**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.”

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.**