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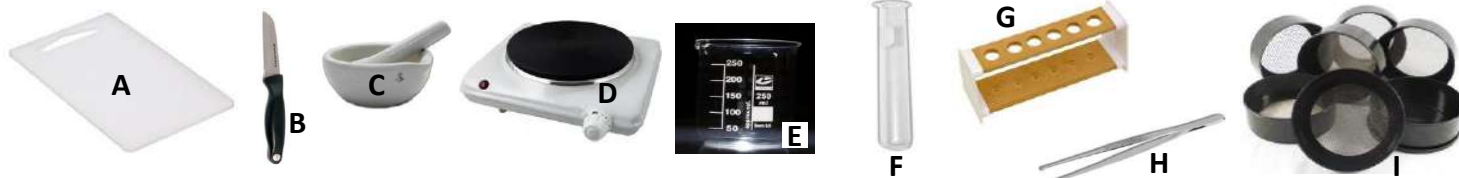
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ANIMAL EXPERIMENTS

To demonstrate the action of the enzyme liver catalase

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	SB48910	Chopping Board	Each	4.36	5.36		
B	SB48920	Knife	Each	2.15	2.64		
C	AMX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		
D	SC41920	Hotplate, Domestic Type 1500W	Each	27.95	34.38		
E	ABN110.30CPK10	Beaker, Lennox Borosilicate Glass 100cm ³	Pk/10	13.04	16.04		
F	S-EDU1016	Test Tube, Borosilicate Glass 150 x 24mmØ - Boiling Tube	Pk/50	38.43	47.27		
G	SC78642	Test Tube Rack, Wooden, 6-hole (25mm Ø)	Each	7.06	8.68		
H	SB44320	Forceps Blunt Point 125mm	Each	1.74	2.14		
	CSA3415-Q	Hydrogen Peroxide 20 Volume 6%	2lt	6.36	7.82		



To compare the digestibility of rolled barley versus whole barley when fed to cows

I	S-3070-6	Soil Sieve Set of 6. Mesh sizes: 4, 2, 0.5, 0.25, 0.1mm	Each	107.36	132.05		
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To show the presence of one named constituent in milk

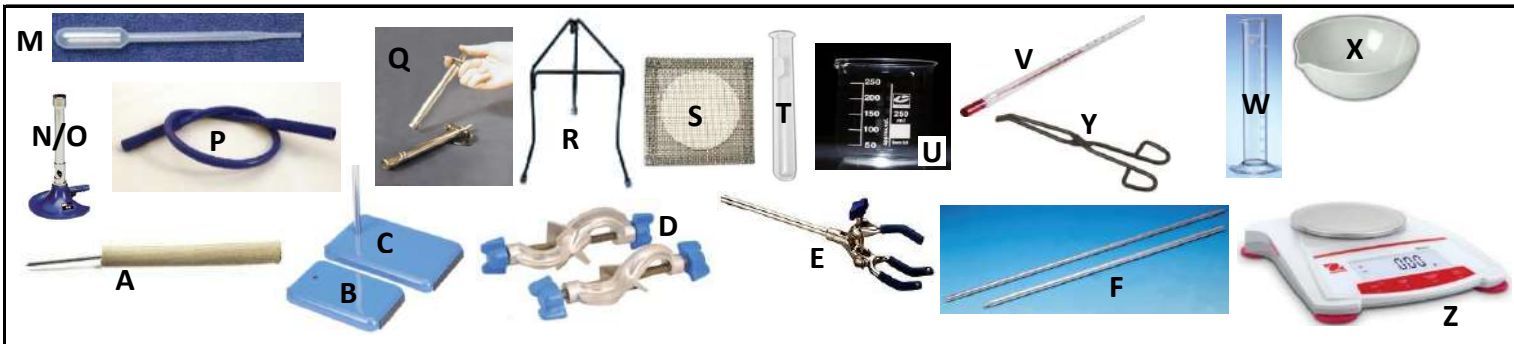
J	S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
K	ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
L	A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
M	EDHWB-22	Water Bath. Digital 22 Lt capacity c/w Lid	Each	457.80	563.09		
	CSA0642-M	Benedict's Reagent Qualitative	500ml	3.14	3.86		
	CSA0642-R	or Benedict's Reagent Qualitative	2.5lt	11.48	14.12		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		



To show the action of a named animal enzyme

M	A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
N	S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11		
O	S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60		
P	S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27		
Q	S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35		
R	S-TRSTD200/1	Tripod Stand, 200 x 125mm - height x top side	Each	5.60	6.89		
S	S-GUZCR125	Wire Gauze, Ceramic Centre 125 x 125mm	Pk/10	9.37	11.53		
T	S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
U	ABN110.45CPK10	Beaker, Lennox Borosilicate Glass 400cm ³	Pk/10	14.07	17.31		
V	AT69/114/3	Thermometer, Spirit -10°C to +110°C x 1°C	Each	3.03	3.73		
W	ACY126.22V	Graduated Cylinder, Glass 50cm ³	Each	3.86	4.75		
W	ACY126.12V	Graduated Cylinder, Glass 5cm ³	Each	2.49	3.06		
	CSA3794-M	Iodine Solution 1% in Potassium Iodide	500ml	5.64	6.94		
	CSA8115-M	Starch Soluble	500g	10.05	12.36		
	CSA0642-M	Benedict's Reagent Qualitative	500ml	3.14	3.86		
	CSA0642-R	or Benedict's Reagent Qualitative	2.5lt	11.48	14.12		
	CSA0444-F	Amylase	10g	14.80	18.20		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		

