

TABLE 20.1

Materials list

Item	Quantity
Consumables	
Calcium chloride, CaCl_2	5 g per group
Cesium chloride, CsCl	5 g per group
Lithium chloride, LiCl	5 g per group
Potassium chloride, KCl	5 g per group
Sodium chlorate, NaClO_3	5 g per group
Sodium chloride, NaCl	5 g per group
Sodium iodide, NaI	5 g per group
Distilled water	200 ml per group
Equipment and other materials	
Polystyrene cups*	2 per group
Thermometer†	1 per group
Graduated cylinder, 25 ml	1 per group
Beaker, 250 ml	3 per group
Stirring rod	1 per group
Electronic or triple beam balance	1 per group
Timer or stopwatch	1 per group
Support stand	1 per group
Ring clamp	1 per group
Chemical scoop	1 per group
Weighing paper or dishes	1 per group
Investigation Proposal C (optional but recommended)	3 per group
Whiteboard, 2' x 3' ‡	1 per group
Lab handout	1 per student
Peer-review guide and instructor scoring rubric	1 per student

* Polystyrene cups are recommended, but a calorimeter can be used instead.

† A temperature probe and sensor interface can be used instead of a thermometer.

‡ As an alternative, students can use computer and presentation software such as Microsoft PowerPoint or Apple Keynote to create their arguments.