**Layered Curriculum Activity Sheet: (Chapters 1, 2, 3, 4, 5, 6 & 7)**

**Unit 1 – Introduction to Food Science Layered Curriculum Experiences**

**All work must look professional, neat, organized, colorful, and easy to follow.**

**Level 1 - Basic Learning and Skills Activities**

**Before turning this in, be sure you have at least one activity for each of the following units:**

* **Importance of Food Science**
* **Basic Experimental Methods & Tools**
* **Food Preservation**
* **Food Processing & Packaging**

**Choose activities to earn a maximum of up to 20 points**

**A=18-20 Points; B=16-17 Points; C=14-15 Points; D=12-13 Points**

**Target Completion Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (end of class)

\_\_\_\_\_ Guided note taking – video or lecture, PPT (required) (3 points)

\_\_\_\_\_ Create flash cards/online flashcards for all of the vocabulary in this unit (4 points) (choose 3 words from each chapter for a total of 21)

\_\_\_\_\_ Draw or print a picture that represents the vocabulary in this unit (4 points) (choose 3 words from each chapter for a total of 21)

\_\_\_\_\_ Create a crossword puzzle and **answer key** for all of the vocabulary in this unit (5 points) (choose 3 words from each chapter for a total of 21)

\_\_\_\_\_ Create a multiple choice quiz and answer key for the vocabulary in this unit (5 points) (choose 3 words from each chapter for a total of 21)

\_\_\_\_\_ Create a matching or fill in the blank quiz and answer key for the vocabulary in this unit (5 points) (choose 3 words from each chapter for a total of 21)

\_\_\_\_\_ List 10 different careers within the food science industry and **explain** what each one does. (5 points)

\_\_\_\_\_ Write a 1-page explanation of the importance of food science as if you were teaching a child (5 points)

\_\_\_\_\_ Create a PPT explaining how food science plays a role in the processing, production and packaging of a processed food of your choice (6 points)

\_\_\_\_\_ Create a pamphlet to explain all appropriate experimental methods & tools (6 points)

\_\_\_\_\_ List 10 types of products made from corn, and 10 from soy, **AND** explain how those foods are produced (8 points)

**Level 2 - Application Activities** **Choose activities to earn up to 30 points**

**A=28-30 Points; B=24-27 Points; C=20-23 Points; D=18-19 Points**

**Target Completion Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (end of class)

\_\_\_\_\_ Create at least 10 questions for interviewing a food scientist regarding the future of food processing and the related ethical concerns (8 points)

\_\_\_\_\_ Write a letter to a government official regarding a food production issue farmers face today with regard to your food choices in the supermarket (8 points)

\_\_\_\_\_ Create a cartoon strip depicting the environmental impact of one area of food science (8 points)

\_\_\_\_\_ Create a computer game using the vocabulary from this unit (choose 3 words from each chapter for a total of 21) (8 points)

\_\_\_\_\_Create a graphic organizer for the food chain, be sure to include economic and environmental factors (9 points)

\_\_\_\_\_ Create a PowerPoint comparing five genetically modified organism’s (GMO) against their non GMO counterpart. Comparisons should be made on the following areas: nutritional value, social and environmental impact. (10 points)

\_\_\_\_\_ Create a detailed script/storyboard and video demonstrating accurate data collection and measurement techniques in food science (10 points)

\_\_\_\_\_\_ Design a cube focusing on one area of food science, each side needs to represent a different career in that area, include advantages and disadvantages (10 points)

**Level 3 - Analyzing Activities Choose 1 activity to earn up to 50 points**

**A=48-50 Points; B=44-47 Points; C=40-43 Points; D=36-39 Points**

**Target Completion Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (beginning of class)

\_\_\_\_\_ Conduct and videotape an interview with a food scientist, using at least 10 student created questions, regarding the future of food processing and other related ethical concerns

\_\_\_\_\_ Research and create an interactive timeline PPT explaining the development of one food through food science; demonstrate how it has changed to be more available, appealing, nutritious and profitable to produce.

\_\_\_\_\_ Research food science careers on the Internet. Choose 6 careers that interest you: 2 in food science, 2 in food technology, and 2 in nutrition. Make a list of at least 10 personal characteristics needed for each of those careers. Compare your personal characteristics with these lists and decide which three careers would be best for you and why.

\_\_\_\_\_Create a 3D model of measurement equivalents, choose which equivalent you would like to represent.