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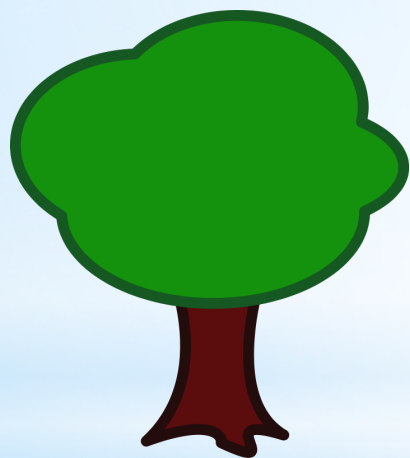


Elephant's Toothpaste

By Trisha Paul

*Decomposition Reaction

* A more complex reagent breaks down into its more simple products



Tree



Image by [PeterM](#)



Leaf



Image by [Fredoguy](#)

+



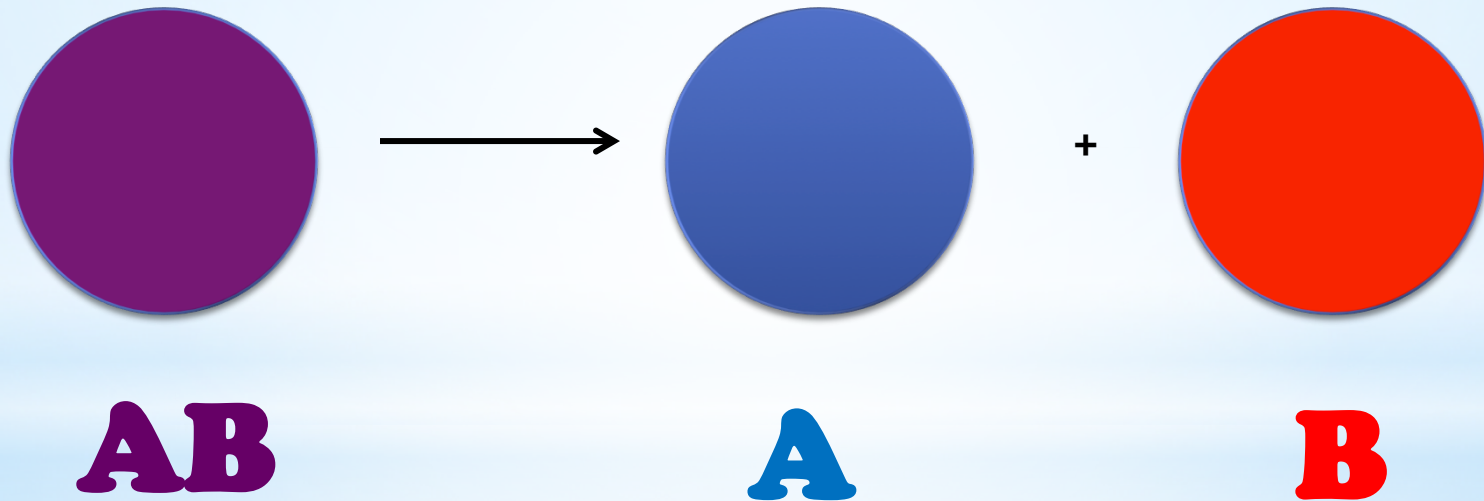
Trunk



Image by [Magnesus](#)

*Characteristics

* **1 Reagent -> 2 products**



*Common Reactions

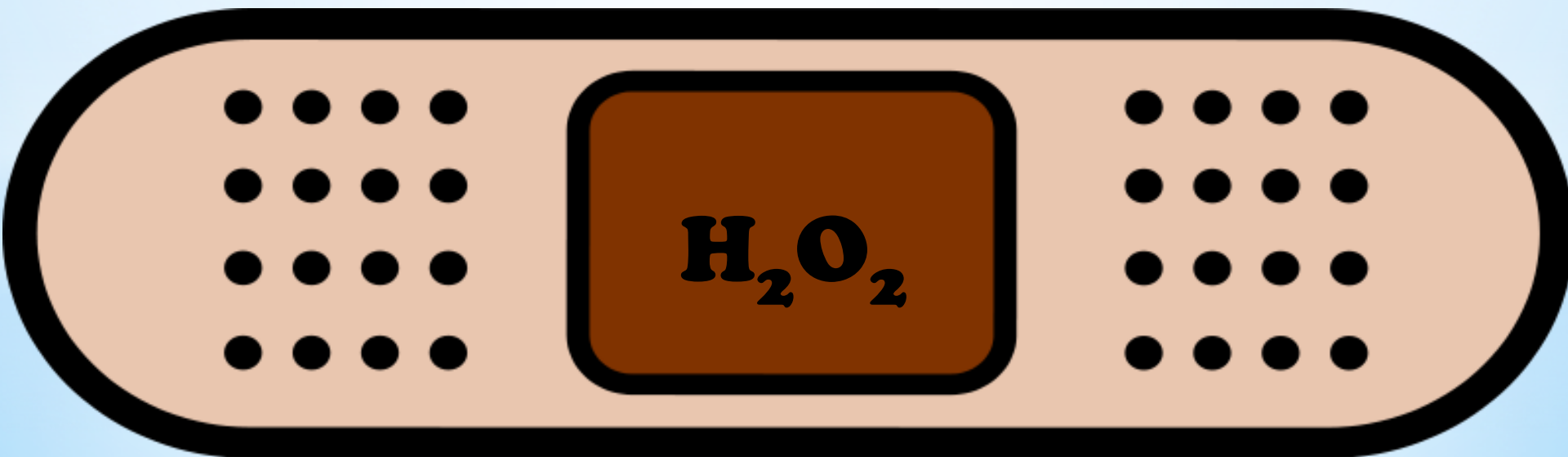
***When mixed with baking soda and soap, hydrogen peroxide is used to remove skunk odor.**



