# *Issues and Science* Transitioning from

Second to Third Edition

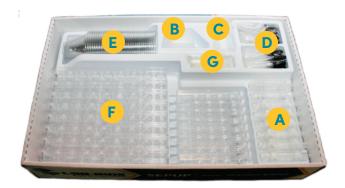
## CELL BIOLOGY AND DISEASE (Second Edition) to FROM CELLS TO ORGANISMS (Third Edition)







THE LAWRENCE HALL OF SCIENCE JNIVERSITY OF CALIFORNIA, BERKELEY





Drawer 3

**Drawer 2** 

Drawer 4







There are 7 drawers for the 2e program but only those affected with the transition are shown



2nd Ed	2nd Ed		3rd Ed	3rd Ed	Activity #	Consum	
Qty	Drawer #	Description	Drawer #	Qty	where used	able 🔶	Ref Cat. No.
		Chemplates <sup>®</sup> with cap (8 from 2nd edition, 10 in					
10	2	3rd edition drawer for a total of 18) A	1	18	5		800
1	2	Cup, measuring, 1/2-cup size B	1	1	7		MC-003
16	2	Cups, graduated, 30 mL C	1	16	5, 7, 13		TW-GCX16
32	2	Droppers, plastic D	1	32	3, 5, 7, 9,12		SP-DX16E
					1, 5, 7, 12,		
32	2	Plastic cups, 9 oz E	3	32	13		TW-9CX16
32	2	SEPUP trays (only 8 need to transfer over) <b>F</b>	1	8	7		CT-001
		Stir stcks (24 from 2nd edition, 24 in 3rd edition					
24	2	drawer for a total of 48) <b>G</b>	2	48	5, 7		SP-MSX24E
2	3	Coverslips, glass, 100/pkg H	1	2	3, 5, 9, 12	•	GS-007
		Disease Indicator solution, 30 mL drop					
8	3	controlled bottles (only 2 need to transfer over)	2	2	1	•	SA-1B19E
1	3	Hay infusion, pkg 亅	3	1	3	•	SA-1P76E
		Methyl Cellulose solution, 15 mL drop controlled					
8	3	bottles K	2	8	3	•	SS-1B17E
2	3	Microscope slides, 30/pkg	1	2	5, 9, 12		GS-004
1	3	Microscope slides, single depression, 16/pkg M	1	1	3		SS-1P24E
		Prepared microscope slides, Amoeba (4 from					
		2nd edition, 4 in 3rd edition drawer for a total of					
4	3	<i>8)</i> N	1	8	3		IALS-P023
8	3	Prepared microscope slides, Human Blood O	1	8	9		IALS-P021
		Prepared microscope slides, Paramecium (4 from					
		2nd edition, 4 in 3rd edition drawer for a total of					
4	3	<i>8)</i> <b>P</b>	1	8	3		IALS-P026
		Prepared microscope slides, stained Human					
8	3	Cheek Cells 🝳	1	8	9		IALS-P022
1	3	Toothpicks, wooden, 250/pkg R	1	1	12	•	TP-006
1	4	Beans, pkg S	2	1	7		SA-1P29E
		Bromothymol Blue (BTB) indicator solution, 30					
8	4	mL drop controlled bottles T	2	8	5, 13	•	WH-1-9EA
1	4	Cornstarch, 500 cc U	2	1	7	•	SA-1B38E
		Gas delivery tubes (8 from 2nd edition, 10 in 3rd					
8	4	edition drawer for a total of 18) <b>V</b>	2	18	5		SA-1P41E
8	4	Lugol's (iodine) solution, 20 mL 🛛 🛛 🛛 🛛 🛛 🛛	2	8	5, 7, 9, 12	•	CH-LSPKG
16	4	Magnifiers, 4X (only 8 need to transfer over) X	3	8	5		MA-001
2	4	Rice, pkg (only 1 needs to transfer over) Y	2	1	7		SA-1P30E
1	4	Rubber bands, 90/pkg Z	2	1	7	•	SA-1P26E
1	4	Sandwich bags, thin, 150/pkg AA	3	1	7	•	SA-1P49E
8	4	Spoons, plastic, large BB	2	8	7		TW-SPX16
16	7	Number cubes (only 15 need to transfer over) ZZ	2	15	1		DI-001A

