



a WOW Lab

BLUEPRINT

'c' is for Chocolate

Glossary

antinodes - the points of maximum amplitude on a standing wave. In this activity, the antinodes correspond to the points of maximum energy, and the distance between antinodes is given by the spacing between melted chocolate puddles. The distance between antinodes is equal to one wavelength.

cavity magnetron - a high-powered vacuum tube that produces microwaves.

cocoa butter - the edible fatty component of the cocoa bean used to make chocolate.

conduction - the transfer of thermal energy between solids and/or fluids from higher to lower temperature, as a direct result of molecular vibration.

frequency - the number of events per second. Frequency is measured in units of hertz. Frequency is equal to the velocity of light divided by its wavelength.

microwaves - electromagnetic waves characterized by wavelengths of 1-1000 mm and frequencies of 0.3-300 GHz.

rectifier - an electrical device that converts alternating current (AC) into direct current (DC).

transformer - a device that transfers electrical energy from one circuit to another through inductive conductors. Transformers are used to increase or decrease voltages.

velocity - rate of change related to physical position. For this activity, velocity is a scalar measurement related to frequency and wavelength.

wavelength - the distance between repeating units in a uniform wave of a given frequency.