



Bite Size Science

Materials

-  Chewing gum
-  Chocolate (Hershey's Kisses work well)
-  Paper towels/tissues



Students will turn their body into a science lab by doing a chemistry experiment in their mouth!

6th - 8th Grade

Directions

Before you begin the experiment, make sure no one is allergic to the materials. Also, be aware of choking risks as you move through each step (this activity is not recommended for children 3 and under).

Clean conditions are important! Remember to wash your hands thoroughly before and after the activity, and make sure your work surface is clean!

- Get a piece of gum, a piece of chocolate, and a tissue or paper towel.
- Unwrap the gum (keep the wrapper) and make some observations; what does it look, smell, and feel like?
- Do the same with the chocolate. What are some of these materials' properties?
- Pop the gum in your mouth and chew it for a bit. Spit the gum out onto the wrapper. How has it changed?
- Put the gum back in your mouth and chew it some more. Put the chocolate in your mouth, and chew it right on top of the gum. Really mix it up in your mouth! What do you notice about the properties of the gum now? How did it change?
- Spit everything into your tissue. Look at it, touch it. What properties have changed? Is it still sticky?
- Throw everything away when you're finished.

What happened?

You were doing chemistry in your mouth! You experienced a phenomenon chemists sometimes describe as “like dissolves like.” In this case, gum and chocolate have something chemically in common: they are both oil based—gum doesn't normally dissolve in your mouth because your saliva is water based, but the oil in the chocolate can dissolve the gum.

So your saliva can't dissolve chewing gum but there's a lot of cool stuff that it *can* do. Check out this video on the [science of spit](#).

