

## Appendix G. 2020-2021 AVR Foundations Toolkit Contents

#	Line	Part	Workbook	ABRA Code
1	1	9V Battery	*	30-455
2	2	9V Battery Clip (Best Quality)	*	2.1mm
1	3	5V DC Adapter 2A	*	276-ADA (5V 2A)
1	4	Arduino UNO Rev3	*	A000066
1	5	Arduino Cable	*	CAB-650
1	6	PermaProto Half size	*	1609-ADA
2	7	Jumper Wire Kit	*	144 pcs
4	8	SPDT Slide Switch	*	SSW-120-BB
4	9	DC Jack	*	PRT-10811
2	10	Bicolor LED	*	LED-5RG-2
10	11	RGBLED (CC) Diffused	*	LED-5RGB-4-CC-DIFF
1	12	5mm LED Pack	*	COM-12062
2	13	Common Cathode 7-Segment Disp.	*	FND500
8	14	Disk Cap: 103	*	0.01uF
8	15	Disk Cap: 104	*	0.1uF
6	16	IC Socket	*	8LP
6	17	IC Socket	*	14LP
6	18	IC Socket	*	16LP
1	19	2x3 Male Header Pins	*	SH-3
1	20	16x2 LCD Blue (Assembled)	*	1447-ADA
1	21	AVR Pocket Programmer	*	PGM-09825
1	22	LD1117V33	*	LD1117
4	23	LM7805	*	TO-220
2	24	LM7809	*	TO-220
1	25	LM317	*	TO-220
2	26	ATtiny85	*	ATtiny85-20PU
1	27	Long Nose Pliers	Hand Tools	LN5
1	28	Side Cutters	Hand Tools	HT-109P
1	29	Precision Screwdrivers	Hand Tools	PREC-1
1	30	Wire Stripper	Hand Tools	147-ADA
1	31	IC Puller	Hand Tools	ICP-20
2	32	10mm Red LED (Diffused)	Schaffer Traffic Light	LED-10R
2	33	10mm Red Yellow (Diffused)	Schaffer Traffic Light	LED-10Y
2	34	10mm Red Green (Diffused)	Schaffer Traffic Light	LED-10G
4	35	Breakaway Male Pins (RTAng)	Schaffer Traffic Light	SH-4
4	36	Breakaway Male Pins (Straight)	Schaffer Traffic Light	SH-2
3	37	LED Bargraph (Blue)	Morland Bargraph	COM-09937
10	38	Shift Register	Morland Bargraph	74HC595
10	39	IC Socket	Morland Bargraph	16LP

1	40	Dual CC Alphanumeric Display	POV	2156-ADA
8	41	NPN BJT	POV	2N3904
8	42	PNP BJT	POV	2N3906
1	43	8x8 LED Matrix (Green) (No Substitute)	Reed MatrixMadeEZ	861-ADA
2	44	TPIC6C595	Reed MatrixMadeEZ	TPIC6C595
10	45	1 row X 8 pins Straight Female Receptacle	Reed MatrixMadeEZ	1018-POLOLU
	46	(Same display and Morland)	Altoids Arduino	
2	47	16 MHz Crystal and 20pF caps	Altoids Arduino	2215-ADA
1	48	ATmega328P	Altoids Arduino	DIP-28
1	49	(Kinked) IC Socket	Altoids Arduino	3M5480-ND
3	50	Transistor Positive Voltage Regulator 1A 5V	Altoids Arduino	7805T
4	51	Elec Cap: 1uF	Altoids Arduino	1R50
4	52	Elec Cap: 10uF	Altoids Arduino	10R50
4	53	Power Diode	Altoids Arduino	1N400n
4	54	LED 3mm: Red	Altoids Arduino	LED-3R
4	55	LED 3mm: Amber	Altoids Arduino	LED-3A
4	56	LED 3mm: Green	Altoids Arduino	LED-3G
1	57	NTC Thermistor (10k)	Altoids Arduino	334-103
1	58	TMP36	Altoids Arduino	TO-92
4	59	SPDT Slide Switch	Altoids Arduino	SSW-120-BB
2	60	4-Digit 7-Segment Display (Blue)	Raymond RTC	COM-09481
1	61	CR1220 Coin Battery	Raymond RTC	CR1220-2
1	62	32.768 kHz Crystal	Raymond RTC	2211-ADA
2	63	15 MOhm	Pierce Oscillator	R1/4-15M
1	64	DS1307	Raymond RTC	DS1307+
1	65	CR1220 Coin Cell Holder	Raymond RTC	BK-917-ND
1	66	Electret Microphone	Dolgin Equalizer	1713-ADA
1	67	8x8 LED Matrix (Yellow)	Dolgin Equalizer	860-ADA
1	68	MSGEQ7	Dolgin Equalizer	MSGEQ7
2	69	ATtiny84	Dolgin Equalizer	ATtiny84-20PU
1	70	DC Hobby Motor	Mechanical	ROB-11696
1	71	Standard Servo	Mechanical	1058-POLOLU
1	72	Stepper with ULN2003 Driver	Mechanical	MOT-28BYJ48
1	73	SN754410	Mechanical	SN754410NE
1	74	L293D	Mechanical	L293D
1	75	IRF520	Mechanical	TO-220
1	76	IR RxTx Set (5mm)	Section	IR-SET-5MM
1	77	nRF24L01	RF	WL-200
4	78	33pF Disk Capacitor	MSGEQ7 BoB	CD330
4	79	200k Fixed Resistor	MSGEQ7 BoB	R1/4-200K-1