# Playdates At Your Place Exploring Gravity

Philbrook Playdates spark wonder and foster rich creative development in children under 5 and their caregivers. Excess time spent at home leaving you stumped on ways to engage your children besides a screen? In this challenging time, Playdates At Your Place offers support to families through exciting new open-ended play-based explorations you can set up at home to inspire creative exploration in your youngest children.

# **April Theme: Exploring Gravity**

Roll! Drop! Toss! You and your little one will have a blast exploring gravity through hands-on exploration and kinetic movement. Join us and make exciting discoveries that blend art, science, and plenty of fun!

### **Exploration 1: DIY Ball Chutes**

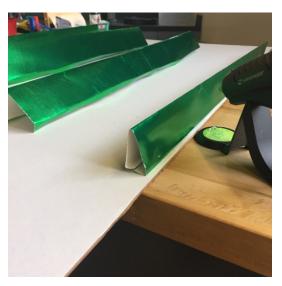
These ball chutes are really easy to make, and a ton of fun. By lining the chutes in different materials you can experiment with friction. Also try adjusting the angle of the chutes for different speeds!

#### You'll need:

- 1. Cardboard
- 2. Poster board, more cardboard, or other sturdy paper material
- 3. Hot Glue
- 4. Aluminum foil (optional)
- 5. Bubble wrap (optional)
- 6. Colorful tape (optional)



1. Cut your poster board into long strips. These will make your lanes



2. Fold the strips as depicted, and hot glue onto large cardboard



3. Add tape, and desired friction modifiers with hot glue. Secure to a table top or chair seat. Get rolling!

# **Exploration 2: Zipline Fun**

Turn a string, and found objects into a fun zipline. This activity is especially great for little ones, who may play with the suspended objects as they work on their gross motor skills. Encourage children to experiment with the angle of the string to make objects move faster or slower. Try it indoors or outside!

# You'll need:

- 1. String or Yarn
- 2. Objects that have holes in them, or are easily tied on. (ex: napkin rings, wooden teething rings, kitchen utensils, scarves, beads, toilet paper tubes, etc.)
- 3. 2 chairs



This zipline is tied from a countertop to the top of a chair, so that I could take a picture. But playing with the angle allows things to move more freely.



This sitting little one can explore objects on a string by moving them along the string by their lap, or pulling the objects suspended above their head.

photo credit: CreativePlayIdeas (Instagram)



Indoors, two chairs can create different angles, depending on how they are tied.

photo credit: CreativePlayIdeas (Instagram)

# **Exploration 3: Drop it, Pick it Up**

Discover how different materials experience gravity. By offering objects with a variety of densities, babies can do what they love doing- dropping things, and picking them up.



# **Exploration 4: Ramp it Up**

If you have a folding table, you have a ramp. This one requires adult supervision, but is an easy switch out to making ball chutes. Just prop up one end of the table's legs, and let the other end rest on the floor to create an easy ramp for all sorts of round or wheeled machines. From balls, to tubes, to trucks and more- there are so many things that can roll and slide! I added colorful masking tape to give it some visual interest.



# **Exploration 5: Connecting Tubes**

If you were inspired/have space for a giant tube exploration like the one we made last month, this would be a perfect exploration to explore gravity!

## You'll need:

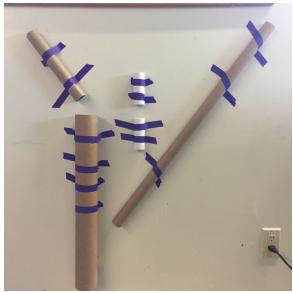
- 1. Pegboard
- 2. A variety of tubes (dryer vents, gutter extensions, dust collection tubes, mailing tubes, etc. All can be ordered online)
- 3. Zip ties
- 4. Balls

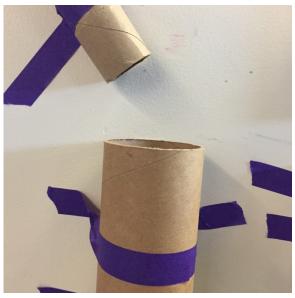




For an easy at-home version, you'll need:

- 1. Mailing tubes, toilet paper tubes, paper towel tubes, etc.
- 2. Masking tape
- 3. Small balls or marbles (if your child is no longer mouthing)







Set your tubes up in a way to create elements of surprise. By leaving gaps and adjusting trajectory, your little one will make discoveries about motion and gravity.

I did not have clear tubes, but clear tubes are especially fun for little ones to see the ball traverse through the tunnel.

Maneuvering through these smaller tubes also develops fine motor skills.

# **Exploration 6: Old-Fashioned Hill Play**

Take you explorations outdoors! Hills are nature's way of exploring gravity. You and your little one can run down the hill, roll down the hill, or bring objects to roll. Does grass make it easier or harder to roll? Why do you think so? Does the slope of the hill help you gain momentum?

Share your Playdate setup with us!

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