Images for Experiment 4 on next page



The percentage of water and solids in a sample of milk

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
X	ABF662.18P	Evaporating Basin 75cm ³ - 80mmØ	Each	1.89	2.32		
N	S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11		
O	S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60		
P	S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27		
Q	S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35		
R	S-TRSTD200/1	Tripod Stand, 200 x 125mm - height x top side	Each	5.60	6.89		
S	S-GUZCR125	Wire Gauze, Ceramic Centre 125 x 125mm	Pk/10	9.37	11.53		
Y	S-TSMS150/5	Tongs, 150mm. Mild steel with corrugated jaws	Pk/5	7.47	9.19		
Z	SOH-NV2101	Balance, Digital 2100g x 0.1g	Each	119.00	146.37		

To find the energy value of a named food

U	ABN110.30CPK10	Beaker, Lennox Borosilicate Glass 100cm ³	Pk/10	13.04	16.04		
W	ACY126.26V	Graduated Cylinder, Glass 100cm ³	Each	4.49	5.52		
A	S-BI0164	Needle, Mounted on Wooden Handle	Pk/5	2.36	2.90		
V	AT69/114/3	Thermometer, Spirit -10°C to +110°C x 1°C	Each	3.03	3.73		
B	S-BASE160T	Base for Retort Stand 160 x 100mm	Each	9.11	11.21		
C	S-BASE200T	or Base for Retort Stand 200 x 125mm	Each	11.15	13.71		
D	S-CH0663B/Single	Bosshead for Retort Stand	Each	2.22	2.73		
E	S-CLMP3P	Clamp with Rubber Jaws for Retort Stand	Each	6.09	7.49		
F	S-RDMS0600	Rod for Retort Stand. Mild Steel. Length: 600mm	Each	4.34	5.34		
Z	SOH-NV2101	Balance, Digital 2100g x 0.1g	Each	119.00	146.37		

To show the butterfat content of milk

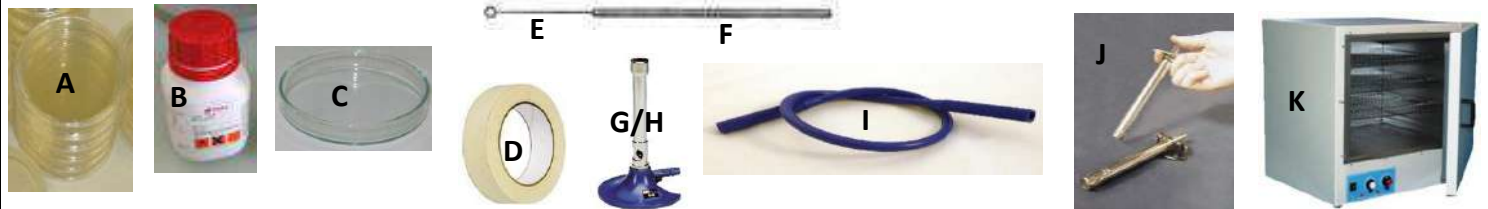
G	ADA150.12X	Butyrometer Milk 10.8cm ³	Each	41.84	51.46		
H	ADA150.40	Lock Stopper for Butyrometer	Each	3.10	3.81		
I	ADA150.42	Key for Lock Stopper	Each	8.17	10.05		
J	EG032250	Gerber Centrifuge- with heating and rotor for 8 butyrometers	Each	1,586.50	1,951.40		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		
	CC30743-2.5L	Sulfuric Acid, Concentrated	2.5lt	18.44	22.68		
	CA121079.1211	Amyl Alcohol	1lt	56.81	69.88		



MICROBIOLOGY

To show how to grow a bacteria culture

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	SM35101	Nutrient Agar Plates - prepared plates	Pk/10	10.48	12.89		
B	CC70148-100G	or Nutrient Agar Powder	100g	40.70	50.06		
C	APD102(15)	Petri Dish, Sterile Plastic	Pk/20	1.89	2.32		
D	ST2560	Masking Tape Roll 25mm	Each	1.76	2.16		
E	SF-A64580	Inoculating Loop (fits holder below)	Pk/5	8.95	11.01		
F	ACM680.60	Inoculating Loop Holder	Each	2.87	3.53		
G	S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11		
H	S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60		
I	S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27		
J	S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35		
K	EMIN30	Incubator. Capacity: 30 Litre. Range: ambient +5°C to 70°C	Each	746.00	917.58		



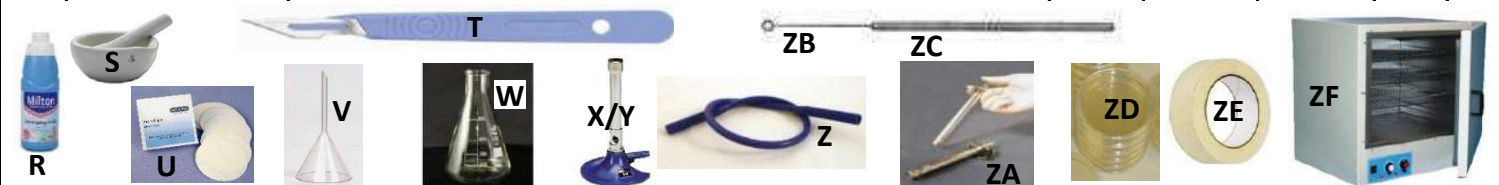
To assess the bacterial quality of a sample of milk

L	S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
M	S-C314-13	Rubber Stopper, Solid No.13	Pk/10	2.38	2.93		
N	ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
O	A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
P	SP06520	Pen, Medium Permanent Black - to label test tubes	Pk/10	21.79	26.80		
Q	EDHWB-22	Water Bath. Digital 22 Lt capacity c/w Lid	Each	457.80	563.09		
	CB330884Y	Resazurin Tablet	Pk/100	57.41	70.61		
	CSA5332-J	Methylene Blue 1% Solution	100ml	3.41	4.19		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		



