

Goodheart-Willcox Publisher

18604 West Creek Drive • Tinley Park, IL 60477-6243

Web www.g-w.com Orders 800.323.0440 Phone 708.687.5000 Fax 708.687.5068

Goodheart-Willcox Correlation of Principles of Food Science ©2015 to Oklahoma Standards for Career Tech / Agriculture Course: Food Science – Grades 9-12

Course. Took Scien	00 014400 5 12	
Standard	Correlating Textbook Pages	
Food as a Science		
Scientific study of food	5-6, 731-742	
Basic concepts of nutrition	6, 12, 229-233, 255-259, 288-293, 323-327, 369- 388, 416-419, 517, 716-717, 786-798	
Methods required in the scientific evaluation of foods	31-50, 63-77	
Explore Chemistry in Food Science		
Explain chemistry as a science of matter	91-107	
Structure of atoms, elements and molecules	91-100	
Periodic table	93-95	
Formation of compounds through chemical bonding in foods	96-100	
Reactions of chemicals commonly found in food	147-167	
Current theories about atomic structure, energy levels, sublevels and orbitals	91-107, 117-135, 147-151	
Application of Food Science and Nutrition		
The sensory evaluation of food	63-77, 732-735	
Physical and chemical characteristics of energy and their relationship to food	117-135	
Properties of water and the importance to the body and food preparation	179-199	
Sources and uses of carbohydrates in food science	211-229, 243-255	
The effects of lipids in food science	271-288	
The sources, chemical changes and importance of proteins in food science	303-323	
The importance of vitamins in food science	369-376, 385-389	



Goodheart-Willcox Publisher

18604 West Creek Drive • Tinley Park, IL 60477-6243

Web www.g-w.com Orders 800.323.0440 Phone 708.687.5000 Fax 708.687.5068

The importance of minerals in food science	376-389
The process of metabolism	716-719, 799-805
Chemical Processes Involved in Food Preparation	
Affects of enzyme reactions on food	339-357, 499-500
Chemical properties and uses of solutions, colloidal dispersions and emulsions in food preparation	288, 671-691
Chemical processes involved in leavening	162-165, 473-474