

Air Particle Experiment

If your child has questions about air pollution or air particles, this science experiment could clear the air! This easy at-home experiment is a great way to "see" science.

What You Need:

- 2 white index cards
- Petroleum jelly or double sided invisible tape
- Marker or pencil
- Rock
- Magnifying glass

What You Do:

1. Most science experiments start with a question.; Which has more particles, indoor or outdoor air?
2. Have your child prepare to collect air particles with two white index cards. She can write "Indoor Air" on one card and "Outdoor Air" on the other.
3. She should smear petroleum jelly or put double sided invisible tape on a large area in the middle of each card. Air particles will land on the sticky areas.
4. Have her place the "Inside" card on a flat surface inside the house like a window sill or table. The card should be in an open room (not a closet), and should not be moved during the experiment.
5. She can put the "Outside" card on a flat surface outside, such as a patio table or chair. She should put a rock on one corner of the card to secure it. The experiment should be conducted when there's no rain or snow being forecast.
6. Let the cards sit for about a week; your child can examine the sticky areas each day with her magnifying glass.
7. After 6 or 7 days, have her compare which card collected more particles on the sticky surfaces.
8. Explain that air has fine particles which cannot be seen without a powerful microscope. But she will have noticed other particles. Indoor air particles come from cooking, mold, pets, and humans. She will have noticed more particles on the outdoor card; they come from soil, pollen, forest fires, cars, trucks, and other vehicles. In general, air has more particles and is more polluted outside of houses than inside houses.
9. If she enjoyed this experiment, she could next compare air particles in different rooms of her house, or measure indoor and outdoor particles for two weeks. A scientist is always curious!

