



### Materials and Tools for Super Lens Invention Kit

This materials and tools list is sufficient for 20 students to complete the activities in teams of five students. This list can be used to purchase and/or supply materials and tools *without* purchasing the kit.

Materials and tools that are not supplied in the kit are listed separately and identified as *required* or *optional* to complete the activities.

All activities require safety items: safety glasses, and disposable latex-free gloves.

Materials and Tools (required; supplied in the purchased kit)	Size and Quantity in Kits	Notes
Shipping tape, clear	2 small rolls	Suggest rolls of 1.88 in. x 22.2 yd.
Cardstock	25 sheets of 8 ½" x 11"	Suggest 110 lb. weight
Red laser pointer w/ raised on/off button	8	Less than 5 milliwatt emitted power
Generic cell phone pry tools and screwdrivers	4	
Semicircular refraction dish	4-4 5/8" diameter	
Utility knives	4	
Masonite board	4, 16" x 20"	
Hot glue gun and glue	4 glue guns	



Smartphone (inexpensive to take apart)	4	Suggest Samsung Galaxy Centura Android pre-paid phone (TracFone)
Fantasy FX Fake Hairspray	1 can	
Knox® unflavored cooking gelatin	2, 1-oz. box of 4 envelopes	
LED light with hook, battery powered	4	LEDs in patterns are important to test focal lengths
Clothes pins, wooden	20	
Masking tape; black or blue	$\frac{3}{4}$ " wide; 4 rolls	
Biconvex lenses with assortment of focal lengths	6 lenses total; various focal lengths of 10, 15, 20, 30, & 50 cm; 50mm diameter	Lens sets available on Amazon or substitute lenses from "drugstore" reading glasses
Cardboard sheets	20, 20" x 30"	
Vellum stationary paper, translucent	25 sheets of 8 $\frac{1}{2}$ " x 11"	
<b>Safety Items (required; supplied in the purchased kit)</b>	<b>Description</b>	<b>Notes</b>
Latex-free disposable gloves	1 box of 100; medium	
Safety glasses	22 regular	



Safety glasses	3 over prescription safety glasses	
Dust masks, disposable	1 box	

<b>Materials and Tools (required; <i>not</i> supplied in the purchased kit)</b>	<b>Size and Quantity</b>	<b>Notes</b>
Cardboard and scrap materials		Commonly found in recycling bins
Scissors	1 pair for each class member	
Yardsticks	1 for each team	
Calculators	1 for each team	