REQUIRED PARTS FOR PCB ASSEMBLY	
Link	

Item #	Qty Vendor	Vendor Part #	Description	Link	<u>Unit Price</u>	Extended Notes price
1	1 Dirty PCBs	N/A	PC Board	http://dirtypcbs.com/store/designer/details/ JSchrempp/5148/water-leak-detector-pcb-	\$12.00	\$12.00 Only \$2 each in quantities of 10 or more.
2	1 Adafruit	2721	Particle Photon WiFi Microcontroller with breadboard headers	https://www.adafruit.com/products/2721	\$19.00	\$19.00 The Particle Electron may also be used.
3	1 Adafruit	1787		https://www.adafruit.com/products/1787	\$1.50	\$1.50
4	1 Adafruit	1536	Piezo Buzzer	https://www.adafruit.com/products/1536	\$0.95	\$0.95
5	1 Adafruit	169	Micro Servo	https://www.adafruit.com/products/169	\$5.95	\$5.95
6	1 Adafruit	386	DHT11 temperature/humidity sensor with pullup resistor	https://www.adafruit.com/products/386	\$5.00	\$5.00
7	1 Adafruit	1440	Momentary pushbutton switch with green LED	https://www.adafruit.com/products/1440	\$1.50	\$1.50
8	1 Adafruit	3221	SPDT toggle switch	https://www.adafruit.com/products/3221	\$0.95	\$0.95
9	1 Adafruit	501	USB power supply, 5 volt/1 Amp	https://www.adafruit.com/products/501	\$5.95	\$5.95
10	1 Adafruit	266	strip of 40 female-female 6" jumper wires	https://www.adafruit.com/products/266	\$3.95	\$3.95
11	10 Jameco	691024	Resistor, 4.7 k ohm, 1/4 watt axial)	http://www.jameco.com/z/CF1-4W472JRC- Resistor-Carbon-Film-4-7k-Ohm-1-4-Watt-5- 691024.html	\$0.10	\$0.99 Must order 10 pcs (need 5)
12	1 Jameco	222608	USB cable	http://www.jameco.com/z/10U2-02203-BK- Cable-USB2-0-A-B-3-Feet-Black-USB-A-Male- To-USB-B-Male 222608.html	\$1.75	\$1.75
13	2 Amazon.com	sensor	Solu water level sensor	https://www.amazon.com/gp/product/B00 UJ0DVN4/ref=oh aui detailpage o00 s00? ie=UTF8&psc=1	\$3.62	\$7.24 Order 1 or 2 sensors, as needed for your project.
14	2 Sparkfun.com	14021	RJ11 dual breakout	https://www.sparkfun.com/products/1402 1	\$1.95	\$3.90
15	4 Sparkfun.com	132	RJ11 6 pin PCB connector	https://www.sparkfun.com/products/132	\$1.25	\$5.00
16	10 Jameco	690785	Resistor, 470 ohm, 1/4 watt axial)	http://www.jameco.com/z/CF1-4W471JRC- Resistor-Carbon-Film-470-Ohm-1-4-Watt-5- 690785.html	\$0.10	\$0.99 Must order 10 pcs (need 1)
17	10 Jameco	93761	Capacitor, 100 uf, 25 v	http://www.jameco.com/z/R100-25-100-uF- 25-Volt-Radial-Capacitor 93761.html	\$0.09	\$0.90 Must order 10 parts (need 1)

18	10 Jameco	151116	Capacitor, 0.1 uf, ceramic	http://www.jameco.com/z/DC-1-25- Capacitor-Ceramic-Disc-0-1-micro-F-25V-	\$0.15	\$1.50 Must order 10 parts (need 7)
19	1 Jameco	230958	USB female type B connector	plusmn-20-37- 151116.html http://www.jameco.com/z/USB-B-S-RA-CS1- SPCC-WT-Adam-Technologies-Connector- USB-2-0-USB-B-Pcb-Female-Right-	\$0.99	\$0.99 http://www.jameco.com/webapp/wcs/stores/servlet/Produ ct_10001_10001_2309581
20	1 Sparkfun.com	10158	Breakaway male pin headers (strip of 40)	https://www.sparkfun.com/products/1015	\$2.95	\$2.95
21	1 Jameco	317197	14 pin DIP socket	http://www.jameco.com/z/6100-14-R- Socket-IC-14-Pin-Machine-Tooled-Low- Profile-0-3-Inch-Wide 37197.html	\$0.50	\$0.50
22	1 Jameco	164822	4 pin SIPP socket	http://www.jameco.com/z/6100-1-4-Socket- SIPP-1x4-Pin-Machine-Tool-Pins-Soldertail- Female 164822.html	\$0.59	\$0.59 Best to mount the DHT11 in a socket. This miounts the part vertically - can bend the DHT11 horizinal after installation.
