

How Does the Nose Know? Receptor Site Theory

Name _____

Date _____ Period _____

Purpose

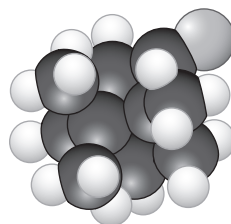
To build a model to explain how your nose detects different smells.

Materials

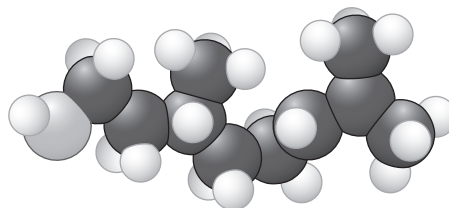
- poster paper
- different-colored markers

Instructions

1. Today you will be designing a model for smell and illustrating how it works on a poster. Your model should
 - Explain how a smell reaches the nose.
 - Explain the chemistry involved in smelling something.
 - Explain how we perceive or interpret the smell in the brain and relate it to other experiences.
2. Once you have finished your model, give it a descriptive name, for example, the molecular mass model.
3. Summarize your model in one or two sentences at the bottom of your poster.
4. Be prepared to present your model to the class. For example, be prepared to describe how your nose is able to detect the difference between the two molecules shown here.



Ball-shaped molecule



Stringy molecule