Grade 4 Teacher-Sourced Kit Items

Module 1: Egg Racers

Items	Driving Question	Lesson
Mini marshmallows	3-D Team Challenge	3
		7
Bread	3-D Team Challenge	5
Jar of peanut butter	3-D Team Challenge	5
Jar of jelly	3-D Team Challenge	5
2 butter knives	3-D Team Challenge	5
Plate	3-D Team Challenge	5
Napkins	3-D Team Challenge	5
Empty folders or other object to cover Twig Books	3-D Team Challenge	5
Shallow, lightweight cardboard box or box lid (for each team)	1	1
Compasses (for each team)	1	1
Sharp item for piercing holes in cardboard (e.g., skewer) **(Optional)**	1	1
	1	5
Mugs (or other round items for drawing around)	1	1
Scissors	1	1
	1	5
	4	2
Rulers	1	1
	1	5
Craft materials (e.g., paint, markers, construction paper, colored pencils, tape)	1	1
Trays **(Optional)**	1	1
Chair with wheels	1	4
Books/binders to build ramps	1	4
	3	2
	1	5
	2	1
	4	1
Paper or cardboard	1	1
	1	5
Prizes for winning teams **(Optional)**	2	3
Pennies or quarters (2 for each pair) **(Optional)**	3	1
Additional balls of various sizes and weights **(Optional)**	3	1
Camera (phone, tablet, etc.) **(Optional)**	3	2
	4	4
Objects for model cars to collide with, including ways to alter the objects' masses	3	2

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Module 1: Egg Racers		
Items	**Driving Question**	**Lesson**
Raw eggs (at least 6, plus 1 for each team)	4	1
	4	2
	4	3
Materials to create safety features for model cars (e.g., straws, cardboard, paper, packing peanuts)	**4**	2
Scale **(Optional)**	4	2
Glue	4	2
Tape	4	2
Permanent marker (for each team) **(Optional)**	4	3
Cleaning products	4	4
Extra raw eggs (for each team) **(Optional)**	4	4

Module 2: Sparks Energy, Inc.

Items	Driving Question	Lesson
Highlighters of different colors **(Optional)**	1	3
Ice cubes	1	4
Ice chest and freezer packs	1	4
Clear tape	1	4
Heat lamps **(Optional)**	1	4
8 additional stopwatches/timers **(Optional)**	1	4
Computers or tablets (for each pair)	1	5
	1	6
Sticky notes	1	7
	2	9
Camera (phone, tablet, etc.) **(Optional)**	2	2
Magazines and catalogs with images of electrical devices	2	2
Scissors	2	2
	2	6
	2	7
Glue	2	2
Legal or other large paper	2	2
2 sources of wind (e.g., electric fans or hair dryers)	2	6
	2	7
	2	8
Trays	2	6
Rulers	2	6
Additional materials for making wind turbine blades (e.g., paper, fabric, plastic, leaves, toothpicks) **(Optional)**	2	7
Props for debate (e.g. hats, microphones, cameras) **(Optional)**	3	6

Module 3: Time-Traveling Tour Guides

Items	Driving Question	Lesson
Images of local geological features	1	2
Computers or tablets (for each pair)	1	2
	1	4
Animal gummies	2	1
Heavy books	2	1
Paper towels	2	1
6 slices of bread (2 of each kind: white, wheat, rye)	2	1
Camera (phone, tablet, etc.)	2	1
	4	2
	4	3
	4	4
	4	5
Masking tape	2	1
Trays	2	1
	4	3
	4	4
Dictionaries **(Optional)**	2	3
Bread knife	2	4
Cloth towels, paper towels, or newspapers (for each team)	3	1
	4	5
	3	3
	4	6
Plastic sheeting or garbage bags	3	1
	3	3
	3	3
	4	6
Water source	3	1
	3	3
	4	5
	4	6
Large plastic tubs or buckets (for each team)	3	1
2 L bottles (for each team)	3	1
	4	5
Books or binders (for each team)	3	1

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Module 3: Time-Traveling Tour Guides

Items	Driving Question	Lesson
Mini whiteboards (for each team) **(Optional)**	3	2
	4	5
	4	6
Materials requested by students for their models (e.g., gravel, pebbles, clay, toothpicks, spray bottles)	3	3
Bulletin board or large poster board	3	4
Glue, tape, or pushpins	3	4
Audiovisual recording device **(Optional)**	3	4
1 piece of colored paper (for each student)	3	4
2 milk cartons (for each team)	4	2
Hairdryer **(Optional)**	4	2
Blocks of ice (1 plain and 1 with sand/gravel for each team)	4	2
Gloves for handling ice (for each team)	4	2
Utility knife	4	3
Cardboard boxes with lid (for each team)	4	3
Newspaper (for each team)	4	3
	4	4
Objects to represent buildings in student models (for each team)	4	4
	4	6
Handheld mini-fans (for each team) **(Optional)**	4	3
Rulers **(Optional)**	4	5
	4	6

