

Fashion Design and Technology  
Revised UBD Curriculum  
Egg Harbor Township High School  
Family and Consumer Science  
Department

CTE



Career and Technical Education

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## **DISTRICT MISSION STATEMENT**

Our mission in the Egg Harbor Township School District is to partner with the student, family, school, and community to provide a safe learning environment that addresses rigorous and relevant 21st Century standards and best practices which will develop academic scholarship, integrity, leadership, citizenship, and the unique learning style of students, while encouraging them to develop a strong work ethic and to act responsibly in their school community and everyday society.

## **CAREER AND TECHNICAL EDUCATION**

### **Mission:**

New Jersey's Office of Career and Technical Education seeks to prepare students for career opportunities of the 21st century, succeed as global citizens and support healthy economic growth for New Jersey. Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.

## **INTRODUCTION**

The most precious resource teachers have is time. Regardless of how much time a course is scheduled for, it is never enough to accomplish all that one would like. Therefore, it is imperative that teachers utilize the time they have wisely in order to maximize the potential for all students to achieve the desired learning.

High quality educational programs are characterized by clearly stated goals for student learning, teachers who are well-informed and skilled in enabling students to reach those goals, program designs that allow for continuous growth over the span of years of instruction, and ways of measuring whether students are achieving program goals.

## **EGG HARBOR TOWNSHIP SCHOOL DISTRICT CURRICULUM TEMPLATE**

The Egg Harbor Township School District has embraced the backward-design model as the foundation for all curriculum development for the educational program. When reviewing curriculum documents and the Egg Harbor Township curriculum template, aspects of the backward-design model will be found in the stated enduring *understandings/essential questions*, *unit assessments*, and *instructional activities*. Familiarization with backward-design is critical to working effectively with Egg Harbor Township's curriculum guides.

## **GUIDING PRINCIPLES: WHAT IS BACKWARD DESIGN?**

### **WHAT IS UNDERSTANDING BY DESIGN?**

“Backward design” is an increasingly common approach to planning curriculum and instruction. As its name implies, “backward design” is based on defining clear goals, providing acceptable evidence of having achieved those goals, and then working ‘backward’ to identify what actions need to be taken that will ensure that the gap between the current status and the desired status is closed.

Building on the concept of backward design, Grant Wiggins and Jay McTighe (2005) have developed a structured approach to planning programs, curriculum, and instructional units. Their model asks educators to state goals; identify deep understandings, pose essential questions, and specify clear evidence that goals, understandings, and core learning have been achieved.

Program based on backward design use desired results to drive decisions. With this design, there are questions to consider, such as: What should students understand, know, and be able to do? What does it look like to meet those goals? What kind of program will result in the outcomes stated? How will we know students have achieved that result? What other kinds of evidence will tell us that we have a quality program? These questions apply regardless of whether they are goals in program planning or classroom instruction.

The backward design process involves three interrelated stages for developing an entire curriculum or a single unit of instruction. The relationship from planning to curriculum design, development, and implementation hinges upon the integration of the following three stages.

*Stage I: Identifying Desired Results:* Enduring understandings, essential questions, knowledge and skills need to be woven into curriculum publications, documents, standards, and scope and sequence materials. Enduring understandings identify the “big ideas” that students will grapple with during the course of the unit. Essential questions provide a unifying focus for the unit and students should be able to answer more deeply and fully these questions as they proceed through the unit. Knowledge and skills are the “stuff” upon which the understandings are built.

*Stage II: Determining Acceptable Evidence:* Varied types of evidence are specified to ensure that students demonstrate attainment of desired results. While discrete knowledge assessments (e.g.: multiple choice, fill-in-the-blank, short answer, etc...) will be utilized during an instructional unit, the overall unit assessment is performance-based and asks students to demonstrate that they have mastered the desired understandings. These culminating (summative) assessments are authentic tasks that students would likely encounter in the real-world after they leave school. They allow students to demonstrate all that they have learned and can do. To demonstrate their understandings students can explain, interpret, apply, provide critical and insightful points of view, show empathy and/or evidence self-knowledge. Models of student performance and clearly defined criteria (i.e.: rubrics) are provided to all students in advance of starting work on the unit task.

*Stage III: Designing Learning Activities:* Instructional tasks, activities, and experiences are aligned with stages one and two so that the desired results are obtained based on the identified evidence or assessment tasks. Instructional activities and strategies are considered only once stages one

and two have been clearly explicated. Therefore, congruence among all three stages can be ensured and teachers can make wise instructional choices.