To show bacteria is present in the roots of clover

R	SC96125	Milton Fluid	1250ml	4.55	5.60		
S	AMX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		
T	SB46010A	Scalpel, Sterile Disposable - No. 10A blade	Pk/10	5.29	6.51		
U	S-FLP150	Filter Paper, Student Grade, 150mm Ø	Pk/100	4.30	5.29		
V	AFT140.30F	Funnel, Filter, Glass 75mm Ø	Each	5.28	6.49		
W	AFK202.30CPK10	Conical Flask, 250cm ³	Pk/10	15.36	18.89		
X	S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11		
Y	S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60		
Z	S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27		
ZA	S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35		
ZB	SF-A64580	Inoculating Loop (fits holder below)	Pk/5	8.95	11.01		
ZC	ACM680.60	Inoculating Loop Holder	Each	2.87	3.53		
ZD	SM35101	Nutrient Agar Plates - prepared plates	Pk/10	10.48	12.89		
ZE	ST2560	Masking Tape Roll 25mm	Each	1.76	2.16		
ZF	EMIN30	Incubator, Capacity 32 Litre (ambient +5°C to 70°C)	Each	746.00	917.58		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		



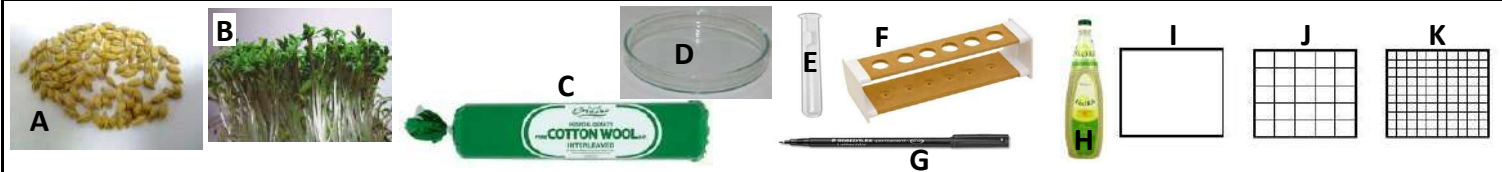
To demonstrate the presence of micro-organisms in an animal foodstuff

Materials used in this experiment are the same as those used for the previous one

PLANT EXPERIMENTS

Determination of the percentage germination of a seed sample

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	SM46535	Barley Seed	250g	3.95	4.86		
B	SM46626	or Cress Seed	100g	6.80	8.36		
C	SS79000	Cotton Wool Absorbent	500g	8.80	10.82		
D	APD102(15)	Petri Dish, Sterile Plastic	Pk/20	1.89	2.32		



To show the conditions necessary for germination

B	SM46626	Cress Seed	100g	6.80	8.36		
C	SS79000	Cotton Wool Absorbent	500g	8.80	10.82		
E	S-EDU1016	Test Tube, Borosilicate Glass 150 x 24mm ϕ - Boiling Tube	Pk/50	38.43	47.27		
F	SC78642	Test Tube Rack, Wooden, 6-hole (25mm ϕ)	Each	7.06	8.68		
G	SP06520	Pen, Medium Permanent Black - to label test tubes	Pk/10	21.79	26.80		
H	SC96130	Vegetable Oil	1lt	4.96	6.10		
	CSA7060-G	Alkaline Pyrogallol (removes oxygen from air)	25g	22.01	27.07		
	SP47090	or Iron Filings Fine	200g	2.34	2.88		

To show the effect of a selective herbicide

I	SB16102	Quadrat, Frame, 50x50cm (one-piece metal frame)	Each	15.95	19.62		
J	SB16107	Quadrat, 50x50cm - 25 grids, each 10x10cm	Each	18.95	23.31		
K	SB16105	Quadrat, 50x50cm - 100 grids, each 5x5cm	Each	20.10	24.72		

To find the percentage of sugar in a sample of grass

L	SC56032	Refractometer, Hand Type. Scale 0-32% Brix x 0.2% Brix	Each	54.24	66.72		
M	SC83220	Scissors, General Purpose 175mm	Each	5.28	6.49		
N	SMP-SG128	Polythene Bag Zip Lock with Write-on Panel 125x190mm	Pk/1000	26.10	32.10		
O	AMX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		





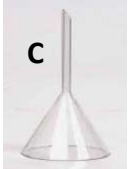

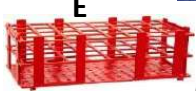





To show the influence of environmental factors on the growth of a crop plant

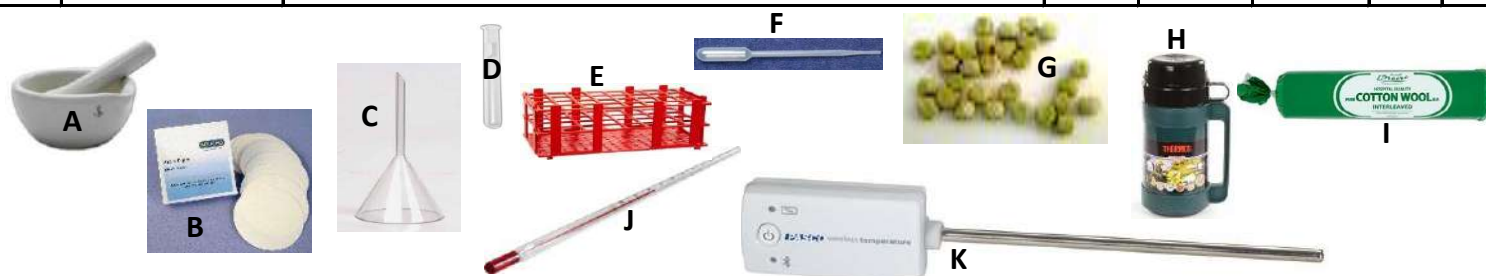
P	SPAL50	Greenhouse 6'X8' - 225x193x198cm LxWxH. Area- 4.92m ² Heavy-duty, doublewall, aluminum frame. Supplied with Polycarbonate panels. Flat packed for self-assembly	Each	639.00	785.97		
Q	AT69/116/2	Soil Thermometer -10 to +110 ^o C	Each	10.68	13.14		
R	S-RU06	Metre Rule, Wooden	Each	4.24	5.22		

