



# Inventing Time!

**FALLING, FLYING,  
BLOWING IN  
THE WIND**

Gather your kids and join us in the Invention Dimension! Julius Jr.'s Inventing Time activities give you simple ways to play with your kids that encourage their natural creativity!

Explore what makes something float, fall and blow in the wind with your kids!

## Objects Needed to Create Your Invention:

- Floating/falling objects
- Folded up towel or cookie sheet (optional)
- Dental floss, tissue, tape
- Key ring (optional)
- Paper, markers, paper clips
- Paper cup or brown paper lunch bag, kitchen twine, tissue streamers
- Safe outdoor location where you could safely drop your creations without hitting anyone or getting too close to the edge (balcony with a railing, top of a staircase)

## Step Inside the Box with Julius Jr.! Ask Your Kids:

- Have you ever wondered about what makes things fall, float or fly?
- What have you seen that can stay up in the air instead of falling straight down? What do those things have that keeps them up in the air?
- Let's test some objects by dropping them from a chair and seeing what happens. What do you think will happen when you drop (this object) to the floor?
- How can you fold this paper to make it fly?
- What did you notice about your paper's flight? What words would you use to describe this?
- What are some ways to change your paper's shape that does NOT help it fly? Why do you think that happened?
- Let's move our exploration outside and see what happens if we drop them from a higher place or if there is wind. What does the wind do to falling and flying objects?

## Now to the Invention Dimension!

Invite your children to explore what types of things float downward when dropped versus falling quickly. Build a model parachute with dental floss, tape, tissue, and a key-ring as a passenger. Find a safe chair or stool from which your child can test the flight of the parachute. Invite your children to test other objects to see whether they float or fall.

What do the floating objects have in common? (You can place a folded-up towel as your landing pad to protect floors and objects, or use a cookie sheet if you want to add the excitement of "crash" landings.)

Invite your children to explore what makes objects fly in different ways. Offer them paper and ask if they can fold it into an interesting flying object. Can they design a paper airplane that flies smoothly? How about a trick plane that does a loop-de-loop? What types of shapes seem to hold the paper in flight, and which ones fall quickly to the ground? Children can decorate their planes with markers, fasten on "passengers" (paper clips), or name each model to reflect its type of flight ("the Smooth Sailor" or "Nose Diver"). Allow the children to guide the exploration, observe the flights, and determine their next experiment. Ask open-ended questions about their thinking, and give them plenty of space to discover the properties of different designs on their own. A crumpled up sheet of paper can give your child as much interesting information as a carefully constructed paper airplane.

Wind offers another realm of discovery for your children's curiosity. Teach them to find the direction of the wind by closing their eyes and turning in the direction from which they think the wind is blowing. Instruct them to feel and listen for the wind passing over their ears equally. They can also throw a lightweight object (like a leaf) straight up and watch to see where the wind blows it. Build a windsock together by decorating a brown paper lunch bag or paper cup, cutting out its bottom, hanging it from one end with some string, and attaching tissue streamers from the other end. You can revisit your windsocks often and wonder together about the direction and strength of the wind.

### What Your Little Ones are Learning:

Young children construct their understanding of the world and its physical properties through trial and error. Allowing them to follow their own curiosity in exploring this topic encourages their own motivation and increases their ability to focus. When children plan and test their own ideas, they develop the prefrontal cortex of the brain, the area that is responsible for planning, impulse control, and most higher-level cognitive tasks. There are also many opportunities for small motor development in the folding, taping, and decorating their flying creations.

### Why "Inventing Time" Matters

Creative thinking begins early in every child's life. It enables original thought and the ability to see solutions where others don't. It provides the fundamental building blocks for success in school and beyond. Creative play has been proven across multiple research studies to be the best path to developing a life-long capacity for creativity.

Julius Jr. and the Center for Childhood Creativity are working together to create Inventing Time activities to help you support kids' natural creativity.

Every kid can be an inventor just like Julius Jr.!

Learn more about Julius Jr. at [www.nickjr.com/julius-jr](http://www.nickjr.com/julius-jr) and Watch on 

The Center for Childhood Creativity's mission is to ignite and advance creative thinking for children.

Learn more about creativity and play at [www.CenterForChildhoodCreativity.org](http://www.CenterForChildhoodCreativity.org)

