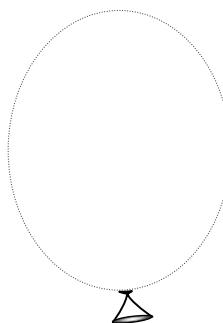


Nosey Balloons

Revised from an activity by Scott Richardson, Davis Senior High School



Get these materials:

- new balloon that is empty (that has not been blown up yet)
- one other balloon that has been blown up

Observe & Describe:

1. **Smell** the balloons. **In your notebook, describe the smell** or aroma as best as you can:
 - new empty balloon?
 - blown-up balloon?
2. Does your nose need to touch the balloon to smell it? **Describe to your partner** how far away from the blown-up balloons you can be and still recognize the smell. **Write this in your notebook.**

Explain:

3. **Think silently** about these two questions:
 - Why do you think the two blown-up balloons have the scent or aroma that you smell?
 - How did the smell get from the balloon to your nose?

Now you will **share your thinking** with your partner using the **Paired Verbal Fluency protocol**.

4. **Talk with your partner** for a minute about your ideas, then **write them in your science notebook**. You may borrow some of your partner's ideas if you like.
5. The following students are making statements about smelling the balloon:
 - Tracy says, "The smell traveled to my nose."
 - Nancy says, "For me to smell the balloon, my nose must touch the balloon."
 - Sam says, "For me to smell the balloon, the smell must touch my nose."
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Do you agree with any of these students? with all of them? with none of them? **With your neighbor, decide on an answer to this question. Use evidence to justify your answer.**

6. You could smell the balloons, even from a short distance away.
 - Sofia says, "I can explain this by thinking that smell is made of tiny particles."
 - Bart says, "I can explain this by thinking that the balloon fabric is made of tiny particles."

Do you agree with Sofia? with Bart? **Discuss with your group.**

On your whiteboard, draw what must have happened to the smell inside the balloon so that the nose could detect it. Be sure to **draw the particles** of the balloon and the particles of the smell.

Record your picture and your thinking in your notebook.