

PACKING LIST Lab 4 & 5 common items

The amounts listed will suffice for teachers doing either or both labs 4 & 5.

TEACHER - _____

Number of Students _____

Ver. A _____

Ver. B _____

ITEM	# per section	Total	# of Sections	PKD	Ret.
Test tubes racks (1/3 cut)	16 (reused)	16		_____	_____
Pipette pumps 10ml	16 (reused)	16		_____	_____
Combs for gels	16 (reused)	16		_____	_____
Plastic blocks (duplo's)	16 (reused)	16		_____	_____
Thermometers (blue band)	3 (reused)	3		_____	_____
Gel boxes:	16 (reused)	16		_____	_____
Power supplies:	8 (reused)	8		_____	_____
Micropipetors	16 (reused)	16		_____	_____
Fry pans for agarose	2 (reused)	2		_____	_____
Fry pan thermostats at 60 ° C	2 (reused)	2		_____	_____
Electrophoresis buffer in 2 plastic bottles	6 liters (reused)	6 liters		_____	_____
*Methylene blue A+ B	_____	1.0 L for 1-3 sections	_____	_____	_____
*Funnel for used stain	1		_____	_____	_____
*Bottle for used stain	1		_____	_____	_____

* Not needed for lab 4 version C

SPECIAL REQUEST TO TEACHERS REGARDING USE OF RELATIVELY EXPENSIVE SUPPLIES (LABS 3, 4, AND 5).

If you have multiple sections:

You will receive several duplicates tubes of DNA and/or of restriction enzyme. Each set has enough for one section, plus a little extra in case of problems.

We ask that you use up one tube fully before opening the next section's tube. Maybe you will have an unopened tube left over after several sections. When you return the unopened tube, it conserves the grant's resources.

Whether or not you have multiple sections:

If you have a tube that still contains material, but that has been opened and partly used up, please mark the tube with a marking pen (black dot on the lid) before returning to us, so we will know to measure contents before we sent that tube out to another teacher.

In lab kits 4 and 5:

Please save all the 1.5 ml colored tubes that come in the kit. Throw away all the white 1.5 ml white tubes.

PACKING LIST - Lab 4 DNA FINGERPRINTING

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TEACHER - _____ Number of Students _____

Paper	Total	PKD °
Protocols: Number of Students plus 10		
# of Ver. A Students: _____ + 10 = _____		_____
# of Ver. B Students: _____ + 10 = _____		_____
# of Ver. C Students: _____ + 10 = _____		_____
Evaluation:	1	_____

KEEP BIOLOGICALS FROZEN OR ON ICE UNTIL USE!

Biologicals for Version A

Uncut DNA's for 0.8 % agarose system:

Label Code	DNA Type	Sections:	Tubes per section	Total	PKD
"X"	Lambda DNA	A: _____	1	_____	_____
"Y"	Lambda DNA	A: _____	1	_____	_____
"Z"	Lambda DNA	A: _____	1	_____	_____

(to each tube of X, Y & Z add 25 ul of DNA and 15 ul of water)

"100"	KB Ladder 25 ul of stock	A: _____	1	_____	_____
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Do not confuse the above DNA's with the Lambda DNA digested by Bste II and the Lambda DNA digested by Hind III that are used for the B version of this experiment.

Restriction Enzymes for 0.8 % agarose system: 20 ul each tube

"B1"	BamH I	A: _____	2	_____	_____
"B2"	Hind III	A: _____	2	_____	_____

Restriction Buffer for 0.8% agarose system: 10 ul each tube

Dilute the stock (10X) buffer 1:1 with water, then put 10 ul in each tube.

"R"	Restriction buffer 5(X)	A: _____	20	_____	_____
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PACKING LIST -lab 4

TEACHER - _____ Number of Students _____
 Ver. A _____ Ver. B _____ Ver. C _____

ITEM	# per section	Total	# of Sections	PKD	Ret.
Pipette tips	20 boxes reused for 1-3 sections plus 10 for each add'l section	_____	_____	_____	_____
10 ml pipette	20	_____	_____	_____	_____
Practice 10 ml pipettes	20 (reused)	20	_____	_____	_____
Baggies	40	_____	_____	_____	_____
3" X 2" glass slides	20	_____	_____	_____	_____
Practice 3" X 2" glass slides	20 (reused)	_____	_____	_____	_____
Staining trays	20 (reused)	_____	_____	_____	_____
250 ml sealed flasks with 100 ml of 0.8% agarose	3 A + B _____	_____	_____	_____	_____
250 ml sealed flasks with 100 ml of 0.8 to 1.0 % agarose	3 Ver. C _____	_____	_____	_____	_____
1.5 ml tubes	Ver. A _____ 65 Ver. B _____ 35 Ver. C _____ 65	_____	_____	_____	_____
Portion cups	Ver. A _____ 20	_____	_____	_____	_____
9 oz waste cups	20 (reused)	_____	_____	_____	_____

PACKING LIST -lab 4

ITEM	# per section	Total	# of Sections	PKD	Ret.
"W" 1.5 ml tube A: _____	20 (reused)	20	_____	_____	_____
"L" 1.5 ml tube A + B _____	20 (reused)	20	_____	_____	_____
"P" (orange color) Practice dyed water	20 (reused)	20	_____	_____	_____
"P" (blue color) Practice loading dye	20 (reused)	20	_____	_____	_____
Practice slotted agar plates	20 (reused)	20	_____	_____	_____
Sharpies	20	20	_____	_____	_____
Lead rings	6 (reused)	6	_____	_____	_____

Simulated "DNA's" for Version C:

500 ul per tube

"11" Red	16 (reused)	16	_____	_____
"12" Yellow	16 (reused)	16	_____	_____
"13" Green	16 (reused)	16	_____	_____
"14" Blue	16 (reused)	16	_____	_____
"G"	16 (reused)	16	_____	_____
50% glycerol 500 ul per tube				

Note: Preparing transparencies from baggies

Each student will record the bands produced on the gel at their station by tracing their own transparency.

- 1.) At the beginning of the lab have each student use the marking pen to draw a rectangle on one thickness of a torn open baggie.
- 2.) The glass slide should be placed on the plastic and it's perimeter outlined with the pen.
- 3.) Do this step at the beginning of lab, before slide gets wet from pouring the gel.

Please return all colored 1.5 ml microtubes.

Please return foam test tube racks