23	2 Digi-Key	S7016-ND	18 pin female header	https://www.digikey.com/products/en?key words=S7016-ND	\$1.37	\$2.74
24	2 Jameco	19622	7 7 ft 4 wire telephone cable	http://www.jameco.com/z/8101-64207- Modular-Network-Cable-RJ11-6P4C-7-Feet- Long-Reverse-Grey 196227.html	\$1.75	\$3.50 NOTE: the assembly instructions are for "reverse" or "telephone wired" cables. This part number is an example of a 7 foot cable. You can buy telephone cables in many sizes and colors in hardware stores and online. Be sure to get 4 wire (not 2 wire) cables!
TOTAL:						<u>\$78.29</u>
				ENCLOSURE AND MOUNTING HARDWARE (CUT BOX)		
1						
1	1 Office max	452378	Вох	http://www.officedepot.com/a/products/4 52378/Really-Useful-Box-Plastic-Storage-	\$2.79	\$2.79 Use this part for the plastic box that you can cut to make the enclosure per the instructions.
2	1 Office max 8 Digi-Key	452378 36-1902E-ND	Threaded standoff, F-F, 4-	52378/Really-Useful-Box-Plastic-Storage- Box/ https://www.digikey.com/products/en?key	\$2.79 \$0.90	•
				52378/Really-Useful-Box-Plastic-Storage- Box/	·	enclosure per the instructions.
2	8 Digi-Key	36-1902E-ND	Threaded standoff, F-F, 4-40 x 1", Nylon	52378/Really-Useful-Box-Plastic-Storage- Box/ https://www.digikey.com/products/en?key words=36-1902E-ND https://www.digikey.com/product-	\$0.90	enclosure per the instructions. \$7.20
2	8 Digi-Key 8 Digi-Key	36-1902E-ND 36-9529-ND	Threaded standoff, F-F, 4-40 x 1", Nylon Nylon screw, 4-40 x 1/2"	52378/Really-Useful-Box-Plastic-Storage-Box/ https://www.digikey.com/products/en?key words=36-1902E-ND https://www.digikey.com/product- detail/en/keystone-electronics/9529/36- https://www.digikey.com/products/en?key	\$0.90 \$0.14	enclosure per the instructions. \$7.20 \$1.12
2 3 4	8 Digi-Key 8 Digi-Key 12 Digi-Key	36-1902E-ND 36-9529-ND 36-9427-ND 36-9605-ND	Threaded standoff, F-F, 4-40 x 1", Nylon Nylon screw, 4-40 x 1/2" Nylon screw, 4-40 x 1/4"	52378/Really-Useful-Box-Plastic-Storage-Box/ https://www.digikey.com/products/en?key words=36-1902E-ND https://www.digikey.com/product- detail/en/keystone-electronics/9529/36- https://www.digikey.com/products/en?key words=36-9427-ND https://www.digikey.com/product-	\$0.90 \$0.14 \$0.14 \$0.17 \$1.49	\$7.20 \$1.12 \$1.68

8	1 N/A	N/A	Mounting bracket, laser cut from 3 mm plastic or wood	N/A	N/A N/	'A This is a custom made part from a 2D CAD file. You need access to a laser cutter to fabricate it.
