

Week	Topic	Details	Items in kit	Items not included in kit
Astronomy				
0	Bingo	keep close by for each class	2 Bingo cards	coins or beans to use to cover squares
Class 1 (Jan 25-27)	The Size of the Solar System	-the relative distance between the Sun and the planets -effect of gravity on weight on different planets -use of parallax in astronomy	3' cash register tape	bathroom scale (or tell child their weight) pencil worksheet (print from website) calculator colored pencils
Class 2 (Feb 2-4)	The Planets (Mercury-Jupiter)	learn about interesting planet phenomena	pencil 2 small rocks 1 chopstick tea bag	lamp without lampshade or ceiling light approx. 12" sheet of wax paper flashlight worksheets (print from website) Clear glass/jar filled 3/4 way with water 1/2 tsp. milk dark area in home tall, large-mouth clear glass/jar filled 1/2 way with water
Class 3 (Feb 9-11)	The Planets (Saturn-Neptune)	learn about interesting planet phenomena	pencil (from Class 2) glitter (about 1/8 tsp) 3 - 1"x6" strips of paper 1 pushpin (stuck in pencil eraser) 1 toothpick clay (small piece from large chunk) 1 small rock from previous class	small pinch of flour, cornstarch, or baby powder black Sharpie or felt tip pen flashlight worksheet from previous class ruler dark area in home approx. 6" aluminum foil/wax paper for putting gluey rock on to dry white glue (small amount to cover small rock) dark-colored plate/pie plate+2 T salt or sugar on it (any surface that allows you to see the salt or sugar)
Class 4 (Feb 16-18)	Life Cycle of a Low-Mass Star	create a model of a low-mass star life cycle	1 paper plate 2 cotton balls small orange pompom 0.5" yellow pompom 1" red pompom 2 silver sequins black peppercorn	white glue or hot glue gun/hot glue pink, red, blue, and/or purple marker black Sharpie or felt tip pen worksheet (print from website)

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Class 5 (Feb 23-25)	Life Cycle of a High-Mass Star	create a model of a high-mass star life cycle	1 cotton ball 0.75" orange pompom 1" blue pompom red yarn pompom rainbow pompom clear pony bead black bead 1 paper plate 1 chopstick (from planet class) pipe cleaner 12" piece of yarn	white glue or hot glue gun/hot glue pink, red, blue, and/or purple marker black Sharpie or felt tip pen worksheet (print from website) low-mass star lifecycle model from last class
Class 6 (Mar 2-4)	Blackholes and Nebulae	-model creation of a black hole -create a nebula in a bottle	2 black balloons 1 pushpin (from Saturn ring model in Planets class) glitter (about 1/2 tsp.) 1 sequin 1 chopstick	three 14" (approx.) sheets of aluminum foil Spaghettification booklet (print from website) colored pencils stapler cell phone with Pocket Black Hole app (Apple & Android) (optional, but fun) clear tall, smooth-sided plastic or glass bottle with tight-fitting lid (Sparkling Ice bottle (17 oz.) or similar works well), label removed about 30 cotton balls funnel old towel/paper towels 10 drops of red and blue food coloring cake pan/cookie sheet to catch spills 3 cups with 1-1/2 c. water in each
Class 7 (Mar 9-11)	Asterioids, Comets, and Meteoroids	-compare relative size of asteroids, comets, and meteoroids -make a model of an asteroid and comet	4 oz. clay 1 chopstick (from nebula class) 1 small rock (from planet class) 3' red ribbon 1.5' yellow ribbon 1 meter thin paper strip	2 worksheets (print from website) approx. 1' foil/wax paper to put clay on approx. 1' plastic wrap approx. 6" aluminum foil glue stick or white glue rock coated with glitter made in previous class colored pencils (optional) freezer "comet": dirt/sand, freezer safe plastic bowl, water, freezer
Class 8 (Mar 16-18)	The Sun (may be taught a different week depending on weather)	-create a model of the Sun -learn about the layers of the sun -observe the color of sunlight and movement of the Sun -observe the sun with solar glasses	Paper model pieces Bic pen solar glasses 3 UV beads 8-1/2" x 11" white cardstock	glue stick chalk/masking/painters tape and a helper OR small, tall object (like a candlestick), a piece paper, pencil scissors (optional) ability to take computer outside or access Zoom via phone during class small piece of scotch tape or large stapler outdoor access to the Sun during class