

# TEACHER'S KEY

## Pioneers of Food Science

- Adams, Thomas . . . Opened first chewing gum factory — 1869
- Anderson, Alexander P. . . Developed stem injection "gun" for puffing cereals — puffed rice 1901
- Appert, Nicolas . . . Developed method of food preservation — canning; received award from Napoleon
- Armour, Philip D. . . Meat packing industry — use of refrigeration and meat canning
- Bacon, Sir Francis . . . Experiment with effect of cold on decay of meat — 1626;
- Ball, Charles Olin . . . 1928 research was the standard used by USDA for calculating thermal processes in canning
- Beach, Chester . . . With Frederick Osius in Racine, WI invented small motor on AC/DC plug powered machines
- Beal, William J. . . Hybrid corn development
- Birdseye, Charles . . . Process of quick freezing and developed special packaging for freezing retail portions
- Borden, Gail Jr. . . Patented process for vacuum-evaporating milk mixed w/sugar under sterile conditions— "condensed milk"
- Borlaug, Norman . . . Agronomist — Nobel Peace Prize for efforts to overcome world hunger — developed wheat/rye hybrid
- Brandenberger, Jacques . . . Swiss chemist created cellophane — 1908
- Brearely, Harry . . . Stainless steel — 1914
- Bunsen, R. W. . . Bunsen burner — 1855
- Burbank, Luther . . . Bred blight resistant potatoes (Idaho potato 1871); helped combat Irish potato famine
- Cade, J. Robert . . . Professor of medicine and physiology — invented Gatorade 1965
- Carver, George Washington . . . Discovered hundreds of uses for peanuts; improved output of southern farmers — 1912
- Cooper, Peter . . . Patent for manufacture of gelatin dessert - 1895 purchased by Pearl Wait and called Jell-o
- Crum, George . . . Native American/African American chef invented potato chip - 1853
- Dewar, Sir James . . . Scottish chemist invented the vacuum flask — 1892

- Diemer, Walter . . . Invented Double Bubble gum — 1928
- Donkin, Bryan . . . Set up first cannery to use tinned iron containers
- Durand, Peter . . . Patent to preserve foods in metal can — 1810
- Farmer, Fannie . . . Author of one of the first cookbooks — 1896
- Fraze, Ermal . . . Created self-opening can by putting first pull tabs on cans — designed 1959; patent 1963
- Gaulin, Auguste . . . Invented homogenization in France 1899 — patent 1902
- Haas, Edward III . . . Pez candies — 1927 Vienna, Austria
- Haber, Fritz . . . with Carl Bosch determined nitrogen needs of plants; 1918 Nobel Prize chemistry synthesizing ammonia
- Hall, Charles Martin . . . Invented method for inexpensive production of aluminum
- Hawkins, Joseph . . . Created grid iron for broiling food, early oven racks — 1845
- Hellman, Richard . . . 1912 built factory to produce mayonnaise in jars
- Hershey, Milton . . . Made milk chocolate and sold nationwide at a low price — 1905
- Hormel, George A. . . . Founded Hormel in Austin, MN in 1891 — invented SPAM in 1937
- Kellogg, John Harvey . . . Corn flakes cereal — 1884 patent
- Keys, Ancel . . . Developed K-rations during WWII — 1950s studied diets and health statistics
- Kraft, James L. . . . 1903 began wholesale cheese business — introduced processed cheese 1915
- Lavoisier, Antoine . . . Quantitative chemical experiments — system to describe structure of chemical compounds
- Mars, Forrest E. . . . Started candy company — developed Mars Bars and created M & M's
- McCollum, Elmer V. . . . Discovered vitamin A & D — pioneered study of vitamins and minerals
- Mendel, Gregor . . . Father of modern genetics; worked with peas 1856 — 1863 theories of heredity
- Mitchell, William . . . A research chemist for General Foods invented Pop Rocks; also created Cool Whip, Tang
- Moore, Thomas . . . First electric refrigerator — 1803
- Moore, Hugh . . . With Lawrence Luellen invented disposable Dixie cups — 1907; prevented spread of germs
- Norman, William . . . Received a patent in 1903 describing a hydrogenation process for fats and oils
- Pasteur, Louis . . . French chemist developed process of pasteurization
- Peebles, David D. . . . Inventor of instant non-fat dry milk products — 1950s
- Pemberton, John S. . . . Atlanta, GA pharmacist invented Coca-Cola — 1886

- Perkins, Edwin . . . Nebraska chemist invented Kool Aid — 1927
- Plunkett, Roy J. . . While working for DuPont discovered Teflon — 1949
- Poplawski, Stephen . . . With Fred Waring as financial backer invented the blender — 1922
- Post, Charles W. . . . Founded cereal company in 1895
- Potrykus, Ingo . . . Developed genetically modified food called golden rice — 1999
- Richards, Ellen . . . Founder of home economics — first woman to be admitted to MIT;  
worked on air, water, & food quality
- Schlumbohm, Dr. Peter . . . Invented coffeemaker — patent 1941
- Spencer, Percy Le Baron . . . As an engineer for Raytheon Corporation invented the microwave oven  
— 1946
- Steenbock, Harry . . . Demonstrated irradiation by UV light increased vitamin D content of  
food — 1924
- Stillwell, Charles . . . Inventor of paper bag machine for flat bottoms and pleated sides —  
1883
- Strite, Charles . . . Mechanic at a plant in Stillwater, MN frustrated by burnt toast designed  
pop up toaster — patent 1921
- Sullivan, Thomas . . . First tea bag — invented 1904 in New York, NY
- Swanson, A.C. . . . Frozen food — introduced TV dinner in 1952
- Tupper, Earl . . . Tupper seal and Tupperware — late 1940s
- Van Wormer, John . . . Waxed cardboard milk carton — 1915
- Von Liebig, Justus . . . Father of the fertilizer industry — agricultural chemistry studied effect of  
individual nutrients on crops
- Wiley, Dr. Harvey . . . Chief chemist of USDA — Pure Food and Drug Act 1906
- Wiley, Ralph . . . Discovered polyvinylidene chloride at Dow Chemicals;  
Saran Wrap — 1933
- Williams, Robert R. . . . Process for obtaining vitamins; helped fight malnutrition and vitamin  
deficiency diseases
- Wyeth, Nathaniel . . . Received patent for PET beverage bottles to hold carbonated  
beverages — plastic soda bottle