At the curricular level, these three stages are best realized as a fusion of research, best practices, shared and sustained inquiry, consensus building, and initiative that involves all stakeholders. In this design, administrators are instructional leaders who enable the alignment between the curriculum and other key initiatives in their district or schools. These leaders demonstrate a clear purpose and direction for the curriculum within their school or district by providing support for implementation, opportunities for revision through sustained and consistent professional development, initiating action research activities, and collecting and evaluating materials to ensure alignment with the desired results. Intrinsic to the success of curriculum is to show how it aligns with the overarching goals of the district, how the document relates to district, state, or national standards, what a high quality educational program looks like, and what excellent teaching and learning looks like. Within education, success of the educational program is realized through this blend of commitment and organizational direction.

#### **INTENT OF THE GUIDE**

This guide is intended to provide teachers with course objective and possible activities, as well as assist the teacher in planning and delivering instruction in accordance with the New Jersey Core Curriculum Content Standards. The guide is not intended to restrict or limit the teacher's resources or individual instruction techniques. It is expected that the teacher will reflectively adjust and modify instruction and units during the course of normal lessons depending on the varying needs of the class, provided such modified instruction attends to the objectives and essential questions outlined below.

## Fashion Design and Technology - Power Standards

Standard Number	Standard
<b>Marking Period 1</b>	
12.9.3.HU2	Evaluate the role of family, community services in society and the economy
12.9.2.B.1	In the 21st century, people will most likely have multiple careers and jobs.
12.9.2.E1	Financial choices have costs, benefits and consequences.
12.9.2.A.1	Choices we make as individuals affect self, family, community and the world.
CRP2	Apply appropriate academic and technical skills.
<b>Marking Period 2</b>	
CRP2	Apply appropriate academic and technical skills.
CRP6	Demonstrate creativity and innovation.
CRP11	Use technology to enhance productivity.
CAEP.9.2.12.C.4	Analyze how economic conditions and societal change influence employment trends and future education.
<b>Marking Period 3</b>	
CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
16.4.1	Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel, and textile construction.
9.1.12.A.1	Identify career goals and develop a plan and time plan.
<b>Marking Period 4</b>	
16.4.1	Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel, and textile construction.
CRP2	Apply appropriate academic and technical skills.

<b>CRP11</b>	Use technology to enhance productivity.
<b>CAEP.9.2.12.C.4</b>	<b>Analyze how economic conditions and societal change influence employment trends and future education.</b>
<b>CAEP.9.1.12.A.</b>	<b>Identify career goals and develop a plan and time plan.</b>

**Unit Name: Digital Fashion Designs**

**Time Frame: 2-3 weeks**

**Author: Judy Tucci**

## **UNIT I**

Subject: Fashion Design and Technology

Country: **USA**

Course/Grade: 9-12

State/Group: **NJ**

School: **EHTHS**

### **UNIT SUMMARY**

Introduces the technological world of digital fashion designs, including the terms, careers, methods, and drawing types used in fashion design. Students complete technical sketches, geometric constructions, orthographic projects and pictorial drawings. Students will have the ability to add prints, text, fabrics, slogans, logos, photos and artwork to their designs.

### **UNIT RESOURCES**

- Digital Fashion Pro Academic Edition
- Beyond the Basics
- Fashion Business Center CD
- Vector Art Mega Pack
- Printer Paper
- 36 Inch Ruler
- Clothing Articles brought in by students
- Microsoft Excel
- Project Folders

### **Internet Resource Links:**

- [www.DigitalFashionPro.com](http://www.DigitalFashionPro.com)
- [www.Shop.StartingAClothingLine.com](http://www.Shop.StartingAClothingLine.com)
- [www.startingaclothingline.com](http://www.startingaclothingline.com)

## **STAGE ONE**

### **GOALS AND STANDARDS**

- 8.1.12.A.1 Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
- 8.1.12.A.2 Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
- 8.1.12.D.1 Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

