

31 - Microwaves

Grow Their Mind

On today's episode, you'll learn that microwaves are powerful! One thing to keep in mind is items that can be microwaved are always marked "Microwave Safe". Metal is never microwave safe because it blocks the electromagnetic waves and can start a fire! For examples of major microwave mishaps, check out these [microwave fails](#).

Activities

- In the episode, we talk about the first commercial use of microwaves -- a vending machine called the Speedy Weeny! Invented in 1942, a Speedy Weeny could cook a hot dog in just 20 seconds! For fun, have your child draw an ADVERTISEMENT touting the benefits of the Speedy Weeny and why everyone should get one!

- Make a [CHOCOLATE MUG CAKE](#) right in your microwave! Wait? You can make an actual chocolate cake in the microwave??? That's right - and best of all it only takes 10 minutes and there are only 8 ingredients!. For some awesome chocolatey goodness - check out this recipe courtesy of Julie Chiou at Table for Two.

Additional Resources

For a much deeper dive into the science of microwaves, check out this [5 minute video](#) from Bill Hammack at the University of Illinois. He even shows you the inside of the magnetron!

Kid News

When students at Cumberland Elementary in West Lafayette, Indiana were curious if fireflies would be able to light up in the zero gravity environment of space, their teacher Mrs. Samudio contacted Aerospace Professor Steven Collicott at nearby Purdue University. Prof. Collicott suggested they contact [Blue Origin rocket](#) -- a company which is offering schools the chance to run actual experiments in space for as little as \$8,000 a payload. This simple question led to two years of incredible study and experiment design, ending with a spaceflight 60 miles into space and an [answer about fireflies](#)! Many schools are participating in this program, which takes the position: if your school can afford football, it can afford space!¹

¹ This activity guide is for the Who Smarted? podcast www.WhoSmarted.com