

STEM STARTS HERE

HOW TO USE THIS BOOK IN THE CLASSROOM

STEM (Science, Technology, Engineering, and Math) and STEAM (the A is added for Art) are educational principles that can be easily be taught using Rube Goldberg inventions. A complex Rube Goldberg Machine is always made up of a series of smaller, simpler machines. These can be created out of everyday items, including levers, pulleys, inclined planes, wedges, springs, pendulums, wheels, and axels.

A Surefire Way to Fake Being Sick

Lever (C, I), Pulley (C, D), Wedge (D), Inclined plane (G), Wheel and Axel (H), Lever + Pulley (K)

A Perfect Way to Pretend to Take Your Cough Syrup

Wheel and Axel (A, H), Lever (B, C), Pulley (D, E), Wedge (H)

A Simple Way to Play Fetch Without Leaving Your Bedroom

Inclined plane (A, J, L, M, N), Lever (B, C, D), Wheel and Axel (E, L), Screw (F), Pulley (L)

A Simple Hands-Free Way to Read a Book

Lever (A, G), Pulley (B, F, K), Wedge (E), Wheel and Axel (I, L)

A Goof-Proof Way to Make Everyone Think You're Sleeping

Inclined plane (B, C, I, K), Lever (F, G, K, N, O), Wedge (J), Pulley (M)

A No-Nonsense Way to Avoid Nosy Neighbors

Inclined plane (D, K), Pulley (F), Lever (G, L, M), Wheel and Axel (I, J)

An Easy Way to Pick Your Favorite Doughnut

Lever (A, H, I), Wedge (B), Wheel and Axel (C, D), Pulley (C, D)

A Self-Operating Swing

Inclined plane (D), Wheel and Axel (E), Pulley (J), Lever (K)

You can teach the basics of STEM and STEAM by using the illustrations in *Rube Goldberg's Definitely Different Day Off*. For more information, visit our website, rubegoldberg.org, and click on the education tab where you will find teacher resources.

If you like to solve problems, tinker, and invent stuff just like Rube Goldberg, join our annual Rube Goldberg Machine Contests for students of all ages.

A Fantastic Feeding Machine

Pulley + Wheel and Axel (B, C), Wheel and Axel (D, G), Wedge (E), Inclined Plane (F)

An Easy Way to Retrieve a Lost Bus Pass

Inclined plane (C), Pulley (E), Lever (G)

A Super Simple Snacking Machine

Lever (A, E), Wedge (B), Pulley + Wheel and Axel (B), Inclined plane (C, H), Inclined plane + Screw (G)

How to Get the Day's Homework Assignment

Wheel and Axel (A), Pulley (D, E)

A Speedy Way to Get Home

Pulley (B), Lever (F, L), Inclined plane (H), Wheel and Axel (J), Crank (K), Wheel and Axel + Pulley (K)

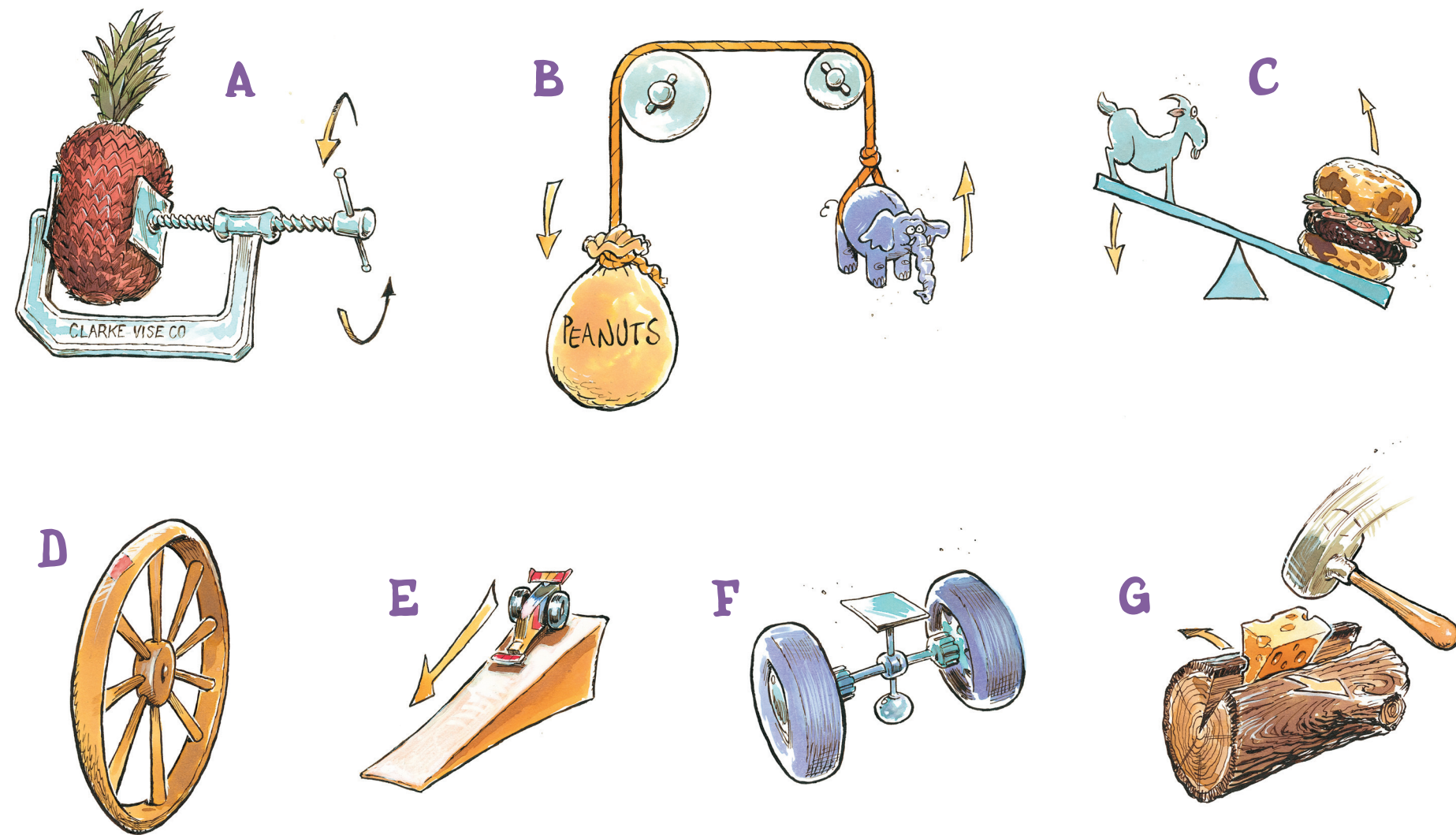
How to Tiptoe Back into the House Without Anyone Noticing

Lever (A), Wheel and Axel (B)

An Easy Way to Make it Look Like You've Been Home All Day

Wheel and Axel + Inclined plane (A), Pulley (D), Wheel and Axel + Screw + Lever (E)

CAN YOU NAME THESE SIMPLE MACHINES?



ANSWERS: (A) Screw, (B) Pulley, (C) Lever, (D) Wheel, (E) Inclined Plane, (F) Wheel and Axel, (G) Wedge