## From Cells To Organisms Drawer 1 Third Edition



3.Prepared microscope slides, mixed bacteriaPS-011-044.Prepared microscope slides, stained AmphiumaPS-011-025.Prepared microscope slides, stained HelianthusPS-011-036.Straws, wrappedFA-SWX407.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, ParameciumIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	No.	Description	ltem No.
2.Prepared microscope slides, EuglenaPS-011HSG-F3.Prepared microscope slides, mixed bacteriaPS-011-044.Prepared microscope slides, stained AmphiumaPS-011-025.Prepared microscope slides, stained HelianthusPS-011-036.Straws, wrappedFA-SWX407.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human BloodIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	1.	Clay, stick	CL-013-1
3.Prepared microscope slides, mixed bacteriaPS-011-044.Prepared microscope slides, stained AmphiumaPS-011-025.Prepared microscope slides, stained HelianthusPS-011-036.Straws, wrappedFA-SWX407.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, ParameciumIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	2.		PS-011HSG-P
5.Prepared microscope slides, stained HelianthusPS-011-036.Straws, wrappedFA-SWX407.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	3.	Prepared microscope slides, mixed bacteria	PS-011-04
6.Straws, wrappedFA-SWX407.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	4.	Prepared microscope slides, stained Amphiuma	PS-011-02
7.Chemplates® with cap8008.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	5.	Prepared microscope slides, stained Helianthus	PS-011-03
8.Coverslips, glassGS-0079.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	6.	Straws, wrapped	FA-SWX40
9.Cup, measuring, 1/2-cup sizeMC-00310.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	7.	Chemplates® with cap	800
10.Cups, graduated, 30 mLTW-GCX1611.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	8.	Coverslips, glass	GS-007
11.Droppers, plasticSP-DX16E12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	9.	Cup, measuring, 1/2-cup size	MC-003
12.Microscope slidesGS-00413.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	10.	Cups, graduated, 30 mL	TW-GCX16
13.Microscope slides, single depressionSS-1P24E14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	11.	Droppers, plastic	SP-DX16E
14.Prepared microscope slides, AmoebaIALS-P02315.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	12.		GS-004
15.Prepared microscope slides, Human BloodIALS-P02116.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	13.		SS-1P24E
16.Prepared microscope slides, ParameciumIALS-P02617.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	14.		IALS-P023
17.Prepared microscope slides, Human Cheek CellsIALS-P02218.SEPUP traysCT-001	15.		IALS-P021
18.SEPUP traysCT-001	16.		IALS-P026
	17.	Prepared microscope slides, Human Cheek Cells	IALS-P022
19 Toothnicks wooden TP_006	18.	,	
	19.	Toothpicks, wooden	TP-006

# From Cells To Organisms Drawer 2 Third Edition



No.	Description	ltem No.
1.	Café Action B1: Eat a Hamburger, 30 mL drop controlled bottle	TX-BOB1
2.	Café Action B2: Eat a Salad, 30 mL drop controlled bottle	TX-BOB2
3.	Café Action B3: A Child Coughs on You, 30 mL drop controlled bottle	TX-BOB3
4.	Clay, vial, 20 g	SMS-B004
5.	Glucose, bottles, 14 g	SMS-B003
6.	Market Action E1: Drink Some Freshly Pressed Apple Juice, 30 mL drop controlled bottle	TX-BOE1
7.	Market Action E2: Cool Off in the Air Conditioning, 30 mL drop controlled bottle	TX-BOE2
8.	Market Action E3: Eat Some Precut Melon, 30 mL drop controlled bottle	TX-BOE3

9.	Picnic Action C1: Swim In The Lake, 30 mL drop controlled bottle	TX-BOC1
10.	Picnic Action C2: Eat A Ham Sandwich, 30 mL drop controlled bottle	TX-BOC2
11.	Picnic Action C3: Get A Tick On Your Leg, 30 mL drop controlled bottle	TX-BOC3
12.	Restaurant Action A1: Eat Fish Sandwich, 30 mL drop controlled bottle	TX-BOA1
13.	Restaurant Action A2: Get a Mosquito Bite, 30 mL drop controlled bottle	TX-BOA2
14.	Restaurant Action A3: Eat Corn on the Cob, 30 mL drop controlled bottle	TX-BOA3
15.	Starch, bottles, 15g	SMS-B005
16.	Zoo Action D1: Eat An Ice-Cream Cone, 30 mL drop controlled bottle	TX-BOD1
17.	Zoo Action D2: Eat A Hot Dog, 30 mL drop controlled bottle	TX-BOD2
18.	Zoo Action D3: Pet a Goat at the Petting Zoo, 30 mL drop controlled bottle	TX-BOD3
19.	Beans, pkg	SA-1P29E
20.	Bromothymol Blue (BTB) indicator solution, 30 mL drop controlled bottle	WH-1-9EA
21.	Cornstarch, 500cc	SA-1B38E
22.	Disease Indicator solution, 30 mL drop controlled bottles	SA-1B19E
23.	Gas delivery tubes (refill comes w/ 4 gas caps too)	SA-1P41E
24.	Lugol's (iodine) solution, 20 mL	CH-LSPKG
25.	Methyl Cullulose solution, 15 mL drop controlled bottles	SS-1B17E
26.	Number cubes	DI-001A
27.	Rice, pkg	SA-1P30E
28.	Rubber bands	SA-1P26E
29.	Spoons, plastic, large	TW-SPX16
30.	Stir sticks (measuring/mixing spatulas)	SP-MSX24E

