

Flashy Smiles

Materials:

Wint-O-Green Lifesavers™
Dark room
Mirror

Procedure:

1. For best results, go into a very dark room at the beginning of the experiment and wait approximately 2 minutes for your eyes to adjust to the darkness.
2. Once your eyes have acclimated to the darkness, put a mint into your mouth and begin to break it up with your teeth.
3. Now use a mirror to watch the sparks fly! By chewing with your mouth slightly open, you should be able to see bluish flashes of light.

The Science:

What you have just seen is a miniature version of lightning – in your mouth! When you crunch on the lifesaver, you are also breaking apart the sugar molecules inside the mint. Those molecules are releasing little electrical charges, which will attract the oppositely charged nitrogen molecules in the air. When the two charges meet, they create a tiny spark that you can see! This whole process is called triboluminescence, which is the emission of light resulting from something being smashed or torn.

Another example of triboluminescence is ripping a piece of tape off the roll – it will produce a very faint glow for the same reason, however, it is not bright enough to see with the naked eye.

Eat It Up!
Presented by:

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