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Module 4: Earthquake Engineering

Items	Driving Question	Lesson
Clear tape	1	1
	3	3
	4	1
	4	2
	6	1
Newspaper (for each team	1	1
	3	3
	4	1
	4	2
	6	1
	6	2
Scissors	1	1
	4	2
Camera (phone, tablet, etc.) **(Optional)**	1	1
	4	2
	4	3
	6	3
Clear plastic tub	1	2
Water	1	2
Rock	1	2
Computers or tablets (for each pair)	1	2
	1	4
	2	1
	2	2
	2	3
	3	4
Seismometer 6 app, installed on a smartphone or tablet	1	5
	6	3
	2	4
Trays	5	3
	3	1
	3	2
	3	3
	4	3

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Module 4: Earthquake Engineering		
Items	**Driving Question**	**Lesson**
Mini marshmallows	3	1
	3	2
	3	3
	4	1
	4	2
	6	1
	6	2
Spaghetti	3	1
	3	2
	3	3
	4	1
	4	2
	6	1
	6	2
Graham crackers	3	2
Scales	3	3
	4	3
	6	3
World map or globe	3	4
Glue	4	1
	4	2
	6	1
	6	2
	6	4
Paper	4	2
	6	1
	6	2
Pencils	4	2
	6	1
	6	2
Metric rulers	4	2
	6	2
Small prize for winning team	4	3
	6	3

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Module 4: Earthquake Engineering		
Items	**Driving Question**	**Lesson**
Markers	**6**	**4**
Poster paper (for each team)	**6**	**4**
Poster boards (for each team)	**6**	**4**

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Module 5: Super Survivors

Items	Driving Question	Lesson
1 freshly cut stem with leaves	1	2
1 freshly cut stem stripped of its leaves	1	2
3 celery stalks	1	2
3 white carnations or daisies	1	2
Red food coloring	1	2
Water	1	2
Sticky notes in 3 colors (for each pair)	1	2
	1	7
Flower with leafy stem	1	3
Flowers (2 different flowers for each pair)	1	4
Bucket of water	1	4
Trays	1	4
	1	6
	6	2
Additional stopwatches (for each pair) **(Optional)**	1	5
	4	4
Cucumber	1	6
Cup of rice	1	6
Pencils	1	6
Small containers for sand (for each team)	1	6
Small containers for water (1–3 for each team)	1	6
Tea leaves	1	6
Walnuts, almonds, or other nuts in shells	1	6
Cascarones (confetti eggs) **(Optional)**	1	6
Scissors	1	6
	2	1
	3	1
	6	6
Music-playing device		
Clear tape	2	1
	4	2
Glue	2	1
	3	3
	4	2
Stapler	2	1
Hand sanitizer **(Optional)**	2	2

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Module 5: Super Survivors

Items	Driving Question	Lesson
Sleep masks **(Optional)**	2	2
Dried beans	2	2
Packing peanuts or pieces of sponge	2	2
Empty tissue boxes or other boxes (e.g., shoeboxes)	2	2
Construction paper	2	2
Objects of varying shapes, sizes, and textures (e.g., seashell, stretchy toy, eraser, tennis ball)	2	2
Binoculars **(Optional)**	2	4
Lidded cardboard boxes (for each team)	3	1
Opaque tape (e.g. duct tape) **(Optional)**	3	1
Tape	3	1
	3	3
Colored pencils	4	1
Ruler	4	1
Transparent sheets of plastic (e.g., sheet protectors for binders) **(Optional)**	4	1
Markers **(Optional)**	4	1
Craft materials for modeling (e.g., cardboard, modeling clay, polystyrene balls, pencils, balls of cotton yarn)	4	2
Index cards **(Optional)**		
Camera (phone, tablet, etc.) **(Optional)**	4	5
	5	7
	6	2
	6	3
	6	4
Metric rulers	4	6
Calculator (for each pair)	4	6
2 boxes	5	1
Party noisemakers **(Optional)**	5	1
Smartphone or other device loaded with a sound meter app	5	3
Drum	5	3
Shallow trays or pans	5	4
Small granules (e.g., sea salt, polystyrene beads)	5	4
Modeling clay **(Optional)**	5	4
Waterproof marker or waterproof tape	5	5
Paper towels	5	5
Containers (e.g., pots, pans, bowls, etc.)	5	5
Computers or tablets (for each pair)	5	6

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Module 5: Super Survivors		
Items	**Driving Question**	**Lesson**
Timer **(Optional)**	6	3
	6	4
1 thin black transparency marker pens (for each student)	6	6
White 8.5 × 11 paper (2 sheets for each pair)	6	6