

**Science:** What minerals are found in toothpaste. Read about or research fluoride. Compare fluoride content in various brands.



## Dig A Little Deeper A Bright Smile

From Toothpaste and Minerals



**Toothpaste cleans your teeth and keeps them healthy.**



The cleaning is done with abrasives (from rocks) that rub the plaque away. Abrasives are minerals like **silica**, **limestone**, **aluminum** oxide (also used in sandpaper), and various **phosphate** minerals.

Fluoride, used to reduce cavities, comes from a mineral called fluorite. It is sometimes changed into stannous fluoride (**tin** fluoride).

Most toothpaste is made white with **titanium** dioxide which comes from minerals called **rutile**, **ilmenite**, and **anatase**. Titanium dioxide also is used to make white paint.

The sparkles in some toothpaste come from **mica**, a mineral common in many rocks.

The toothbrush and tube holding your toothpaste are both made of plastics that come from petroleum (petrochemicals) and other minerals.

For more information about minerals in society, go to:  
Mineral Information Institute, [www.mii.org](http://www.mii.org)

**Language Arts:** Read "Ira Sleeps Over." Let students bring PJs & toothpaste.

**Social Studies:** What was used before toothpaste was "invented."

**Math:** Survey class on brands used, chart or graph. **Health:** Discuss dental hygiene & special ingredients. **P.E.:** Stomp & squirt contest, use toothpaste & butcher paper.