## From Cells To Organisms Drawer 3 Third Edition



No.	Description	ltem No.
1.	Aluminum foil, squares (underneath)	TW-1-14F
2.	Colored pencil set, 8 colors	IAPS-P12
3.	Place signs, set of 5	SMS-L012
4.	Rulers, metric, 15 cm	RU-003B
5.	Hay infusion, pkg	SA-1P76E
6.	Magnifiers, 4X	MA-001
7.	Plastic cups, 9oz	TW-9CX16
8.	Sandwich bags, thin	SA-1P49E

## From Cells To Organisms Drawer 4 Third Edition



No.	Description	ltem No.
1.	Graduated cylinders, 50 mL	GC-011
2.	Pop beads, oval, blue, 50/pkg	SMS-P007A-1
3.	Pop beads, oval, green, 50/pkg	SMS-P007A-2
4.	Pop beads, oval, red, 50/pkg	SMS-P007A-3
5.	Pop beads, oval, white, 50/pkg	SMS-P007A-4
6.	Pop beads, round, yellow, 200/pkg	SMS-P007B-1
7.	Resealable bags, 3" x 4" (not shown - for beads)	SMS-P008
8.	Vial caps	C1-VCX16
9.	Vials, clear plastic, 10 dram	C1-VX16

#### FROM CELLS TO ORGANISMS, Third Edition IALS, SEPUP Transition from 2nd to 3rd Edition

2nd Ed	2nd Ed		3rd Ed	3rd Ed	Activity #	Consum	
Qty	Drawer #	Description	Drawer #	Qty	where used	able 🔶	Ref Cat. No.
		Chemplates <sup>®</sup> with cap (8 from 2nd edition, 10 in					
10	2	3rd edition drawer for a total of 18)	1	18	5		800
1	2	Cup, measuring, 1/2-cup size	1	1	7		MC-003
16	2	Cups, graduated, 30 mL	1	16	5, 7, 13		TW-GCX16
32	2	Droppers, plastic	1	32	3, 5, 7, 9,12		SP-DX16E
					1, 5, 7, 12,		
32	2	Plastic cups, 9 oz	3	32	13		TW-9CX16
32	2	SEPUP trays (only 8 need to transfer over)	1	8	7		CT-001
		Stir stcks (24 from 2nd edition, 24 in 3rd edition					
24	2	drawer for a total of 48)	2	48	5, 7		SP-MSX24E
2	3	Coverslips, glass, 100/pkg	1	2	3, 5, 9, 12	•	GS-007
		Disease Indicator solution, 30 mL drop					
8	3	controlled bottles (only 2 need to transfer over)	2	2	1	•	SA-1B19E
1	3	Hay infusion, pkg	3	1	3	•	SA-1P76E
		Methyl Cellulose solution, 15 mL drop controlled					
8	3	bottles	2	8	3	•	SS-1B17E
2	3	Microscope slides, 30/pkg	1	2	5, 9, 12		GS-004
1	3	Microscope slides, single depression, 16/pkg	1	1	3		SS-1P24E
		Prepared microscope slides, Amoeba (4 from					
		2nd edition, 4 in 3rd edition drawer for a total of					
4	3	8)	1	8	3		IALS-P023
8	3	Prepared microscope slides, Human Blood	1	8	9		IALS-P021
		Prepared microscope slides, Paramecium (4 from					
		2nd edition, 4 in 3rd edition drawer for a total of					
4	3	8)	1	8	3		IALS-P026
		Prepared microscope slides, stained Human					
8	3	Cheek Cells	1	8	9		IALS-P022
1	3	Toothpicks, wooden, 250/pkg	1	1	12	•	TP-006
1	4	Beans, pkg	2	1	7		SA-1P29E
		Bromothymol Blue (BTB) indicator solution, 30					
8	4	mL drop controlled bottles	2	8	5, 13	•	WH-1-9EA
1	4	Cornstarch, 500 cc	2	1	7	•	SA-1B38E
		Gas delivery tubes (8 from 2nd edition, 10 in 3rd					
8	4	edition drawer for a total of 18)	2	18	5		SA-1P41E
8	4	Lugol's (iodine) solution, 20 mL	2	8	5, 7, 9, 12	•	CH-LSPKG
16	4	Magnifiers, 4X (only 8 need to transfer over)	3	8	5		MA-001
2	4	Rice, pkg (only 1 needs to transfer over)	2	1	7		SA-1P30E
1	4	Rubber bands, 90/pkg	2	1	7	•	SA-1P26E
1	4	Sandwich bags, thin, 150/pkg	3	1	7	•	SA-1P49E
8	4	Spoons, plastic, large	2	8	7		TW-SPX16
16	7	Number cubes (only 15 need to transfer over)	2	15	1		DI-001A

