

Physics of Toys

Complete Materials List

The curriculum supply list is written for 25 students,
with group activities based on 5 students in a group.

Teacher Prep Work:

Make 25 journals

Drill holes in 25 plastic jars

Make copies (see list below)

Copies:

25 You Be Galileo activity sheets

25 Calculate your Weight on Another Planet sheets

25 Friction Action sheets

25 Car Race Observation sheets

25 Spinning Tops Observation sheets

25 Come Back Can Instruction sheets

25 Spool Racer Instruction sheets

Permanent Items:

25 pairs of scissors

25 sharpened pencils

25 glue sticks

5-10 different colored markers

1 stapler

1 box extra staples

25 small objects that do not bounce (balloons, cotton balls, feathers etc.)

2 objects of different weights

5 empty film canisters

5 film canisters filled with weights

5 calculators

1 meter-stick

5 rulers

5 protractors

5 super balls

5 rubber baseballs

5 Ping-Pong balls

5 Nerf balls

5 golf balls

5 tennis balls
5 marbles
5 small boxes
5 equal sets of rocks or other heavy items to put in the boxes
5 soup cans
5 lids that fit over soup cans
1 coffee can
15 marbles
5 tops
5 trays
Pieces of different surfaces such as carpet, fabric, sand, wax paper etc.
1 large bottle of baby oil
Optional: shoes with a variety of soles, such as ballet shoes, golf shoes, football shoes, boots and dress shoes
A car, ball or top for each student
5 ramps
5 smooth surfaces
5 carpet strips
5 sandpaper strips
5 Matchbox cars
10 books
5 plastic Slinkys of assorted sizes
5 metal Slinkys of assorted sizes
5-10 tops of various size & shape
5 glue guns
1 bag of glue gun sticks
5 stopwatches
5 compasses for drawing circles
5 protractors
250 dominoes (or more)
Bernoulli Blower or hand held dryer
5-6 various balls
10 ping-pong or small Styrofoam balls
5 funnels
10 ring stands or other supports
5 straight pins

Consumable Items:

6 pieces of white chart paper
1 package of colored sticker dots corresponding to marker colors

1 box chalk
5 craft sticks
5 large rubber bands
2 cans play dough
50 5x 5 pieces of waxed paper
50 5x 5 pieces of coarse sandpaper
100 cotton balls
10 rolls of masking tape
25 paint stirrers
150 large rubber bands (3-4 long)
25 film canisters
10 pieces of string approximately 24 long
25 2 x dowels
25 3 squares of paperboard cut from cereal boxes
150 pennies
200 paperclips
Various lengths of tubing for each group
25 pieces of construction paper
30 spools
75 toothpicks
25 unsharpened pencils
25 small metal washers
25 large metal washers
25 plastic jars with lids (with one hole predrilled in each end)
25 twist ties
25 bolts & 50 nuts
5 10-foot lengths of string
50 long balloons
100 straws
25 small milk cartons
25 pieces of paperboard (from cereal boxes)
25 alcohol wipes
5 index cards (any size)
1 roll of lightweight string