

LIVONIA PUBLIC SCHOOLS

Theresa O'Brien, Chief Academic Officer

Academic Services Department

March 29, 2017

To: Andrea Oquist, Superintendent

From: Theresa O'Brien, Chief Academic Officer

Re: Science Equipment Purchases

I am requesting the purchase of Secondary Science Equipment be placed on the agenda for the April 10, 2017 Board of Education's Curriculum Committee. A committee of middle and high school teachers worked together for two years to create a prioritized list of science equipment to purchase for all science content areas: Chemistry, Biology, Physics and Middle School sciences. This proposed purchase utilizes budgeted resources from the 2013 Bond. This purchase does not include any technology or textbooks.

The committee began with a needs assessment based on what equipment they currently had and what they need in order to improve science instruction. Teachers met with vendors and created a list of wants for each content area, and then teachers determined importance in order to stay within their budget. The requested equipment would be used to support both current science labs and also allow for additional learning experiences that align with science curriculum. Materials will allow students to gather and analyze data, design experiments and investigate phenomena. This will allow students to have a more authentic science experience and will support teacher instruction to better meet the shifts addressed in the Michigan Science Standards.

Bid Summary	Cost
FISHER SCIENTIFIC, HANOVER PARK, IL	\$4,033.50
PARCO SCIENTIFIC COMPANY, PLYMOUTH, MI	\$4,200.00
PASCO SCIENTIFIC, ROSEVILLE, CA	\$ 133,453.59
SCHOOL SPECIALITY (FREY SCIENTIFIC), LANCHESTER, PA	\$ 37,825.38
VERNIER SOFTWARE & TECHNOLOGY BEAVERTON, OR	\$ 173,720.52
WARD'S SCIENCE ROCHESTER, NY	\$ 227,357.90
GRAND TOTAL	\$ 580,590.89

FISHER SCIENTIFIC, HANOVER PARK, ILLINOIS

Item Number	Item Description	Quantity	Unit Price	Cost
531978	Extech Digital Multimeters	45	\$14.94	\$672.30
N392-3050-635	Spring Scale Set	30	\$32.66	\$979.80
UVXS3960HS	UVEX Stealth Clear Anti-Fog Goggles	210	\$11.34	\$2,381.40
	Vendor Total		Total	\$4,033.50

PARCO SCIENTIFIC COMPANY, PLYMOUTH, MI

Item Number	Item Description	Quantity	Unit Price	Cost
model #: cs-2000	Digital Scales - Ohous compact portable electronic digital scale	60	\$70.00	\$4,200.00
	Vendor Total		Total	\$4,200.00

PASCO SCIENTIFIC, ROSEVILLE, CA

Item Number	Item Description	Quantity	Unit Price	Cost
ME9452B	2.2m Classics Dynamics System	36	\$477.24	\$17,180.64
UI5001	550 Universal Interface	36	\$481.17	\$17,322.12
WA 9401	Demonstration Wave Spring	3	\$19.69	\$ 59.07
EM 8656	Electronics Lab	36	\$196.81	\$ 7,085.16
ME 9491	Fan Car Accessory	36	\$58.06	\$ 2,090.16
OS8500	Optics System	36	\$885.59	\$31,881.24
PS-3200	Passport Airlink	48	\$58.06	\$2,786.88
ME 9471A	Photogates and Fences	36	\$137.76	\$ 4,959.36
PS2120A	Rotational Motion Sensor	36	\$166.30	\$ 5,986.80
PS 2931B	Sensor Bundle	36	\$1161.09	\$ 41,799.24
ME6838	Smart Gate and Pulley System	36	\$63.97	\$ 2,302.92
	Vendor Total		Total	\$ 133,453.59