## **COMMON CORE STANDARDS ENGLISH LANGUAGE ARTS**

- **RI.9-10.4** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
- **W.9-10.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- **W.9-10.6** Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.
- **NJCCCS 21st CENTURY LIFE AND CAREER**
- **9.3.HT-RFB.4** Demonstrate leadership qualities and collaboration with others
- **9.1** 21st-Century Life & Career Skills: All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.
- **9.1.12.A.1** Apply critical thinking and problem-solving strategies during structured learning experiences.
- **9.1.12. F.2** Demonstrate a positive work ethic in various settings, including the classroom and during structured learning experiences.
- **9.3** Career Awareness, Exploration, & Preparation: All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.
- **9.3.12. C.3** Develop personal interests and activities that support declared career goals and plans.
- **9.3.12. C.7** Pursue a variety of activities related to career preparation (e.g., volunteer, seek employment, and/or apply for training grants, higher education grants, and loans).
- **LA.K-12.3.1.3** - [*Cumulative Progress Indicator*] - Give directions and/or instructions to others.
- **LA.K-12.3.3.2** - [*Cumulative Progress Indicator*] - Demonstrate the ability to sequence and organize thoughts and information using graphic symbols for a variety of audiences and situations
- **CRP2.** Apply appropriate academic and technical skills.
- **CRP6.** Demonstrate creativity and innovation.

## **ENDURING UNDERSTANDING**

- Students will know how to start your clothing line from scratch or greatly enhance the line that you have already started.
- Students will have the tools that you will need in each step of the fashion design process of getting your clothing made.
- Students will be able to design Men's and Women's Clothing such as Tees, Jeans, Dresses, Skirts, Swimwear, Shoes, Handbags, Pants, Jogging Suits, Sportswear, Hoodies, Business Attire, Tops, Lingerie and Sweaters.
- Students will be able to not only find a manufacturer to make your line but how to effectively conduct business with them.
- Students will learn how to effectively sell your collections to apparel retailers.

## **ESSENTIAL QUESTIONS**

- **Does a fashion designer need drawing skills?**
- **What other ways can fashion designs be made besides sketching?**
- **How has technology changed the way we view fashion designs?**
- **How can digital fashion designs save time and money?**

## **KNOWLEDGE AND SKILLS**

- Create Basic Tops, Pants, Shorts, Leggings
- Create Hangtags, Pockets, Zippers, Buttons
- Create Outerwear, Coats, Jackets, Sportswear, Suits
- Create Dresses and Skirts
- Create Trendy Tops
- Create Swimwear
- Create Baby and Kid Clothing
- Create Shoes: Sneakers, Heels, Boots, Flip Flops & more.
- Create Hats & Scarves
- Create Handbags
- Create Eyewear

## **STAGE TWO**

### **PERFORMANCE TASKS**

- The ability to design Men, Women, Baby and Kid clothing, design shoes and handbags
- You will learn how to make technical sketches with Beyond the Basics
- Over 1,000 Digital Fabrics to use in your designs
- Create special denim wash and treatment effects with Denim Wash Factory

## **OTHER EVIDENCE**

- Group participation
- Daily agenda completion
- Portfolio completion

## **STAGE THREE**

### **LEARNING PLAN**

- **Students will work in a team environment to foster team building skills.**
- **Students will learn to design clothing and the clothing design process for professional fashion designer.**
- **Students will create and organize their designs.**
- **Students will have hands on activities where they can work with measuring garments.**
- **Students will adapt the knowledge and confidence to become an independent fashion designer.**
- **Students will experience the ease of working with technology to create fashion designs.**
- **Students will work with groups of 3-5 to create their own mini-fashion lines.**
- **Students will work to create a theme for their collections for a specific season.**
- **Students will create specification sheets for their designs and technical sketches.**
- **Students create a group or solo portfolio.**

**Unit Name: The History of Fashion**

**Time Frame: 3-4 weeks**

**Author: Judy Tucci**

## **UNIT I**

Subject: Fashion Design & Technology

Country: **USA**

Course/Grade: 9-12

State/Group: **NJ**

School: **EHTHS**

### **UNIT SUMMARY**

Students will explore the history of fashion by decade from 1900 - 2015. Students will research the fashion of the times, the news of the times, and the designers of the times. Students will create a power point representing their chosen decade and present the decade to the class. Describe the history of fashion prior to the 1900's. Students will identify how fashion is influenced by what is happening in politics, culture, economics and society. Compare how textiles and design have evolved throughout history. Define the ways in which economies, mass production, labor unions, globalization, and technology affect the fashion industry. Create a product describing fashion cycles and the adaptation of historical fashions to current trends.

