



# I.P.A KIDS ACTIVITIES

## Flying Tea Bag Ghosts



\*\*\*\***Caution!**\*\*\*\* This activity involves the use of fire. As such, this activity should only be performed under adult supervision in a safe location far away from buildings; furniture, low ceilings, trees, or other objects than can catch on fire.

This activity is a HUGE hit!

So if you are looking for a Halloween science activity that your kids will be screaming about, make some flying tea bag ghosts and you won't be disappointed!

Read on for directions to make your own flying tea bag ghosts.

For this activity, you will need tea bags. I have heard rumours that not all tea bags work equally well. We used Tazo brand tea bags and they worked very well. I cannot say how well this activity will work with other brands of tea.

Follow the pics on this sheet or this video below to see how it all works. <https://youtu.be/JoAJWuvZkcMremember>

\*\*\*\*This flying tea bag can rise upwards parents should be involved when conducting this activity\*\*\*\*

So what makes the tea bag ghost fly?

There are three different forces at work that allow the tea bag ghost to fly.

First, as the cylindrical tea bag burns down, the air inside the bag heats up. When air heats up, it becomes less dense. And when air becomes less dense, it rises. So, as the air inside the cylinder becomes warmer and less dense than the air outside the cylinder, it rises.

Second, as we've established, the hot air inside the burning cylinder will rise as it becomes less dense than the cool air outside the cylinder. As the hot air rises, cool air rushes in to take its place, creating a convection current. In this case, the convection current pushes upwards from the bottom of the bag.

Finally, as the tea bag burns the smoke rises and leaves behind a very delicate and very lightweight frame of ash. The ash framework is so lightweight that it is easily carried into the air by the hot rising air and convection current.

