

## **CTE Introduction Minimum Equipment List**

### **Business Rotation:**

Computers for each student with Microsoft Office

Printers

Computer projector for presentations

Supplies for whatever Business Simulations you choose

### **FACS Rotation (Suggestions from Mountainville Academy):**

4 Ranges – Convection suggested

Mixing bowls, measuring cups and spoons, spatula

8 Blenders

Dishes, utensils, cooling racks

Pans, hot pads, dish clothes, dish towels

12 Sewing Machines

Sergers

Sewing scissors

Supplies for project chosen, thread, bobbins

Computers (used periodically)

### **Technology Rotation:**

Computers

Printers

Projector

Measuring tapes, box cutters or saws, hammers, screw drivers

Project supplies vary depending on the project

## **Economics**

No equipment

## **Marketing:**

Access to computers

## **Agriculture:**

### **Business Education Lesson - Agricultural Career Concept Map**

#### **Materials**

- Bulletin Board Paper (5 pieces 2' x 3'), or Dry Erase
- (Chalk) Board, if you have enough board room for 5
- groups of students
- Colored Pencils or Dry Markers or Chalk (5 sets with 5
- different colors in each set)
- 5-Fs or Agriculture poster (FREE)
- Connecting to Agriculture Video/DVD (available from Utah AITC)

### **Business Education Lesson - Farming: It's a Fact!**

#### **Materials**

- Computer Lab or Computer & Projector for Presentation
- Computer Speakers or Headphones
- Computer Internet Access or Agricultural Technologies and
- Edutainment Software (available from Utah AITC website)
- Farm Facts Booklets (1 for every two students, available
- from Utah AITC website)
- Software (such as MicroSoft PowerPoint and Excel) or Graph
- Paper that will allow students to create charts and graphs
- Copies of handouts and transparency masters
- Ten Grocery Items with Receipt
- Calculators (hand-held or computer accessory)
- Ag Overload Score Card for each player or team

### **Business Education Lesson - The Business of Agriculture**

#### **Materials**

- Seed samples of corn, rice, wheat, and soybeans (available
- from Utah AITC)
- Agronomy Specialist card sets and game boards for each
- group of four students
- Copies of map handout
- Marketing Integrated Lessons in Business for TLC,
- distributed by the Utah State Office of Education (optional)
- "Pit" game (optional)

## **Family & Consumer Science Lesson - Source Search**

### **Materials**

- Four boxes labeled “Store,” “Factory,” “Farm,” and “Natural Resources”
- Poster board (for mounting product pictures)
- Glue

## **Family & Consumer Science Lesson - From Milk to Cheese & Seed to Shelf**

### **Materials**

#### **Activity 1: Making Cheese, Old and New**

- Computer Lab or Computer & Projector for Presentation
- Computer Speakers or Headphones
- Computer Internet Access or Agricultural Technologies and Edutainment Software (available from Utah AITC)
- Biotech Cheese Kit
- 2 Crockpots
- Rennet
- Thermometer
- Large Spoon
- Large Knife
- Colander
- 8 Cups Powdered Milk
- 2 Quarts Buttermilk
- Salt
- 2 Small Bowls
- Crackers
- Herbs (optional)
- Understanding Biotechnology CD available from Utah
- AITC (optional)
- What is Biotechnology Bulletin Board and Lesson Plan, and Worksheet available from Utah AITC (optional)
- Bringing Biotechnology to Life available from Utah
- AITC (optional)

#### **Activity 2: From Seed to Shelf**

- Computer Lab or Computer & Projector for Presentation
- Computer Speakers or Headphones
- Computer Internet Access or Agricultural Technologies and Edutainment Software (available from Utah AITC)

#### **Activity 3: No Fear Food Safety First**

- Science in Your Shopping Cart Booklet & DVD (available from Utah AITC)
- 5 Sets of Specialist Fact Cards

- 5 Sets of Specialist Matching Cards
- 5 Consumer Facts Information Boards

### **Family & Consumer Science or Technology Education Lesson - High-Tech Food**

#### **Materials**

- The following materials are available on this website:
- [www.agclassroom.org/scienceinshopping.htm](http://www.agclassroom.org/scienceinshopping.htm)
- "Science in Your Shopping Cart" booklet (PDF)
- "Science in Your Shopping Cart" PowerPoint Presentation
- "Science in Your Shopping Cart" video (free download or purchase the DVD from the website, 14 min.)
- "Agricultural Science and Technology Worksheet," one for each student
- "Modern Marvels: Harvesting Technology" video/DVD (order online from the History Channel, [www.historychannel.com](http://www.historychannel.com))

### **Technology Education Lesson - Exploring Living Science Careers**

#### **Materials**

- Living Science Career Cards
- Source Search Lesson Plan (optional)
- Agricultural Career Concept Map Lesson Plan (optional)
- 5-Fs or Agriculture poster (FREE, Utah AITC)
- Employment Opportunities for College Grads in the U.S. Food, Agricultural, & Natural Resource Systems (FREE, Utah AITC)
- Career Cluster Investigation Worksheet
- Career Matching Activity (optional)

### **Technology Education Lesson - Space Age Technology Comes to Earth**

#### **Materials**

- Computer Lab or Computer & Projector for Presentation
- Computer Speakers or Headphones
- Computer Internet Access or Agricultural Technologies and Edutainment Software (available from Utah AITC)
- 5 - GPS Receivers (optional)
- Geocaching Bags (optional)

Supporting materials are available at this website.