### **UNIT RESOURCES:**

- **History of Fashion power point**
- **Fashion History Note Page**
- **Video: Cocoa Channel**
- **Video: History of Fashion**

### **Internet Resource Links: https:**

- **[www.cteonline.org/resources/view/42000](http://www.cteonline.org/resources/view/42000)**
- **[www.imdb.com/title/tt1094661/](http://www.imdb.com/title/tt1094661/)**
- **[americanhistory.si.edu/first-ladies/](http://americanhistory.si.edu/first-ladies/)**

## STAGE ONE

### GOALS AND STANDARDS

- **9.2.12.C.1** Review career goals and determine steps necessary for attainment.
- **9.2.12.C.3** Identify transferable career skills and design alternate career plans.
- **9.2.12.C.4** Analyze how economic conditions and societal changes influence employment trends and future education.
- **9.3.12.C.5** Identify transferable skills in career choices and design alternative career plans based upon those skills.
- **9.3.12.C.6** Develop job readiness skills by participating in structures learning experiences and employment seeking opportunities.
- **CRP2.** Apply appropriate academic and technical skills.
- **CRP5.** Consider the environmental, social and economic impacts of decisions.
- **CRP6.** Demonstrate creativity and innovation.
- **CRP7.** Employ valid and reliable research strategies.
- **TEC.5-8.** - *{Content Statement}* - the use of digital tools and media-rich resources enhances creativity and the construction of knowledge.
- **TEC.5-8.** – *[Content Statement]* – The design process is a systematic approach to solving problems.
- **CTE.FID.A.A5.1** Analyze fashion trends in various periods throughout history, and analyze the influences of art and media on fashion.
- **CTE.FID.A.A5.2** Understand how fashion and design have been influenced by politics, society, economics, culture, and aesthetics.

### ENDURING UNDERSTANDING

- **Students will understand the events that impacted fashion and the time period.**
- **Students will understand the introduction of a silhouette and how it is formed.**

### ESSENTIAL QUESTIONS

1. Why it would be important to know what people wore in the different times in our history?
2. Do you think that history repeats itself?
3. Can you think of a item of clothing that has repeated itself in another decade?

## KNOWLEDGE AND SKILLS

- Students will be able to identify the fashion of the times, news of the times and designers of the time for each decade from 1900 -1990.
- Students will be able to identify how fashion is influenced by what is happening in politics, culture, economics and society.
- The students will be able to synthesize their research and make a presentation to the class.

## STAGE TWO

### PERFORMANCE TASKS

#### Fashion "A Mirror of the Times"

**Preparation** - For this activity I like to dress up in an outfit that represents a particular decade. If it is not in your personality to dress up you might be able to put on a few accessories that could represent a time period because what people wore during this time was a mirror of what was happening in our society. (ie - 1960's when people wore clothes which reflected a time that people did not follow rules dictated by our society...hippies)

As the students enter the room they notice that you are dressed up in something out of the ordinary. Act as if it is just another outfit that you would wear any day. Once the class has started, lead a discussion with students on why fashion is a mirror of the times. Discuss how your outfit is a reflection of a particular time period.

In their journal or on a piece of paper, ask students to reply to the following:

Why it would be important to know what people wore in the different times in our history.

Do you think that history repeats itself.

Can you think of a item of clothing that has repeated itself in another decade?

Lead a discussion where responses emphasize the importance of knowing; the news of the times, fashion designers of the times, and the style of the times for each decade.

### Group Project

**Overview** - The students will work as a group to research the news of the times, fashion of the times, and designer of the times for a particular decade. They will create a power point that reflects through words and

pictures all three areas. Once complete the students will give an oral presentation to the class about their decade. Extra credit can be offered if the students dress up on the day of their presentation in the appropriate clothes for their decade. Guided notes are used so that at the end of this unit each student has a 2 page document that highlights each time period. Note: The finished products can serve as a timeline in your class that can stay up for a few months. If you teach more than one class you can use the second set of posters and create a display in the library, administration or any other appropriate place. Because I have a specific idea on how I want to use the finished posters I give each group a piece of white card stock that is 11X 17 inches. If you would rather use technology you can have the students create a powerpoint.

**Assignment:** Write on the board each decade 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, and 1990.

Students will work in groups of 2 or 3 to complete this assignment. Each group will select a decade from 1900's through 1990's, no two groups should have the same time period and there needs to be a group for every decade. To do this I like to have the students first get into groups (2-3 works best). Once in groups I give them a minute to discuss what decade they would like to research. Have them write down a first, second and third choice on a piece of paper along with the names of the group members. Collect the papers and fold them up so that you can draw one piece at a time. Select the first piece of paper and that group will be able to have their first choice. Continue to select groups until all decades have been filled. It is first come first serve basis so some groups might actually get a decade that is not on their paper. Reminder : all decades need to be given out. If for some reason you have a very large class it would be okay to have more than one group do the same decade.