SCHOOL SPECIALITY (FREY SCIENTIFIC) LANCHESTER, PA

Item Number	Item Description	Quantity	Unit Price	Cost
701021	Digital Hot Plates 5"x7" top	45	\$175.38	\$7,892.10
N692-4606-635	3" Green Connector Lug Wire	60	\$1.50	\$90.00
N692-4607-635	6" Blue Connector Lug Wire	60	\$1.50	\$90.00
564652-635	Ballistics car	3	\$33.23	\$99.69
892-5128	Battery Pack Assembly	60	\$3.95	\$237.00
1539815	Bicycle Wheel Gyroscope	3	\$39.36	\$118.08
792-1400	CPO Colliding Pendulum Equipment Module	3	\$139.95	\$419.85
792-1620	CPO Science Lab data collection starter kit	3	\$3,359.95	\$10,079.85
792-1700	Equipment Kit CPO Science Foundations of Physics Kit	3	\$2499.95	\$7,499.85
527273	Floating Image Set	3	\$154.74	\$464.22
530733	Ice Melting Plates	30	\$14.28	\$428.40
N392-2220-635	Motor Magnet Set	6	\$21.95	\$131.70
792-1280	Science Electric Circuits Equipment Module	30	\$159.95	\$4,798.50
N792-1490-635	Smart Track w/Energy Car	30	\$154.95	\$4,648.50
N392-3050-635	Spring Scale Set	30	\$26.96	\$808.50
530553	Wind-up Meter Tape	3	\$6.38	\$19.14
	Vendor Total		Total	\$37,825.38

VERNIER SOFTWARE & TECHNOLOGY BEAVERTON, OR

Item Number	Item Description	Quantity	Unit Price	Cost
LQ2-CHMA-SV	Advanced Chemistry LabQuest 2 pkg. w/SpectroVis Plus	96	\$1,113.20	\$ 106,867.20
LQ2-CRG	Charging Station	24	\$104.72	\$ 2,513.28
GC-SEP	GC Septa (pkg 4)	30	\$25.52	\$ 765.60
GC-SYR-MIC	GC Syringe, 1 uL Hamilton	12	\$73.92	\$ 887.04
LABQ2	Lab Quest 2	96	\$289.52	\$ 27,793.92
LQ2-CRG	LabQuest 2 Charging Station	24	\$104.72	\$ 2,513.28
LabQ2	LabQuest 2 Interface	60	\$289.52	\$ 17,371.20
LQ2-ARMOR	LabQuest 2 Lab Armor	252	\$12.75	\$ 3,213.00
LQ2-STN	LabQuest 2 Stand	120	\$4.25	\$ 510.00
LQ-CRG	LabQuest Charging Stations	30	\$104.72	\$ 3,141.60
LQ-VIEW	LabQuest Viewer	6	\$39.50	\$ 237.00
LP	Logger Pro 3	6	\$124.50	\$ 747.00
GC2-MINI	Vernier Mini GC Plus	4	\$1790.10	\$ 7,160.40
	Vendor Total		Total	\$ 173,720.52

WARD'S SCIENCE ROCHESTER, NY

Item Number	Item Description	Quantity	Unit Price	Cost
63901-0101	Thermal Scanner with camera Model E4	1	\$ 876.74	\$ 876.74
N392-3050-635	Spring Scale Set	30	\$5.40	\$ 162.00
BAR-BTA	Barometer Sensor	96	\$61.41	\$ 5,895.36
BC-2000	BioChamber 2000	60	\$16.43	\$ 985.80
CO2-BTA	Carbon Dioxide Gas Sensor	96	\$224.00	\$ 21,504.00
CON-BTA	Conductivity Probe	96	\$104.72	\$ 7,887.36
GPS-BTA	Gas Pressure Sensor	96	\$82.16	\$ 6,890.88
IRT-BTA	Infrared Temperature Probe	48	\$154.81	\$ 7,430.88
LQ2-BIO-ODX	LabQuest 2 Deluxe Biology Package	60	\$1606.54	\$ 96,392.40
LS-BTA	Light Sensor	96	\$47.57	\$ 4,566.72
MD-BTD	Motion Detector	48	\$68.32	\$ 3,279.36
O2-BTA	Oxygen Gas Sensor	6	\$2698.4	\$ 16,190.40
PH-BTA	pH Sensor	48	\$136.64	\$ 6,558.72
VRM-BTD	Radiation Monitor	96	\$146.16	\$ 14,031.36
RH-BTA	Relative Humidity Sensor	96	\$59.68	\$ 5,729.28
SAL-BTA	Salinity Sensor	96	\$94.27	\$ 9,049.92
SLM-BTA	Sound Level Meter	96	\$172.11	\$ 16,522.56
TMP-BTA	Stainless Steel Temperature Probe	96	\$25.08	\$ 2,407.68
VP-BTA	Voltage Probe	96	\$10.38	\$ 996.48
	Vendor Total		Total	\$ 227,357.90

C S. Archibald
B. Hillard