02	27	750	

3rd sheet



Instrument Data Sheet

Instrument #	Type of Instrument	Location Hung	Area Focused	Color Name & #	Circuit # or Address	Lamp Wattage	Notes
31	Fresnel	2 Elec	H	321	28	750	
32	Scoop	"	B	339	30	1000	
33	Fresnel	"	I	02	31	750	
34	"	"	I	321	32	"	
35	"	"	H	365	33	"	
36	"	"	H	83	34	"	
37	Scoop	"	C	339	35	1000	
38	Fresnel	"	I	365	37	750	
39	Scoop	"	D	339	38	1000	
40	Fresnel	"	I	83	39	750	
41	Scoop	3 Elec	E	339	44	1000	
42	"	"	H	339	46	"	
43	"	"	F	339	49	"	
44	"	"	I	339	53	"	
45	"	"	G	339	57	"	

Circuitry

- For the circuitry, determine where each instrument will be plugged in. Use a circuit sheet for the theatre.
- Each circuit will only hold 2400 watts.
- Assume each light has 1000 watts. (Some have 750), but in order to make sure a circuit is not overloaded, assume the highest amount, unless you know for certain.
- Each theatre will have its own circuit layout. This is the circuit sheet used for the sample plot in this lesson for the data sheet.

WCHS Auditorium Circuitry including LED placement

3rd Electric

41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

2nd Electric

25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

173 174 175 176 177 178 179 180 181 182 183 184

1st Electric

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

165 166 167 168 169 170 171 172

R RAIL

61

62

63

64

65

66

67

R **Catwalk**

75 76 77 78

161 162

House Lights

86 87 88 89 90 91 92 93 94 95

L **Catwalk**

79 80 81 82

163 164

L **RAIL**

68

69

70

71

72

73

LED lights are 100 + numbers

Reflection/Activity:

WOW, who knew that lighting a show involved so many forms, so much planning, so much organization. That is a lot! After watching the video, reflect and write on the following:

What steps does a lighting designer take before they ever start the physical act of hanging and focusing lights? Why is this important to the process of a show!

Now you know the basics! Next, lesson we will start practicing developing our own lighting design process!!!!

Annie Wiegand on her Lighting Design Process