

**Online Supplemental Materials for
Classroom-Scale Experiments in System-Scale Modeling**

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Supplies for latent heat transfer experiment

Part	Unit cost	Quantity	Total cost	Comments
Standard grade filtering flasks, 1,000 mL	\$33.20	7	\$265.60	Do not use flasks designed for vacuum use
Small conduction hot plates (e.g., ceramic top)	\$145	7	\$1,015	Hot plates should be at least as wide as the contact base of the flasks—e.g., at least 13 cm (5 in.) square.
600 mL Beakers	\$5.95	7	\$34.65	Any beaker in the range of 500–750 mL size should work.
Solid rubber stoppers, size #8	\$14.25 per pound (8–10 stoppers in the bag)	1	\$14.25	May be sold by the pound, stoppers must fit the flask, Getting the right sized stopper may require some trial and error as the openings of the filtering flasks aren't always the same.
Tygon tubing, .6 cm (1/4 in.) bore, sold as 3 m (10 ft.) length	\$19.30	1	\$19.30	Can cut down into 13-14 inch lengths. 5/16 inch bore will also work, but we had some trouble with these slipping off the flask.
Digital pocket thermometer	\$19.95	7	\$139.65	e.g. -50 to 200 C with resolution of 0.1 degree C)
Hand protector, silicone	\$22.10	7	\$154.70	e.g. manufactured by Bel-Art SP Scienceware Hot-Hand Protector Glove/Mitt). Beaker tongs could also be used to handle hot flasks
Oven mitt or hot pot holder	\$4	7	\$28	For teacher to set the hot flask on after the experiment is completed to decrease thermal shock against the table top.