

Molecule Match

What is the challenge? Decipher each scent, match them together and win the game!

What you need:

- 20 dessert size paper plates
- 10 types of extracts or flavoring
 - I.e. vanilla, banana, or lavender
- Marker
- 20 cotton balls
- Coffee beans
- Paper and pencil



What to do:

- Adult: Prepare one set of each scent by placing one drop of the scent onto a cotton ball and placing on a paper plate.
 - *Note: Label the bottom of the paper plates with the answers, so you don't have to remember.*
- Place the paper plates randomly into a rectangle 5 plates across by 4 plates down. Label the plates 1-20 randomly.
- Invite your learners to play the game.
 - Learners may choose two plates at a time. Ask them to smell each and write down what they think each plate is.
 - Encourage the use of coffee beans to neutralize smells as needed.
 - Once learners think they have matched each plate, reveal the answers.
 - Whoever has the most matches wins!



STEM connection:

- Your sense of smell is very complicated. There are special olfactory (smell) receptors in our noses that send messages to the brain. When you inhale odor molecules through your nose, those odors bind to the receptors and transfer the information to your brain. Your brain then interprets the information, telling you what you are smelling.
- Scents are made up of many different odor molecules.
 - Chocolate has hundreds of different odor molecules!

Take it further:

- Find objects around your house that smell like the extracts and flavorings on the cotton balls. Do they smell exactly the same or are they different?
- Does every object have a smell? Try smelling your kitchen table or a plastic cup. Can you smell anything?
 - If you do, you may be smelling dish soap or a cleaner!

Notes for adults:

- Be careful to avoid any allergies or sensitivities that may cause distress to your learners.

