CCSD Kit

FAMILY SCIENCE NIGHT

FSN (Family Science Night Kit)

#1 Airplanes Design and construct a paper airplane to fly. Investigate and develop an understanding of applied forces (gravity/lift). **STEM Activity**	**Materials Provided:** • paper clips • pencils	**Materials You Provide:** • Copy paper
#2 Air Zooka Aim Use Air Zooka to create movement of air to knock down a stack of cups. A tally sheet will be used to predict/track the actual number of Air Zooka blows to knock down all of the cups. **GSE Correlation** SKP2, S2P1, S2P2, S4P3	**Materials Provided:** • Air Zooka • Cups • Tally sheet • Dry erase marker	**Materials You Provide:** • None
#3 Balloon Racers Construct and observe a balloon rocket in motion. **STEM Activity**	**Materials Provided:** • 6 feet of string • 4 inch piece drinking straw • Balloons • spring clothespin	**Materials You Provide:** • Chairs or posts • Transparent tape
#4 Beneficial Blubber Investigate how blubber serves as an effective insulator for Arctic animals. Students create "blubber mitts" and see for themselves if blubber can protect them from the freezing Arctic!! **GSE Correlation** S3L1, S3P1	**Materials Provided:** • Lard (Crisco) • Ziploc bags	**Materials You Provide:** • Ice • Water • Tape

#5 Conductors Investigate objects that are insulators and conductors **GSE Correlation** S5P2	**Materials Provided:** • Batteries • Battery packs • Various materials to test • Light bulbs with wire	**Materials You Provide:** • none
#6 Energy Ball Demonstrate complete/ incomplete circuits and the flow of electric current through touch **GSE Correlation** S5P2	**Materials Provided:** • Energy Ball	**Materials You Provide:** • none
#7 Escaping Water Transfer water using capillary action of a paper towel **GSE Correlation** S1L1, S5L1	**Materials Provided:** • Plastic Dixie cups • Paper towels • Food coloring	**Materials You Provide:** • Water
#8 Heat Create heat by using friction. Observe what happens when you quickly rub sandpaper on a wood block. **GSE Correlation** S3P1	**Materials Provided:** • Sandpaper squares • blocks of wood	**Materials You Provide:** • Safety goggles • Waste basket • Timer • Paper Towels
#9 Lava Lamps Create a lava lamp from a result of a chemical change **GSE Correlation** S5P1	**Materials Provided:** • Clear cups • Vegetable oil • Alka-Seltzer tablets, or store brand equivalent • Food coloring	**Materials You Provide:** • Water
#10 Lenses Investigate how lenses allow us to see things differently. Identify objects we use that have lenses. **GSE Correlation:** S4P1	**Materials Provided:** • Convex lenses • Concave lenses • Lens Exploration Sheet/Lens Hunt • Answer Key	Materials You Provide: • Dry Erase Marker • Eraser/paper towel

#11 Magnificent Mixtures Students will create a mixture and separate the items back into their original state using household items. **GSE Correlation** S5P1	**Materials Provided:** • Bowl • Green gravel • Sand • Iron filings • Bar magnets • Colander	**Materials You Provide:** • none
#12 Rock 'n Soils Identify, sort, and compare types of soils and rocks. **GSE Correlation** S3E1	**Materials Provided:** • Rock samples • Soil samples • Hand lens • Sorting mats	**Materials You Provide:** • **none**
#13 Saltwater vs. Freshwater (Animal adaptation correlation) Observe difference between salt water and fresh water. How do animal adaptations affect existence in salt water/fresh water? (particularly crocodiles) **GSE Correlation** S3L1, S4L1	**Materials Provided:** • Clear cups • Salt • Food coloring • Spoons	**Materials You Provide:** • Water • Perrnanent marker • Ice cube (optional) • Toothpicks, soap, grapes are optional)
#14 Shadow Makers Discover objects that allow all light, some light, and no light to travel through. Cut outs are used to create shadows **GSE Correlation** S1P1, S4P1	**Materials Provided:** • Flashlights • Batteries • White and black pepper • Geometric shape cut outs • Wax paper, aluminum foil, and plastic wrap • Various materials to test (4-5)	**Materials You Provide:** • **None**
#15 Sound – Feeling and Hearing it Identify and organize tuning forks by pitch from the highest to lowest. Observe what happens when a tuning fork is struck and placed in water. **GSE Correlation** S1P1, S4P2	**Materials Provided:** • Tuning forks • Striking mallets • Cup	**Materials You Provide:** • Water • Table • Copy paper

#16 Spaghetti Structures Construct/engineer a structure using spaghetti and mini marshmallows strong and stable enough to support a ping pong ball. **STEM Activity**	**Materials Provided:** • Spaghetti • Mini-marshmallows • Ping pong balls • Measuring tape	**Materials You Provide:** • None
#17 Twirly Whirly Milk Investigate chemical reaction when dish detergent and milk touch. Reaction causes a swirling motion that creates a colorful display in the milk. **GSE Correlation** S5P1	**Materials Provided:** • Petri-dish • Q-Tip • Dish detergent • Food coloring	**Materials You Provide:** • WHOLE milk
#18 World of Weathering Students will explore how various types of weathering can break down rocks over time. **GSE Correlation** S5E1, S3E1	**Materials Provided:** • Sugar cubes • Black construction paper • Vinegar • Cups • Droppers	**Materials You Provide:** • Water • Paper towels
#19 What Do You Hear? Hypothesize what objects are side different egg using an item chart. **GSE Correlation** S1P1, S4P2	**Materials Provided:** • Listening eggs and cartons • Answer egg cards • Listening egg picture key	**Materials You Provide:** • None