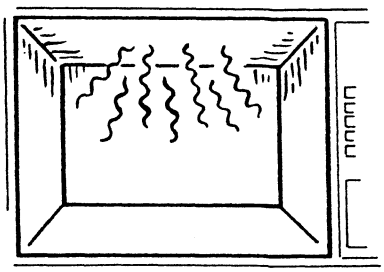
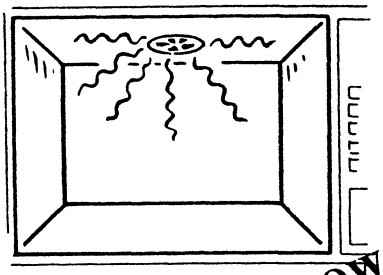
Name _____ Date _____

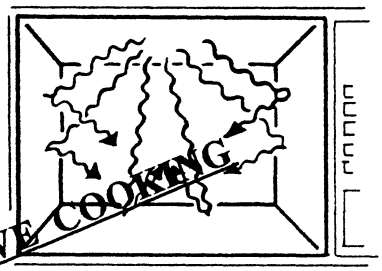
Cooking in a Microwave Oven



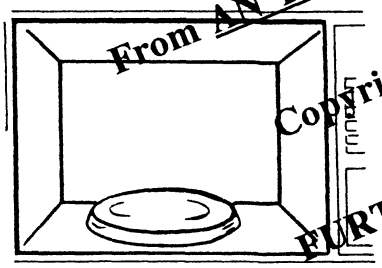
Microwave energy enters the oven from the magnetron.



Some ovens have a stirrer to spread the microwaves around the oven.

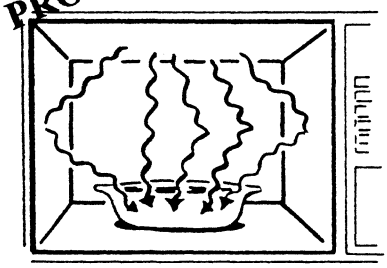


Metal walls reflect the microwaves back into the oven.

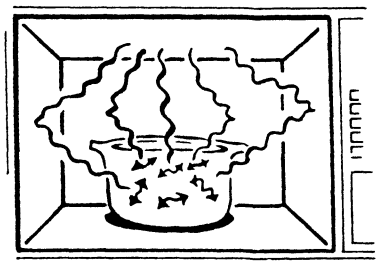


Some ovens have a turntable to move food in the oven.

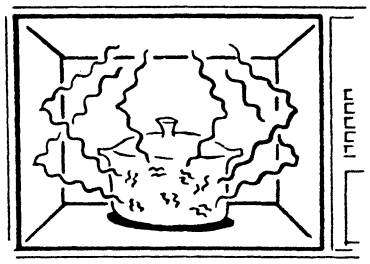
Microwaves pass through glass, paper, and ceramic because they are electrically neutral.



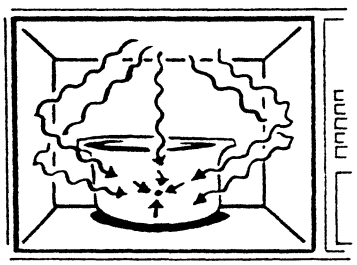
Microwaves are attracted to the charged particles in food molecules. They go ¾ to 1½ inches into food.



Positive and negative charges of microwaves cause food molecules to vibrate nearly 2½ billion times each second.



The vibration causes friction, which creates heat that cooks the food.



Heat moves by conduction toward the center of the food and cooks it.