To extract pigments from a sample of grass






O	AMX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		
S	S-FLP150	Filter Paper, Student Grade, 150mm ϕ	Pk/100	4.30	5.29		
T	AFT140.30F	Funnel, Filter, Glass 75mm ϕ	Each	5.28	6.49		
U	AW3001/614	Chromatography Paper Roll, 20mm x 100 metres	Each	36.91	45.40		
V	S-CH0882	Capillary Tubes - spot chromatography paper	Pk/100	4.99	6.14		
W	SC41960C	Gas Jar 15cm High x 50mm ϕ c/w Lid	Each	4.06	4.99		
X	SC33380	Hair Dryer	Each	12.95	15.93		
	CRTSE0021608	Ethanol, Absolute - Duty Paid	100ml	13.86	17.05		
	CSA7625-N	Sand	1kg	8.60	10.58		
	CC32201-2.5L	Propanone (Acetone)	2.5lt	17.53	21.56		

To show the presence of protein in a sample of peas






Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
	A MX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		
	B S-FLP150	Filter Paper, Student Grade, 150mm Ø	Pk/100	4.30	5.29		
	C AFT140.30F	Funnel, Filter, Glass 75mm Ø	Each	5.28	6.49		
	D S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
	E ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
	F A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
	CSA1511-M	Copper (2) Sulfate (to make up a 1% solution)	500g	7.83	9.63		
	CSA7889-M	Sodium Hydroxide (to make up a 10% solution)	500g	6.04	7.43		
	CSA0726-M	or Biuret Reagent	500ml	4.20	5.17		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		

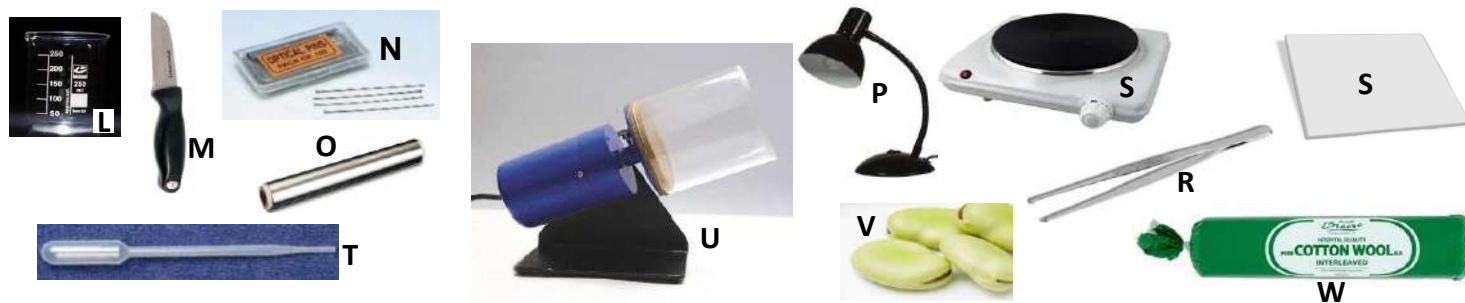


To show the production of heat during the germination of seeds











	G SM46669	Pea Seeds	250g	9.94	12.23		
	H SC32720	Thermos Flask 500cm ³	Each	5.50	6.77		
	I SS79000	Cotton Wool Absorbent	500g	8.80	10.82		
	J AT69/114/3	Thermometer, Spirit -10°C to +110°C x 1°C	Each	3.03	3.73		
or Datalogging method							
	K SP-PS-3201	Wireless Temperature Sensor - 2 required. Connect via Bluetooth 4.0 to iPad/Phone or Android devices. Free Sparkvue App download from www.pasco.com/downloads	Each	58.75	72.26		

To demonstrate osmosis in a potato plant



	L ABN110.50CPK10	Beaker, Lennox Borosilicate Glass 600cm ³	Pk/10	20.60	25.34		
	M SB48920	Knife	Each	2.15	2.64		
	N S-241-512	Pin, Steel 50mm	Pk/100	10.55	12.98		
	CSA8165-M	Sucrose	500g	5.29	6.51		
	CRTSW0021614A	Water Purified	5lt	8.40	10.33		



To show that light is needed for photosynthesis

	O AAL200.14	Aluminium Foil (to cover leaf)	Each	13.53	16.64		
	P SC46100	Lamp, Desk Flexible Arm Type - bulb required	Each	10.58	13.01		
	SC46110	Bulb 40W SES for above Desk Lamp	Each	2.30	2.83		
	Q SC41920	Hotplate, Domestic Type 1500W	Each	27.95	34.38		
	L ABN110.40CPK10	Beaker, Lennox Glass Borosilicate 250cm ³	Pk/10	14.74	18.13		
	R SB44330	Forceps Blunt Point 150mm	Each	2.51	3.09		
	S S-EDU009	Spotting Tile, Ceramic 150mm x 150mm	Pk/5	12.41	15.26		
	T A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
	CRTSE0021608	Ethanol, Absolute - Duty Paid	100ml	13.86	17.05		
	CSA3794-M	Iodine Solution 1% in Potassium Iodide	500ml	5.64	6.94		

