Jumping Pepper Explore Static Electricity in a Fun Way!

Have you ever seen pepper jump and dance? This static electric experiment is a fun way for you and your children to investigate this scientific phenomenon!

How to Do It

- 1. Blow up the balloon to whatever size desired.
- 2. Encourage your child to draw a face.
- 3. Sprinkle the salt on the tray.
- 4. Sprinkle the pepper into the salt and spread out onto the tray.
- 5. Bring the balloon close to the pepper and observe what happened? Talk with your child about what they are holding (the balloon) and what they are trying to attract (the pepper and salt)

Things you will need

- Tray
- A balloon a light coloured balloon works best to be able to observe the darker pepper.
- Salt
- Black pepper
- Dry, woollen cloth
- permanent Texta (optional) You might want to draw a face with the chin on the smooth, round end of the balloon and see the pepper jump on as a 'beard.'
- 6. Touch the balloon to the pepper and notice that (this time) not much will 'stick.'
- 7. Encourage your child to rub the balloon with the cloth (or on the carpet) for a few seconds.
- 8. Bring the bottom of the balloon near to the salt and pepper again without it touching it.
- 9. Observe and listen to the pepper and salt as it attaches itself to the bottom of the balloon! Ask your child what happened and why? Talk about what was different this time?

What Learning is Occurring?

- Make connections between different experiences, concepts
 and processes
- Language skills responding both verbally and non-verbally to what they observe
- Interact with others to explore ideas and concepts, clarify and challenge and thinking
 Understanding how the static electricity forms with the
- Understanding how the static electricity forms with the contact of the balloon and cloth or carpet
- Understanding the properties of matter the concept behind why the salt and pepper separate with static electricity (pepper is lighter.)
- Learning 3 ways an object can be charged: by friction, conduction and induction



Tips

- Supervise this experiment from beginning to end.
- Remain aware of the possibility of children putting the objects or ingredients in their mouths.
- Let them taste the pepper (and with their permission, use a camera to capture their reactions!) Make sure that the pepper and salt doesn't go near their eyes though.
- Ensure the balloon is disposed of properly when the experience is over and if there is a breakage, make sure all pieces are accounted for and disposed of properly as these can cause choking.
- Encourage children to lids back on the Texta when not being used and put in a safe place.
- Encouraged everyone to wash their hands well afterward.
- © If you enjoyed this experiment, have a look at our Young Einstein post for more inspiration!