Each group will research the news of the times, fashion designers of the times, and the fashion of the times and make a poster that reflects those three areas. Students will be given 2 days to work in class using the computers and other supplies. You can adjust the amount given depending on your students needs.

Each group will present their decade in an oral presentation. As each group presents the students will use the guided notes to record notes. Extra credit can be earned if the students dress up in the time period that they are reporting on.

I have included a Powerpoint that highlights all of the decades. This can be used in different ways. Often I instruct the students to listen to the students presentation and not take any notes. After for example the 1900's are presented I show them the three slides that I have created. If you are missing a decade or a group decides not to present you can present that decade.

## **OTHER EVIDENCE**

### **Fashion History Terms**

### **History of Fashion Research**

## **STAGE THREE**

### **LEARNING PLAN**

- **Introduction to Fashion History**
- **Fashion Trends**
- **Fashion Designers**
- **Events that impacted fashion and the time period**
- **Silhouette – How it is formed? How did it begin?**

**Unit Name: Embroidery & Embellishment**

**Time Frame:**

**Author: Judy Tucci**

**4 weeks**

## **UNIT II**

Subject: Fashion Design & Technology

Country: **US**

Course/Grade: 9-12

State/Group: **NJ**

School: **EHTHS**

### **UNIT SUMMARY**

To develop a personal creativity and learn basic hand sewing construction skills and equipment.

### **UNIT RESOURCES**

#### **Essential Tools**

- Embroidery Hoop – 5” or 6”
- Embroidry Floss
- Embroidery Needles(crewels)
- Pins
- Magnetic pin holder
- Muslin Fabric
- Transfer Paper
- Pattern Design
- Seam Gauge
- Tape Measure
- Shears
- Iron
- Pressing Cloth
- Scissors
- Fabric markers
- Chalk
- Marking pencils
- Power point
- Computer
- Software

#### **Internet Resource Links:**

[www.stitching.cow](http://www.stitching.cow)

[www.dmc-usa.com](http://www.dmc-usa.com)

<http://www.craftsy.com/blog/2014/04/hand-embroidery-stitches/>

<https://www.google.com/search?q=embroidery+stitches&safe=active&rls=com>.

<http://insects.about.com/od/morphology/ss/butterfly-diagram.htm>

[http://www.historythrougharts.org/main/program/domesticarts/PF\\_Needlearts.pdf](http://www.historythrougharts.org/main/program/domesticarts/PF_Needlearts.pdf)

## STAGE ONE

### GOALS AND STANDARDS

- CCSS.ELA-Literacy.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
- CCSS.Math.Content.HSG-MG.A.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).
- CCSS.Math.Content.HSF-LE.A.1a Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.
- Explain how demographics (i.e., race, gender, and economic status) affected social, economic, and political opportunities during the Colonial era.
- 9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.
- 9.3.12. AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media.
- 9.2.4.A.1 Identify reasons why people work, different types of work, and how work can help a person.
- 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.
- 9.2.4.A.3 Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- 9.2.8.B.4 Evaluate how traditional and nontraditional careers have evolved regionally, nationally, and globally.
- 9.2.12.C.1 Review career goals and determine steps necessary for attainment.
- 9.2.12.C.2 Modify Personalized Student Learning Plans to support declared career goals.
- 9.2.12.C.3 Identify transferable career skills and design alternate career plans.
- 9.2.12.C.4 Analyze how economic conditions and societal changes influence employment trends and future education.
- 9.2.12.C.5 Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
- 9.2.12.C.6 Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.
- 6.1.P.D.2 Demonstrate an understanding of family roles and traditions.
- 6.1.P.D.4 Learn about and respect other cultures within the classroom and community
- 4.A6.3. Compare family life today with long ago.
- 6.4.A.4. Tell about their family heritage using stories, songs, and drawings.
- 6.2.E.2. Identify traditions and celebrations of various cultures

## **ENDURING UNDERSTANDING**

- Students will be able to identify the sources and types of embellishments.
- Students will be able to explain how embellishments are produced.
- Students will identify the career possibilities available in the trim industry.

## **ESSENTIAL QUESTIONS**

1. Why did early and later settlers use needle arts?
2. How did needle arts fit into the lives of young men and young women alike?
3. Can you name the job opportunities associated with fashion embellishments?
4. Identify the categories of trim that are available?
5. Explain why thread quality is critical to the embroidery process?
6. Explain the difference in hand embroidery and machine embroidery?
7. Identify the product costs associated with with embellishments?

