

Additional Safety Guidelines

SAFETY PRECAUTIONS



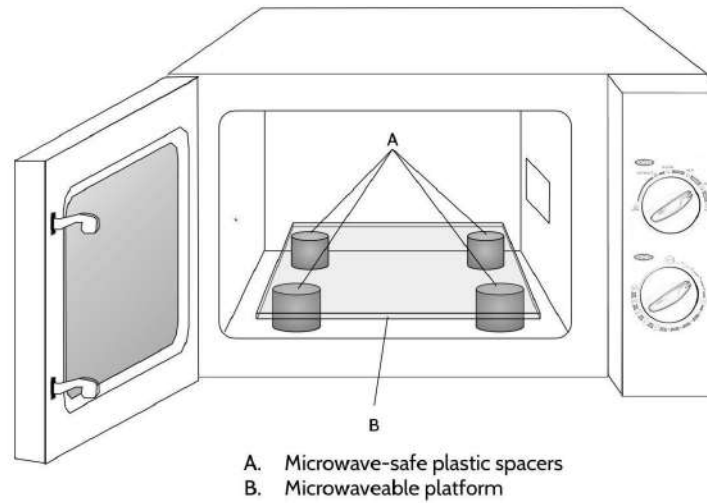
When creating safety guidelines with students, use the following sections of the *Microwave Oven Manual* to prompt specific safety protocols. If students do not point out the sections below on their own, direct their attention to them and create safety guidelines for each issue.

PREVENTING ARCING WHEN USING ALUMINUM FOIL

⚠ CAUTION

To avoid arcing, follow these steps:

1. Remove the turntable.
2. Place a microwaveable platform on top of microwave-safe plastic spacers to prevent the foil from touching the microwave oven floor (*see image below*).
3. Place your food on top of the platform.
4. Make sure the foil is at least one inch (2.5 cm) away from the oven walls, and ceiling.



Direct students to this section of the manual to prompt the use of a microwave oven platform.



Use this section of the manual to determine there should be **no exposed edges, seams, or gaps** showing before we use the foil in the oven. Also use this section to prompt that there must be no spaces in between the pieces of foil.

NOTE ON ARCING

The term *arcing* refers to the sparks inside the microwave oven. Arcing can be caused when:

- The microwave oven is operated while empty.
- Metal or foil is less than one inch from the inside walls, floor, or ceiling.
- Foil is not closely molded to the shape of the food, leaving sharp edges sticking up.

LIMITED USE

- **Aluminum foil:** Shielding only. Small smooth pieces can be used to cover thin parts of meat or poultry to prevent overcooking. Arcing can occur if foil is too close to oven walls. (*See next page for instructions*)
- **Plastic:** Use only if labeled “Microwave Safe”. Use with care because the plastic can soften from the heat of the food and some plastic can melt.

Use the “Warning about Empty Microwaves” section to consider potential overheating of items in the oven. To prevent any overheating, determine that we should limit the length of time for each test to 15 seconds on high power.

Also use this section to prompt students to **never run the microwave oven without something in it that is a known absorber**, like water.

The “Utensil Guide for the Microwave Oven” section can be used to prompt students **not to do these tests at home**. Point out that anyone under the age of 21 must not operate the oven when using items from the Limited Use category, such as foil.

WARNING

1. Do not operate the microwave oven empty. Operating the oven with no food or food that is extremely low in moisture can cause fire, charring, or arcing.
2. Always operate the microwave with food or liquids that you know will absorb some of the microwave electromagnetic radiation.

UTENSIL GUIDE FOR THE MICROWAVE OVEN

This section lists which materials can be used in the microwave oven, which ones can be used with caution, and which ones should never be used in the microwave oven. *Individuals under the age of 21 must not operate the microwave oven when using items from the LIMITED USE category.*