



Materials List

This kit is prepared for 12 groups of 2 kids.

Quantity	Part Description
Non-Consumable Items	
1	<i>Engineering Design Process</i> poster
1	<i>Messages from the Duo</i> audio file or access to a computer
1	measuring cup, 2 cups
1	permanent marker
1	tablespoon measure
2	black lights, handheld, <i>AA batteries included</i>
2	buckets, 5 liters
2	calculators
2 pairs	dish gloves
2 pairs	garden gloves
2	hand lenses
2 pairs	oven mitts
2	plastic bags, resealable, gallon size
2	skewers
2	stuffed animals
2	thermometers, digital
2 pairs	winter gloves
4	cups, plastic, 16 oz.
4	jars, with twist lids, 12 oz.
6	aluminum trays, 12" x 10" x 2.5"
8	stopwatches
12	rulers
60	beads
160	paper clips
210	metal washers, 1 1/4" in diameter
Consumable Items	
1 roll	aluminum foil
1 bottle	dish soap
1 box	food-safe gloves, adult, 100 count
1 bottle	UV glow powder, white, 4 oz.
1 box	vinyl gloves, adult, 100 count*
2 sheets	cardboard, thin, 8.5" x 11"
2 cups	gravel



2 boxes	spaghetti [†]
6	deli containers, round, with lids, 16 oz.
6 cups	sand
12 rolls	tape, masking
24	plastic bags, resealable, quart size
30 sheets	felt, 8.5" x 11"
30 sheets	transparency, 8.5" x 11"
32 sheets	craft foam, green, 8.5" x 11"
36	sponges
50 sq. ft.	cheesecloth, 8.5" x 11"
125	pipe cleaners
300	cotton balls
350	straws, regular
1200	index cards
NOT INCLUDED IN KIT	
1 pad	chart paper
1	clock/timepiece for scheduling
1 sheet	copy paper
1	device to play mp3 files
1 roll	duct tape
2	craft sticks, jumbo
2 rolls	paper towels
8	pens or pencils
12 pairs	scissors
24	Engineering Journals
36 cups	ice cubes [‡]
	access to water

* The vinyl glove should be at least 3 mil thickness to prevent tearing during glove construction.

† The spaghetti used in Adventure 3 should be standard, No. 5 size, spaghetti. Using thin spaghetti or angel hair pasta will be too fragile for this activity.

‡ You will need 36 cups of ice cubes for 3 activities. Please ensure that you have access to a freezer.