## **KNOWLEDGE AND SKILLS**

- Students will understand how to thread a needle.
- Students will recognize the different sizes,types and uses of hand needles.
- Students will understand how to tie a knot.
- Students will understand how to use a needle.
- Students will understand the different types of scissors and their uses.
- Students will be able to separate floss.
- Students will be able to use a rotary cutter, change blade and follow safety procedures.
- Students will practice safety procedures while using an iron.
- Students will identify 15 different embroidery stitches.
- Students will be able to apply embellishments as a design to fashion.
- Students will improve fine motor skills.
- Students will be able to follow sequential instructions.
- Learn the best stitch techniques to execute your design.
- Introduce Literature relevant to art and historical period.
- Review Keywords & Vocabulary.
- Discuss Guiding Questions.

## STAGE TWO

### PERFORMANCE TASK

1. Students will identify and perfect fifteen different embroidery stitches on muslin fabric using embroidery hoops.
2. Students will practice safety procedures while using embroidery equipment.
3. Stitch a simple butterfly using basic surface embroidery stitches including the stem stitch and the stem stitch filling. Other stitches used in this free hand embroidery pattern include French knots and single chain stitches.

### Directions:

Fold the square of evenweave fabric into quarters and mark the center point of the base fabric. Center the pattern under the fabric and \*trace the embroidery design onto the fabric using the water-soluble fabric marking pen. Referring to the color photo for color placement, embroider the design using 2 strands of floss.



### OTHER EVIDENCE

Play "TOOLS OF THE TRADE BINGO."  
Practice stitch samples  
Key terms quiz  
Embroidery construction project

## STAGE THREE

### LEARNING PLAN

- **Introduction to Hand Embroidery**
- **Origins of hand Embroidery**
- **Keywords and Terminology**
- **Tools and Equipment Safty**
- **Needle Threading**
- **Practice Stitching**
- **Embroidery Projects**



**Unit Name** Machines and Equipment

**Time Frame:** 4-6 weeks

**Author:** Judy Tucci

### UNIT III

Subject: Fashion Design and Technology I

Country: **USA**

Course/Grade: 9-12

State/Group: **NJ**

School: **EHTHS**

#### **UNIT SUMMARY**

The use of current methodology, technology, and equipment will prepare students for real-life experiences in fashion construction while pursuing and exploring their related passions, interests, and talents.

#### **UNIT RESOURCES**

##### **Essential Tools**

- Sewing Safety study guide
- Sewing Safety Contracts
- Sewing Safety Poster directions
- Sewing Safety Test
- Tool ID and Function study guide
- Seam Gauge Measuring pretest
- Tool samples/Worksheet
- Sewing Machine Parts power point and study guide
- Machine Parts Scramble homework
- Stitching lines for practice of accuracy and control
- Stitching Lines Test
- Quiz on machine parts and tools
- Directions for threading the sewing machine
- Sewing Machines
- Serger Machines
- Iron/Iron Safety
- Ironing Board
- Thread
- Bobbins
- Pins
- Shears
- Magnetic Pin Holder
- Chalk
- Marking Pencils
- Power point
- DVD
- Fabric scraps
- Threading checklist for practice
- Machine Stitchery Sample directions/rubric/examples
- Threading Review work sheet
- Machine Threading Steps work sheet

- Sewing Vocabulary work sheet
- Fabric
- Unit Test

### **Internet Resource Links:**

<http://www.familyconsumersciences.com/clothing-sewing/>

<http://www.creative-sewing-machine-center.com/EmbroideryDesignsonline.html>

<http://www.instructables.com/id/FASTEST-RECYCLED-T-SHIRT-TOTE-BAG/>

## **STAGE ONE**

### **GOALS AND STANDARDS**

- 1.5 Identify employability skills
- 1.6 Apply skills through community outreach projects and activities
- 1.7 Explore the impact technology has on careers, community and family
- 11.2.B Deduce the importance of time management skills.
- 16.3 Demonstrate fashion,, apparel, and textile design skills.
- R11.A.2.1 Identify and apply vocabulary.
- R11.A.2 Understand nonfiction appropriate to grade level
- M11.A.1 - Demonstrate an understanding of numbers; measurement
- 9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.
- 9.3.12. AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media.
- 9.2.4.A.1 Identify reasons why people work, different types of work, and how work can help a person.
- 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.
- 9.2.4.A.3 Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.

- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.
- 9.2.8.B.4 Evaluate how traditional and nontraditional careers have evolved regionally, nationally, and globally.
- 9.2.12.C.1 Review career goals and determine steps necessary for attainment.
- 9.2.12.C.2 Modify Personalized Student Learning Plans to support declared career goals.
- 9.2.12.C.3 Identify transferable career skills and design alternate career plans.
- 9.2.12.C.4 Analyze how economic conditions and societal changes influence employment trends and future education.
- 9.2.12.C.5 Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
- 9.2.12.C.6 Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.

## **ENDURING UNDERSTANDING**

### **Students will understand:**

- Safe use of the sewing machine, tools and irons is essential in the classroom.
- Knowing the function and proper use of various sewing tools is necessary for success in sewing.
- Properly threading the sewing machine is essential.
- Proper use of the sewing machine to complete basic sewing techniques is necessary to complete projects.

## **ESSENTIAL QUESTIONS**

- What are considerations for the safe use of the sewing machine, sewing tools and iron?
- What are the functions of various sewing tools?
- What is the procedure for properly threading the sewing machine?
- How are basic sewing techniques performed on the sewing machine?

## **KNOWLEDGE AND SKILLS**

- Students will understand and define vocabulary of the unit.
- Students will practice safe use of sewing machine, tools, and irons.
- Identify sewing tools and their functions.
- Demonstrate correct procedure to thread the sewing machine.
- Demonstrate the ability to use the sewing machine with control and accuracy while performing basic sewing techniques.

## STAGE TWO

### PERFORMANCE TASKS

- Sewing Safety Poster
- Accurate Stitching Lines Assessment
- Machine Stitchery Sample
- Written quizzes and unit test

1. Students will fill in the blanks on page one of the sample packet while sitting in front of the sewing machine.

The teacher will explain the parts of the sewing machine. The students will be able to move and touch the parts.

2. Select Different Stitches.

Points to Discuss--

- how to select different stitches, straight, zigzag, decorative

- How to lengthen or widen a stitch

- How to change needle position

3. Partner Time.

Students need to pair up and quiz each other on the parts and functions of the sewing machine.

4. Teacher Review.

The teacher will ask each student:

- If I switch the stitch width to 5 what will happen to my stitch?
- If I want the sewing machine to make a standard straight stitch what number does my stitch length need to be on?
- Always turn the hand wheel \_\_\_\_\_ you.
- What happens when my stitch length is on 5?
- How do I change needle position?

## **OTHER EVIDENCE**

- Active Engagements used:
- #1. Graphic Organizers
- #2. Cooperative Education
- Others: Student projects – machine stitching sample, pin cushion project
- Hands-on use of tools and machines to practice and then produce finished projects with one-on-one instruction when necessary.
- Describe usage: Graphic organizers used for tool identification; cooperative education during small group work at learning centers

## **STAGE THREE**

### **LEARNING PLAN**

1. Introduce the essential questions.
2. Discuss unit performance task
3. Introduce small equipment. Demonstrate or explain the safe use of each.
4. Teacher demonstrates fabric layout and pinning and fabric marking.
5. Students will pin and mark their fabric according to the instruction sheet.
6. Teacher will demonstrate cutting along markings.
7. Students will cut their fabric along marking
8. Students will complete project rubric according to performance task criteria.

**Unit Name:** Pre-Construction Skills

**Time Frame:** 6-8 weeks

**Author:** Judy Tucci

## **UNIT V Pre-Constructioun Skills Patterns and Markings**

**Subject:** Fashion Design & Technology

**Country:** USA

**Course/Grade:** 9-12

**State/Group:** NJ

**School:** EHTHS

### **UNIT SUMMARY**

Students will demonstrate how to lay a pattern out correctly by following pattern guide sheet. Students will be instructed on how to lay a pattern out correctly on the straight of the grain, and then will practice laying out pattern pieces correctly, pinning, marking and cutting each piece in order to begin project construction.