Image by [Lesmode](#)

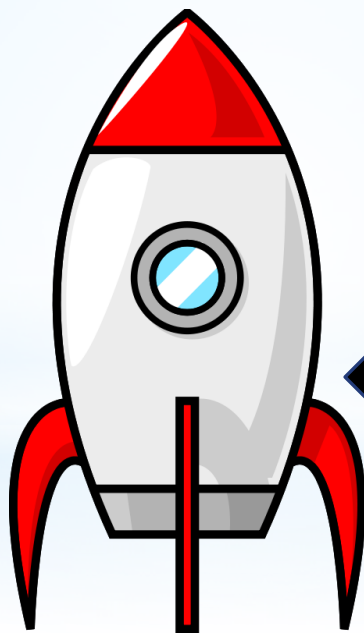
*Common Reactions

- *When put on a cut, hydrogen peroxide acts as a cleaner and also slows the bleeding.
- *It also causes additional damage to the tissue.



*Common Reactions

***When reacted with some metals like silver, hydrogen peroxide produces a hot steam used to propel and launch certain rockets.**



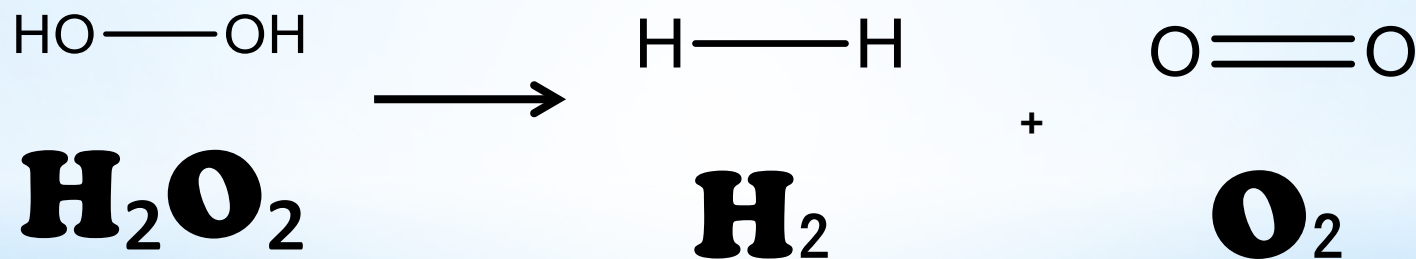
Hydrogen
Peroxide
Chamber



Image by [purzen](#)

*Decomposing H_2O_2

*Predict the products of a decomposition reaction of H_2O_2 .



*Decomposing H_2O_2

*How can we make H_2O_2 decompose?

* H_2O_2 is stable at room temperature.

*Decomposing H_2O_2

***What state of matter would the products be in? (solid, liquid, gas)**

*Decomposing H_2O_2

***How could we make the products even more visible? (Hint: Think about bubbles.)**

***Purpose**

- 1) How can we decompose hydrogen peroxide?**
- 2) What happens when hydrogen peroxide is decomposed?**
- 3) How can we tell that hydrogen peroxide has been decomposed?**

*Materials

- * **Safety glasses**
- * **Lab smock**
- * **1/2 cup 20-volume hydrogen peroxide (20-volume is 6% solution, purchased from a beauty supply store)**
- * **Squirt of Dawn dish detergent**
- * **1 teaspoon yeast**
- * **Approximately 2 tablespoons very warm water**
- * **Empty plastic water bottle**
- * **Foil cake pan**

*Safety

* **Hydrogen peroxide is:**

* **Corrosive- avoid skin contact**

* **Do not ingest**

* **Do not inhale**



Image by [Rfc1394](#)



Temporary bleaching effects of skin contact with H_2O_2



Image by [Olli Niemitalo](#)

*The End!



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