To show the growth reaction of a plant shoot to an external stimulus - geotropism

	U S-B244	Clinostat	Each	124.08	152.62		
	N S-241-512	Pin, Steel 50mm	Pk/100	10.55	12.98		
	V SM46695	Broad Bean Seed	250g	9.64	11.86		
	W SS79000	Cotton Wool Absorbent	500g	8.80	10.82		

To show the dry matter content in a sample of silage

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	ABN110.50CPK10	Beaker, Lennox Borosilicate Glass 600cm ³	Pk/10	20.60	25.34		
B	SFR-035010	Beaker Tongs	Each	3.53	4.34		
C	SOH-NV2101	Balance, Digital 2100g x 0.1g	Each	119.00	146.37		
D	EDHON-50	Oven - natural convection. Range: 5-230°C. Capacity: 50lt.	Each	872.69	1,073.41		

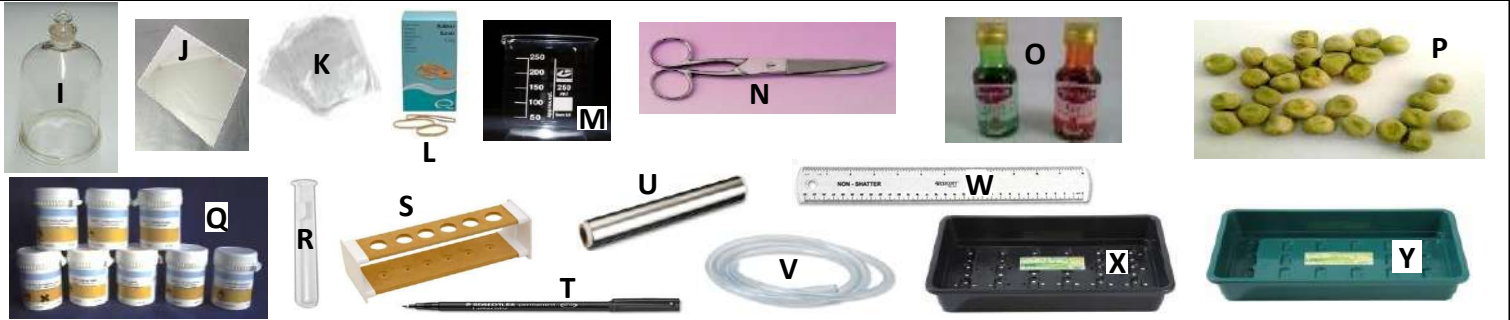


To demonstrate the rate of transpiration of water in plants

E	S-B192	Ganong's Potometer	Each	70.15	86.28		
A	ABN110.50CPK10	Beaker, Lennox Borosilicate Glass 600cm ³	Pk/10	20.60	25.34		
F	SB37020B	Bohemian Blade - safety backed blade	Pk/100	7.76	9.54		
	CRTSP8121211	Petroleum Jelly (Vaseline)	1kg	14.70	18.08		
or Datalogging method							
G	S-TABLETT4	Tablet - Android with Bluetooth 4.0. Screen Size - 7"	Each	135.00	166.05		
H	SP-PS-3202	and Wireless Pressure Sensor	Each	105.20	129.40		

To demonstrate the transport of water in plants (transpiration)

I	SC17820C	Bell Jar 200x300mm	Each	77.12	94.86		
J	SC17825	Acrylic Sheet 25x25cm - for use with bell jar to create a tight seal	Each	8.77	10.79		
K	SCP-BA055-52	Polythene Bag Lightweight 250x375mm	Pk/100	17.91	22.03		
L	SC83180	Rubber Bands Assorted Sizes. 100g	Each	3.09	3.80		
	CRTSP8121211	Petroleum Jelly (Vaseline)	1kg	14.70	18.08		
	CSA1513-L	Copper Sulfate Anhydrous (turns blue with water)	250g	8.84	10.87		









To show capilarity in a plant stem

M	ABN110.30CPK10	Beaker, Lennox Borosilicate Glass 100cm ³	Pk/10	13.04	16.04		
N	SC83220	Scissors, General Purpose 175mm	Each	5.28	6.49		
O	SC96160	Food Colouring - available in red or green	25ml	1.59	1.96		

Show the effects of a mineral deficiency on the growth of a plant

P	SM46669	Pea Seeds	250g	9.94	12.23		
Q	SF-A23565	Sach's Water Culture Medium Set/8 (1 tub containing all minerals + 7 tubs each lacking one essential mineral)	Each	46.69	57.43		
R	S-EDU1016	Test Tube, Borosilicate Glass 150 x 24mmØ - Boiling Tube	Pk/50	38.43	47.27		
S	SC78642	Test Tube Rack, Wooden, 6-hole (25mm Ø)	Each	7.06	8.68		
T	SP06520	Pen, Medium Permanent Black - to label test tubes	Pk/10	21.79	26.80		
U	AAL200.14	Aluminium Foil (to cover leaf)	Each	13.53	16.64		
V	SB55342	PVC Tubing 5mm Ø (cut to length to make aeration tube)	5 Mt.	3.33	4.10		
W	SRD34-2660	Ruler, Plastic 300mm	Each	0.99	1.22		
X	SB59385	or Seed Tray 355x215mm (with holes)	Each	1.66	2.04		
Y	SB59410	and Gravel Tray 355x215mm (without holes)	Each	1.96	2.41		

