



## Curiosity Guide #703

### Wax Science

Accompanies Curious Crew, Season 7, Episode 3 (#703)

#### Wax Coating

Investigation #6

#### Description

Have some food fun with wax!

#### Materials

- 12 ounces of chopped chocolate
- 2 ounces of canning paraffin
- Bowl
- Double-boiler or microwave
- Stove
- Spoon
- Marshmallows
- Strawberries
- Wax paper
- Wooden skewer

#### Procedure

- 1) Measure and put 2 ounces of paraffin in a bowl.
- 2) Heat the paraffin until melted.
- 3) Add the chocolate and heat again, stirring to blend well.
- 4) Use the skewer to pierce and dunk the marshmallows and strawberries into the chocolate/paraffin mixture.
- 5) Place each item on the wax paper to dry and harden.

## My Results

### Explanation

If you have ever seen a shiny piece of chocolate, you can assume that the chocolate has wax mixed in. Another benefit to including wax in candy recipes is that the wax preserves the candy by not letting water in or out because wax is insoluble in water. Food-grade paraffin wax is edible, so paraffin is often used as an ingredient to make things look better or to preserve the food longer.

One of the properties of wax is that wax is water resistant and another is that wax gets shiny, especially if it is buffed. Polishing shoes or cars takes advantage of both those properties. Your leather shoes will have better luster while preventing water from damaging them, and your car will look great after washing and waxing. Even beeswax that is secreted by bees to make their honeycombs is water repellent. We use beeswax on our lips to seal in moisture, so our lips don't chap. Wax is wonderful!

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