1	1 Shapeways		Mounting assembly	ENCLOSURE AND MOUNTING HARDWARE (3D PRINTED) https://www.shapeways.com/product/HBS DDYLAU/water-leak-detector-chassis	\$24.00	\$24.00 Use this in lieu if the plastic box for a 3D printed ready to assemble mounting enclosure.
2	1 Shapeways		3D printed front panel	https://www.shapeways.com/product/UST N8GVJQ/wld-bezel	\$15.00	\$15.00 Use this with the Shapeways 3D printed Mounting assembly
3	8 Digi-Key	36-9427-ND	Nylon screw, 4-40 x 1/4"	https://www.digikey.com/products/en?key words=36-9427-ND	\$0.14	\$1.12
4	8 Digi-Key	36-9605-ND	Nylon nut, 4-40	https://www.digikey.com/product- detail/en/keystone-electronics/9605/36- 9605-ND/2746252	\$0.17	\$1.36
5 6	4 1 Home Depot	11364	Self tapping screw #8 wood screw and wall anchors	[need link from Jim] http://www.homedepot.com/p/E-Z-Ancor- Twist-N-Lock-75-lb-8-x-1-1-4-in-Philips-Zinc- Plated-Nylon-Flat-Head-Drywall-Anchors- with-Screws-4-Pack-11364/100165900	\$1.49 :	\$1.49
1	1 Tap Plastics		8x11 3mm material	ENCLOSURE AND MOUNTING HARDWARE (LASER CUT)	\$10.00	\$10.00 acrylic or wood. For this case you have to cut it yourself from
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2	4 Jameco	77650	Threaded standoff, M-F, 6-32 x 1", Metal	https://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langld=- 1&storeld=10001&catalogid=10001&productId=77650	\$0.59	the WLD plans. \$2.36
	•	77650 77578	Threaded standoff, M-F, 6-	res/servlet/ProductDisplay?langId=- 1&storeId=10001&catalogId=10001&produ		the WLD plans.
2	4 Jameco		Threaded standoff, M-F, 6-32 x 1", Metal  Threaded standoff, F-F, 6-	res/servlet/ProductDisplay?langld=- 1&storeld=10001&catalogld=10001&productld=77650  https://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langld=- 1&storeld=10001&catalogld=10001&produ	\$0.90	the WLD plans. \$2.36
3	4 Jameco	77578	Threaded standoff, M-F, 6-32 x 1", Metal  Threaded standoff, F-F, 6-32 x 1", Metal  #6-32 x 1/4" Phillips Pan	res/servlet/ProductDisplay?langId=- 1&storeld=10001&catalogId=10001&productId=77650  https://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=- 1&storeld=10001&catalogId=10001&productId=77578  https://www.jameco.com/webapp/wcs/stores/servlet/ProductDisplay?langId=- 1&storeld=10001&catalogId=10001&productId=10001&catalogId=10001&productId=10001&catalogId=10001&productId=10001&produc	\$0.90 \$0.09	the WLD plans. \$2.36 \$3.60

7	4 Digi-Key	36-9529-ND	Nylon screw, 4-40 x 1/2"	https://www.digikey.com/product-	\$0.14	\$0.56
				detail/en/keystone-electronics/9529/36-		
8	8 Digi-Key	36-9605-ND	Nylon nut, 4-40	https://www.digikey.com/product-	\$0.17	\$1.36
				detail/en/keystone-electronics/9605/36-		
9	1 Home Depot	11364	#8 wood screw and wall	http://www.homedepot.com/p/E-Z-Ancor-	\$1.49	\$1.49
			anchors	Twist-N-Lock-75-lb-8-x-1-1-4-in-Philips-Zinc-		
				Plated-Nylon-Flat-Head-Drywall-Anchors-		
				with-Screws-4-Pack-11364/100165900		