To show the effect of an additive on ensiled grass

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
	A	ABS910.80	Kilner Jar with Metal Screw Lid 1000cm ³	Each	8.11	9.98	
	B	ATD140.30X	Indicator Paper pH 1-14 - 10 booklets of 20 leaves	Each	4.33	5.33	
	C	SC58034	or pH Meter, Digital - requires pH electrode below	Each	102.91	126.58	
	D	SC58035	and Electrode for pH Meter	Each	23.53	28.94	
	E	EDHON-50	Oven - natural convection. Range: 5-230°C. Capacity: 50lt.	Each	872.69	1,073.41	
	F	SC96171	Molasses (black treacle)	454g	2.80	3.44	

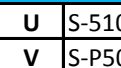
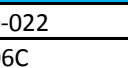


To show that starch is present in a leaf

	G	SC46100	Lamp, Desk Flexible Arm Type - bulb required	Each	10.58	13.01	
		SC46110	Bulb 40W SES for above Desk Lamp	Each	2.30	2.83	
	H	ABN110.45CPK10	Beaker, Lennox Borosilicate Glass 400cm ³	Pk/10	14.07	17.31	
	I	SC41920	Hotplate, Domestic Type 1500W	Each	27.95	34.38	
	J	S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11	
	K	S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60	
	L	S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27	
	M	S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35	
	N	S-TRSTD200/1	Tripod Stand, 200 x 125mm - height x top side	Each	5.60	6.89	
	O	S-GUZCR125	Wire Gauze, Ceramic Centre 125 x 125mm	Pk/10	9.37	11.53	
	P	S-EDU1016	Test Tube, Borosilicate Glass 150 x 24mmØ - Boiling Tube	Pk/50	38.43	47.27	
	Q	SB44330	Forceps Blunt Point 150mm	Each	2.51	3.09	
	R	S-CH0180B	Wash Bottle 250cm ³	Pk/5	4.89	6.01	
	S	S-EDU009	Spotting Tile, Ceramic 150mm x 150mm	Pk/5	12.41	15.26	
	T	APD102(15)	Petri Dish, Sterile Plastic	Pk/20	1.89	2.32	
		CRTSE0021608	Ethanol, Absolute - Duty Paid	100ml	13.86	17.05	
		CRTSE0651610	or Ethanol, Absolute - Duty Paid	500ml	58.80	72.32	
		CSA3794-M	Iodine Solution 1% in Potassium Iodide	500ml	5.64	6.94	
		CSA0495-L	Anti Bumping Granules	250g	13.77	16.94	

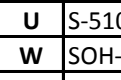
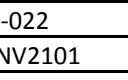
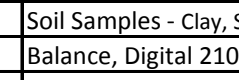
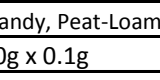
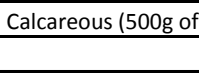
SOIL EXPERIMENTS

To examine the texture of a soil sample (feel method)

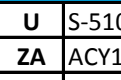
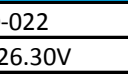
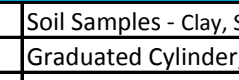
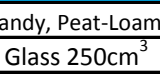
	U	S-510-022	Soil Samples - Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44	
	V	S-P506C	Magnifying Lens 75mm Diameter	Each	3.08	3.79	



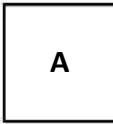



To show that there are different sized particles in soil

	U	S-510-022	Soil Samples - Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44	
	W	SOH-NV2101	Balance, Digital 2100g x 0.1g	Each	119.00	146.37	
	X	S-3070-6	Soil Sieve Set of 6. Mesh sizes: 4, 2, 0.5, 0.25, 0.1mm	Each	107.36	132.05	
	Y	ABN110.40CPK10	Beaker, Lennox Borosilicate Glass 250cm ³	Pk/10	14.74	18.13	
	Z	ACL725.15	Paper Towel Roll - 2-Ply, 197mm wide x 120 metres long	Pk/6	20.71	25.47	

To investigate the structure and texture of a soil (sedimentation method)

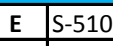
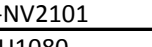
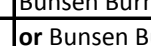
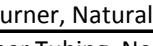
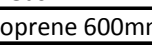
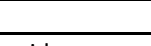
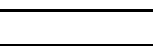
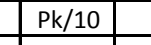
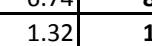


	U	S-510-022	Soil Samples - Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44	
	ZA	ACY126.30V	Graduated Cylinder, Glass 250cm ³	Each	6.65	8.18	
	ZB	S-CH0314N	Rubber Stopper Solid 33mm Ø . Fits 250cm ³ cylinder	Pk/10	13.24	16.29	
	ZC	SRD34-2660	Ruler, Plastic 300mm	Each	0.99	1.22	

To estimate the number of earthworms in a pasture

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
	A SB16102	Quadrat, Frame, 50x50cm (one-piece metal frame)	Each	15.95	19.62		
	B SB61850	Garden Shears	Each	22.00	27.06		
	C SB61841	Watering Can, Plastic. Capacity - 5Lt	Each	6.56	8.07		
	D SS-211030	Washing Liquid	433ml	2.11	2.60		



To show the percentage of organic matter in a soil sample

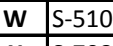
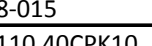
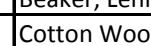
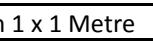
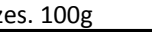