[http://extension.usu.edu/aitc/teachers/secondary/cte\\_instruct.htm](http://extension.usu.edu/aitc/teachers/secondary/cte_instruct.htm)

## **Health Science/Technology:**

### **Health Care Pathways Orientation Slideshow**

1. Introduction to Career Pathways -- Student PowerPoint (available on website)
2. Crossword Puzzle for Students (available on website)

### **Health Careers Planner - Interest Inventory**

1. Classroom set of American Careers--Health Careers Planner (HCP)
2. Duplicate copies of "Make an Inventory of Your Interests" from page 5 of the HCP

### **Who Wants to be a Health Care Worker?**

3. Simulated "Who Wants To Be A Millionaire" PowerPoint Game titled "Who Wants To Be A Health Care Worker?" (available on website)

### **Disease Detective - Health Informatics**

1. National Health Care Pathways and Careers (available on website)
2. Mission Possible PowerPoint (available on website)
3. Student Booklet for the Disease Detective Activity (available on website)

### **Health Careers Planner - Health Informatics**

4. Classroom set of American Careers--Health Careers Planner (HCP)
5. Worksheet "Exploring Informatics" (available on website)
6. Optional: Copies of Crossword Puzzle, duplicated from page 31 in HCP and list of words to use as answers

### **Child Safety-Therapeutic Services**

7. A bulletin board displaying the "Six Points of Danger" bulletin board sample, (page 8.24 of the TLC FACS curriculum)
8. The child care safety assignment 8.23 of the TLC FACS curriculum (available on website)
9. Case studies (pp. 8.33-8.38 of the TLC FACS curriculum) - Optional
10. Basic first-aid information (pp. 1.33-1.34 of the TLC FACS curriculum).
11. A guest speaker from the emergency health care system
12. Guest Speaker - Student Evaluation Form (TLC Work-based Learning Tool Kit CD)
13. Introduction to Health Careers or EMT Units (TLC Health Careers Teacher Guide) – Optional

### **Health Care Careers**

14. Health Care Careers Poster
15. Careers for the 21st Century Video "Health Technologists & Technicians"
16. National Health Care Foundation Skill Standards document (available on website)
17. National Health Care Pathways document (available on website)

18. Organization of Health Care document (available on website)
19. Utah Health Science & Technology Education Conceptual Model (available on website)

### **Health Careers Planner - Therapeutic Services**

20. Classroom set of American Careers--Health Careers Planner (HCP)
21. Worksheet "Exploring Therapeutic Careers" (available on website)
22. Optional: Copies of "Working with Words" from page 15 in the HCP

### **Sanitation & Food - Support Services**

23. Option I - A white ball or a similar object about the size of a tennis ball, that can be thrown or passed around the room and a sealable plastic bag
24. Option II - A cutting board, food items, (such as chicken, an apple) a knife, and soap
25. GloGerm powder ([www.glogerm.com](http://www.glogerm.com))
26. A black light
27. An information sheet or a video on food safety
28. A guest speaker relating to food and sanitation such as a county health inspector, a USDA inspector, or a restaurant owner or manager – optional

### **Health Careers Planner - Support Services**

1. Classroom set of American Careers--Health Careers Planner (HCP)

### **Artificial Limbs & Robotics – Diagnostic**

2. Assorted “scrap materials” such as wire, coat hangers, dowels, 1/4 inch square sticks, hinges, string, rubber bands, tape, assorted wood, metal, PVC pipe or plastic scraps
3. Empty water cooler jug or large bottle with an opening of at least 2 inches, and a quantity of various sized wrapped candy
4. Video - Medical Systems Tech Module “Artificial Arm & Hand”

### **Health Care Careers**

5. Health Care Careers Poster
6. Careers for the 21st Century Video "Health Technologists & Technicians"
7. National Health Care Foundation Skill Standards document (available on website)
8. National Health Care Pathways document (available on website)
9. Organization of Health Care document (available on website)
10. Utah Health Science & Technology Education Conceptual Model (available on website)

### **Medical Technology – Diagnostic**

11. Video on medical technologies – one copy per school still available through the Utah State Office of Education
12. Small video camera with monitor – still available through the USOE
13. Mannequin, dummy, or a large shoe box
14. Hemostats or tweezers – still available through the USOE
15. String

### **Health Careers Planner – Diagnostic**

16. Classroom set of American Careers--Health Careers Planner (HCP)
17. Worksheet: "Exploring Diagnostic Careers" (available on website)
18. Optional: Create copies of "Detect a Word", found on page 23 of the HCP

### **Health Careers Planner – Biotechnology**

19. Classroom set of American Careers--Health Careers Planner (HCP)
20. Worksheet titled "Exploring Biotechnology Research and Development" (available on website)

### **Medical Ethics – Low Birth Weight Infants**

21. "Low Birth Weight Infants" Dilemma Power Point (available on website)
22. Fact sheet "Low Birth Weight Infants" (available on website)
23. "What to do about Thomas?" Case Study (available on website)

### **Radiology Technician Activity**

1. Handout "Human Skeleton " (available on website)
2. Worksheet "Radiology Technician Activity" (available on website)
3. Sample x-rays (available on website)

### **Check Cell DNA**

4. Glass or plastic vials with lids
5. Pipettes
6. Dish detergent
7. Plastic or paper cups
8. Meat tenderizer or salt
9. Rubbing alcohol

### **Health Care Career Game**

10. Paper and writing utensil for each student

### **CPR and First Aid Clever Catch Ball Activity**

1. Clever Catch Ball – CPR and First Aid (Nasco Modesto)

## **Handwashing/Glogerm Activity**

1. Watch/clock with a second hand or a stopwatch
2. Sink
3. Paper towels
4. Soap
5. Glogerm powder or oil
6. UV light
7. Handwashing posters – optional

## **IT:**

Computer Lab

Digital Camera – at least one

Microphones for computers at least 4

Internet Access