2nd Ed	2nd Ed		3rd Ed	3rd Ed	Activity #	Consum	
Qty	Drawer #	Description	Drawer #	Qty	where used	able 🔶	Ref Cat. No.
srand No	ew items ti	nat come in the 3rd Edition Drawers Certificate, Elodea	1	1	12, 13	•	SMS-LM03
		Clay, stick	1	1	3, 6	•	CL-013-1
						•	
		From Cells to Organisms SDS (Safety Data Sheet)	1	1	0		SMS-CEL-3SD
		Prepared microscope slides, Euglena	1	8	3		PS-011HSG-P
		Prepared microscope slides, mixed bacteria	1	8	3		PS-011-04
		Prepared microscope slides, stained Amphiuma	1	8	9		PS-011-02
		Prepared microscope slides, stained Helianthus	1	8	9		PS-011-03
		Straws, wrapped	1	50	5, 13	•	FA-SWX40
		Cafe Action B1: Eat A Hamburger, 30 mL drop					
		controlled bottle	2	1	1	•	TX-BOB1
		Cafe Action B2: Eat A Salad, 30 mL drop					
		controlled bottle	2	1	1	•	TX-B0B2
		Cafe Action B3: A Child Coughs On You, 30 mL		_			
		drop controlled bottle	2	1	1	•	TX-B0B3
		Clay, vial	2	1	5	•	SMS-B004
		Glucose, bottles	2	8	5	•	SMS-B003
		Market Action E1: Drink Some Freshly Pressed					
		Apple Juice, 30 mL drop controlled bottle	2	1	1	•	TX-BOE1
		Market Action E2: Cool Of In The Air					
		Conditioning, 30 mL drop controlled bottle	2	1	1	•	TX-B0E2
		Market Action E3: Eat Some Precut Melon, 30		_			
		mL drop controlled bottle	2	1	1	•	TX-B0E3
		Picnic Action C1: Swim In The Lake, 30 mL drop					
		controlled bottle	2	1	1	•	TX-B0C1
		Picnic Action C2: Eat A Ham Sandwich, 30 mL	2	4	1		TV DOCO
		drop controlled bottle	2	1	1	•	TX-B0C2
		Picnic Action C3: Get A Tick On Your Leg, 30 mL	2	1	1		
		drop controlled bottle Restaurant Action A1: Eat Fish Sandwich, 30 mL	2	1	1	•	TX-B0C3
		drop controlled bottle	2	1	1	•	TX-B0A1
		Restaurant Action A2: Get A Mosquito Bite, 30	2	1	1	•	TA-BOAT
		mL drop controlled bottle	2	1	1	•	TX-B0A2
		Restaurant Action A3: Eat Corn On The Cob, 30	2	-	-	•	TX-DOA2
		mL drop controlled bottle	2	1	1	•	TX-B0A3
		Starch, bottles	2	8	5	•	SMS-B005
		Zoo Action D1: Eat An Ice-Cream Cone, 30 mL	2	0		•	51013-0005
		drop controlled bottle	2	1	1	•	TX-B0D1
		Zoo Action D2: Eat A Hot Dog, 30 mL drop	2	-	-	•	
		controlled bottle	2	1	1	•	TX-B0D2
		Zoo Action D3: Pet A Goat At The Petting Zoo, 30		_	-		
		mL drop controlled bottle	2	1	1	•	TX-B0D3
		Aluminum foil, squares	3	2	13	•	TW-1-14F
		Colored pencil set, 8 colors	3	16	1, 6, 8, 11		IAPS-P12

2nd Ed Qty	2nd Ed Drawer #	Description	3rd Ed Drawer #	3rd Ed Qty	Activity # where used	Consum- able ♦	Ref Cat. No.
		Place signs, set of 5	3	1	1		SMS-L012
		Rulers, metric, 15 cm	3	32	13		RU-003B
		Graduated cylinders, 50 mL	4	8	1		GC-011
		Pop beads, oval, blue, 50/pkg	4	1	11		SMS-P007A-1
		Pop beads, oval, green, 50/pkg	4	1	11		SMS-P007A-2
		Pop beads, oval, red, 50/pkg	4	1	11		SMS-P007A-3
		Pop beads, oval, white, 50/pkg	4	1	11		SMS-P007A-4
		Pop beads, round, yellow, 200/pkg	4	1	11		SMS-P007B-1
		Resealable bags, 3" x 4"	4	17	11		SMS-P008
		Vial caps	4	64	13		C1-VCX16
		Vials, clear plastic, 10 dram	4	64	13		C1-VX16