	E S-510-022	Soil Samples-Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44		
	F SOH-NV2101	Balance, Digital 1500g x 0.1g	Each	119.00	146.37		
	G S-EDU1080	Bunsen Burner, LPG Bottle Gas	Each	10.66	13.11		
	H S-EDU1081	or Bunsen Burner, Natural Gas	Each	11.06	13.60		
	I S-704-016/1	Bunsen Burner Tubing, Neoprene 600mm long	Each	7.54	9.27		
	J S-EDU080	Gas Lighter, Piezo Type	Each	7.60	9.35		
	K S-TRSTD200/1	Tripod Stand, 200 x 125mm - height x top side	Each	5.60	6.89		
	L S-C530B	Pipeclay Triangle 50mm	Pk/10	6.74	8.29		
	M ACX348.22P	Crucible 47mm Ø 25cm ³ c/w Lid	Each	1.32	1.62		
	N S-TSMS150/5	Tongs, 150mm. Mild steel with corrugated jaws	Pk/5	7.47	9.19		
	O AKART550	Desiccator Polycarbonate 150mm Ø	Each	36.68	45.12		
	CSA7663-M	Silica Gel	500g	11.39	14.01		

To test a soil for the presence of phosphates

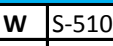
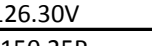
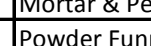
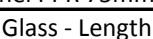

	P ABN110.40CPK10	Beaker, Lennox Glass Borosilicate 250cm ³	Pk/10	14.74	18.13		
	Q S-FLP150	Filter Paper, Student Grade, 150mm Ø	Pk/100	4.30	5.29		
	R AFT140.30F	Funnel, Filter, Glass 75mm Ø	Each	5.28	6.49		
	S S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
	T ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
	U A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
	V SB14340	Soil Test Kit - pH, N, P, K (60 tests)	Each	19.23	23.65		
	CLL103292.0B	or Ammonium Molybdate	1lt	38.07	46.83		



To demonstrate capillary action in a sandy soil and a clay soil

	W S-510-022	Soil Samples - Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44		
	X S-708-015	Glass Tube 17mm Bore x 300mm Long	Each	1.67	2.05		
	P ABN110.40CPK10	Beaker, Lennox Glass Borosilicate 250cm ³	Pk/10	14.74	18.13		
	Y SS79000	Cotton Wool Absorbent	500g	8.80	10.82		
	Z SC35740	Muslin Cloth 1 x 1 Metre	Each	4.36	5.36		
	ZA SC83180	Rubber Bands Assorted Sizes. 100g	Each	3.09	3.80		
	ZB SRD34-2660	Ruler, Plastic 300mm	Each	0.99	1.22		

The effect of structure formation on total pore space in soils

	W S-510-022	Soil Samples-Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44		
	ZC ACY126.30V	Graduated Cylinder, Glass 250cm ³	Each	6.65	8.18		
	ZD AMX150.25P	Mortar & Pestle 100mm	Each	4.64	5.71		
	ZE AFT460.35	Powder Funnel PPR 75mm Ø. Stem Ø - 25mm	Each	3.04	3.74		
	ZF S-CH0755A	Stirring Rod Glass - Length 150mm	Each	0.73	0.90		

To determine the percentage purity of barley seeds

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	SM46535	Barley Seed	250g	3.95	4.86		
B	SOH-CS200	Balance, Digital 200g x 0.1g c/w Mains Adapter	Each	51.31	63.11		
C	S-3070-6	Soil Sieve Set of 6. Mesh sizes: 4, 2, 0.5, 0.1mm	Each	107.36	132.05		



To show the activity of earthworms in the soil

D	SB67800G	Wormery - with Perspex Sheets	Each	32.21	39.62		
E	S-510-022	Soil Samples-Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44		

To show cation exchange in a sample of soil

E	S-510-022	Soil Samples-Clay, Sandy, Peat-Loam, Calcareous (500g of each)	Each	20.68	25.44		
F	S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
G	ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
H	S-BASE160T	Base for Retort Stand 160 x 100mm	Each	9.11	11.21		
I	S-BASE200T	or Base for Retort Stand 200 x 125mm	Each	11.15	13.71		
J	S-CH0663B/Single	Boshead for Retort Stand	Each	2.22	2.73		
K	S-CLMP3P	Clamp with Rubber Jaws for Retort Stand	Each	6.09	7.49		
L	S-RDMS0600	Rod for Retort Stand. Mild Steel. Length: 600mm	Each	4.34	5.34		
M	S-FLP150	Filter Paper, Student Grade, 150mm Ø	Pk/100	4.30	5.29		
N	AFT140.30F	Funnel, Filter, Glass 75mm Ø	Each	5.28	6.49		
O	A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
	CSA6762-M	Potassium Chloride	500g	5.42	6.67		
	CLA10263	Ammonium Oxalate	100g	17.21	21.17		
	CC71608-25G	Sodium Cobaltnitrate	25g	63.97	78.68		
	CRTSE0021608	Ethanol, Absolute - Duty Paid	100ml	13.86	17.05		
	CRTSW0021614A	Water, Deionised	5lt	8.40	10.33		

To measure the amount of air in a sample of soil

P	ABN110.30CPK10	Beaker, Lennox Borosilicate Glass 100cm ³	Pk/10	13.04	16.04		
Q	ABN110.60C	Beaker, Lennox Borosilicate Glass 1000cm ³	Each	3.98	4.90		
R	ACY126.30V	Graduated Cylinder, Glass 250cm ³	Each	6.65	8.18		

To calculate the percentage moisture in a sample of soil

S	SOH-NV2101	Balance, Digital 2100g x 0.1g	Each	119.00	146.37		
T	EDHON-50	Oven - natural convection. Range: 5-230°C. Capacity: 50lt	Each	872.69	1,073.41		
U	ABF662.28P	Evaporating Basin 150cm ³ - 100mmØ	Each	2.84	3.49		

