RUBE GOLDBERG DOMINO CHAIN

IDEAL AGE: 4+

Set 'em up and knock 'em down! Design and test a domino chain – an important step in any Rube Goldberg Machine.

LEARN TOGETHER

Experiments like this help children learn scientific concepts, like force and motion, as they design, plan, and make guesses and observations.

MATERIALS

- Dominos
- Household items (CD cases, books, cereal boxes, etc.)
- Measuring tape (optional)

MAKE TOGETHER

Rube Goldberg Machines perform simple tasks through a series of elaborate chain reactions. They're inspired by the famous cartoonist Rube Goldberg and the crazy machines he drew. Learn about Rube Goldberg's life, cartoons, and see Rube Goldberg Machines in action at Rube Goldberg Inc.

Along with ball runs, gears, and pulleys, a domino chain is a popular addition to a Rube Goldberg Machine.

1. Create a domino chain by standing up dominos and lining them up one after another. Knock down the first one. What happened? The energy from the first push moves from one domino to another until they all fall down.
2. Design your domino chain. It can go in a straight line, on a diagonal, or twist around like a snake.
3. Collect household items, like CD cases, books, or cereal boxes. Set them up just like the dominos and test out your new chain. What happens when you use these bigger items? How far apart do they need to be spaced?
4. If you use the same number of each item, which do you think will make a longer chain: dominos, CD cases, books, or cereal boxes? Take five of each item and create a chain. Knock them down and use measuring tape to see how far each one can reach.
5. Mix and match. Line up your dominos and different household items together. What works best: small to big, big to small, or mixing it up?

Want to make a full Rube Goldberg Machine? Join the Rube Goldberg Bar of Soap Video Challenge! Try including a vortex cannon as a step in your machine from our friends at the Children's Museum of Pittsburgh.

For more fun activities, please go to cmom.org/resources