To determine the pH of a soil

F	S-EDU1014	Test Tube, Borosilicate Glass 125 x 16mmØ	Pk/100	50.90	62.61		
G	ASM805.26	Test Tube Rack PPR 55 x 18mm Hole	Each	8.22	10.11		
M	S-FLP150	Filter Paper, Student Grade, 150mm Ø	Pk/100	4.30	5.29		
N	AFT140.30F	Funnel, Filter, Glass 75mm Ø	Each	5.28	6.49		
V	ABN110.45CPK10	Beaker, Lennox Borosilicate Glass 400cm ³	Pk/10	14.07	17.31		
W	S-CH0755A	Stirring Rod Glass - Length 150mm	Each	0.73	0.90		
O	A711116	Dropper Plastic Graduated 3cm ³	Pk/500	7.84	9.64		
	CRTSW0021614A	Water, Deionised	5lt	8.40	10.33		
	CSA2644-J	Universal Indicator Solution, Full Range pH 1-14	100ml	3.36	4.13		
X	SB14340	or Soil Test Kit - pH, N, P, K (60 tests)	Each	19.23	23.65		

Safety Materials

Image	Product Reference	Description	Pack Size	Price € Ex-VAT	Price € Inc-VAT	Order Qty	Total
A	S-EDU652	Safety Spectacles, Fixed Side-Arm	Each	2.16	2.66		
B	ASA962.10	Safety Goggles	Each	3.42	4.21		
C	S-506-055	Safety Visor	Each	33.09	40.70		
D	ASA350.20	Gloves, Disposable Polythene	Pk/100	2.23	2.74		
E	ASA382.15X	Gloves, Surgical Type, Small	Pk/100	2.72	3.35		
E	ASA382.20X	Gloves, Surgical Type, Medium	Pk/100	2.71	3.33		
E	ASA382.25X	Gloves, Surgical Type, Large	Pk/100	2.71	3.33		
F	SF-A79510	Gloves Leather Heat Resistant	Each	13.66	16.80		
G	ASA800.10	Dust Mask	Pk/50	3.22	3.96		
H	SC64962	Laboratory Coat Small 36/38"	Each	13.18	16.21		
H	SC64962A	Laboratory Coat Medium 40/41"	Each	13.18	16.21		
H	SC64963A	Laboratory Coat Large 42/44"	Each	13.18	16.21		
H	SC64965	Laboratory Coat X-Large 46/48"	Each	13.18	16.21		
I	S-EDU994	Safety Screen Perspex 3-Panel (225/300/225mm x 610mm high)	Each	64.41	79.22		
J	A5421726	Eye Wash Bottle, Empty. Capacity: 600cm3	Each	14.13	17.38		
K	SC67120	Eye Wash Station Wall Mounting c/w 2 x 500cm3 bottles	Each	37.78	46.47		
L	SC67210	First Aid Kit, 10 Person	Each	34.31	42.20		
L	SC67212	First Aid Kit, 20 Person	Each	50.56	62.19		
L	SC67215	First Aid Kit, 50 Person	Each	66.86	82.24		
M	SC67250	First Aid Cabinet Wall Mounting Lockable - with 20 person kit	Each	227.71	280.08		
N	SC67302	Fire Blanket	Each	16.48	20.27		
O	SF-L75796	Flammable Liquids Storage Cabinet 610x459x459mm - including carriage	Each	295.25	363.16		
O	SF-L76272	Flammable Liquids Storage Cabinet 915x459x459mm - including carriage	Each	356.37	438.34		
O	SF-L76296	Flammable Liquids Storage Cabinet 712x915x459mm - including carriage	Each	427.69	526.06		
O	SF-L76302	Flammable Liquids Storage Cabinet 915x915x459mm - including carriage	Each	448.06	551.11		
O	SF-L76314	Flammable Liquids Storage Cabinet 1220x915x459mm - including carriage	Each	529.56	651.36		
O	SF-L76326	Flammable Liquids Storage Cabinet 1525x915x459mm - including carriage	Each	567.40	697.90		
O	SF-L76338	Flammable Liquids Storage Cabinet 1830x915x459mm - including carriage	Each	590.69	726.55		
P	SF-L76855	Corrosives Storage Cabinet 610x459x459mm - including carriage	Each	323.77	398.24		
P	SF-L76867	Corrosives Storage Cabinet 915x459x459mm - including carriage	Each	369.11	454.01		
P	SF-L76880	Corrosives Storage Cabinet 712x915x459mm - including carriage	Each	448.84	552.07		
P	SF-L76892	Corrosives Storage Cabinet 915x915x459mm - including carriage	Each	468.60	576.38		
P	SF-L76909	Corrosives Storage Cabinet 1220x915x459mm - including carriage	Each	550.30	676.87		
P	SF-L76910	Corrosives Storage Cabinet 1525x915x459mm - including carriage	Each	589.44	725.01		
P	SF-L76922	Corrosives Storage Cabinet 1830x915x459mm - including carriage	Each	599.39	737.25		
NB: above corrosives cabinets are not suitable for hydrochloric, sulfuric or nitric acids as corrosion to door lock mechanism will occur							
Q	SF-A80196	Spill Kit (to absorb up to 3lts of chemicals spillage)	Each	63.01	77.50		
R	SC61800	Pipette Filler Pi-Pump 25cm3	Each	5.10	6.27		
S	S-C6586A/1	Pipette Filler Rubber Bulb Type	Each	4.84	5.95		