### **UNIT RESOURCES**

- Pattern Envelope
- Pattern Guide Sheet
- Pattern Pieces
- Pattern Markings
- Fabric
- Grain/Nap Identification
- Pins
- Shears
- Tracing wheel
- Tracing paper
- Fabric Markers
- Fabric Chalk
- Tape Measure
- Iron
- Ironing board
- Bobbins
- Thread
- Sewing Safety Certificate
- Pattern Worksheet Activity
- Pattern Markings Test
- Letter to Parents

### **Internet Resource Links:**

## **STAGE ONE**

### **GOALS AND STANDARDS**

### **NEW JERSEY CORE CURRICULUM STANDARDS**

- CCSS.ELA-Literacy.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
- CCSS.Math.Content.HSG-MG.A.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).
- CCSS.Math.Content.HSF-LE.A.1a Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.
- **Career Ready Practices**
  - ✓ Apply appropriate academic and technical skills.
  - ✓ Demonstrate creativity and innovation.
  - ✓ Model integrity, ethical leadership and effective management.
  - ✓ Utilize critical thinking to make sense of problems and persevere in solving them.
- **National Standards for Family and Consumer Sciences**
  - 16.2.4 Analyze effects of textile characteristics on design, construction, care, use, and maintenance of products.
  - 16.2.5 Apply appropriate procedures for care of textile products.
  - 16.3.2 Apply basic and complex color schemes and color theory to develop and enhance visual effects.
  - 16.3.3 Utilize elements and principles of design in designing, constructing, and/or altering textile, apparel, and fashion products.
  - 16.4.1 Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel, and textile construction, alteration, and repair.
  - 16.4.5 Demonstrate basic skills for producing and altering textile products and apparel.

## ENDURING UNDERSTANDING

Organization	Clean and organized work area with all the necessary equipment available.
Safety	Proper precautions for safety are followed.
Pattern Layout	Efficient use of fabric. Accurate measurements are used. Project should be cut on grain, flat, and smooth.
Follows Written Directions	Sequentially follows directions.
Technical Skills and Use of Tools	Understands and correctly uses marking, sewing, and pressing tools.
Time Management	Effective use of allotted time.
Ability to Problem-Solve	Able to find solutions in the creation of project.

## ESSENTIAL QUESTIONS

- Why are accurate measurements essential in pattern construction?  
 Why is it important to follow the pattern guide sheet when constructing a garment?  
 What could happen if pattern markings are incorrect?

## **KNOWLEDGE AND SKILLS**

Students will identify pattern envelope information.

Students will read pattern guide sheet, identify markings, fabric and notions.

Students will be able to determine fabric yardage.

Students will identify grain of fabric and nap.

Students will identify pattern markings and proper placement.

Students will use proper tools necessary to complete project.

## **STAGE TWO**

### **PERFORMANCE TASKS**

- Pattern Markings Activity
- Pattern Markings Quiz
- Power point/DVD pattern markings
- Sewing Project

### **OTHER EVIDENCE**

- Active engagement
- Hands on use of tools and equipment
- Quiz on tools and equipment
- Pattern markings worksheet

## **STAGE THREE**

### **LEARNING PLAN**

- Introduction to Essential Questions.
- Discuss unit performance tasks.
- Introduce tools and equipment. Demonstrate safe use of each.
- Introduce the pattern envelope and discuss information given.

- Introduce pattern guide sheet and explain markings.
- DVD/Powerpoint – Patterns and markings
- Assess student understanding – quiz pattern markings, tools and equipment
- Introduce pattern cutting and pinning activity.
- Demonstrate proper cutting, marking and layout of activity.
- Assess student understanding through observation.
- Begin project construction layout of pattern.
- Teacher to check layout, markings and pinning.
- Teacher will approve for cutting of pattern pieces.

**Unit Name: Handbag Construction**

**Time Frame: 4-5 weeks**

**Author: Judy Tucci**

## **UNIT VI**

Subject: Fashion Design and Technology

Country: **USA**

Course/Grade: 9-12

State/Group: **NJ**

School: **EHTHS**

### **UNIT SUMMARY**

Students will demonstrate their ability to follow pattern guidesheet in completing handbag project. Students will lay pattern out correctly on the straight of the grain, and cut out pattern pieces accordingly.

### **UNIT RESOURCES**

- Simplicity Pattern #1519
- Fabric
- Fleece
- Jute Webbing
- Buttons
- Interfacing
- Magnetic pin holder and pins
- Transfer Paper
- Seam Gauge
- Tape Measure
- Shears
- Iron
- Pressing Cloth
- Scissors
- Fabric markers
- Chalk
- Marking pencils
- Power point
- Sewing Machine
- Thread
- Bobbin

### **Internet Resource Links:**

- [www.simplicitypatterns.com](http://www.simplicitypatterns.com)

## **STAGE ONE**

## GOALS AND STANDARDS

- **9.1** 21st-Century Life & Career Skills: All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.
- **9.1.12.A.1** Apply critical thinking and problem-solving strategies during structured learning experiences.
- **9.1.12.F.2** Demonstrate a positive work ethic in various settings, including the classroom and during structured learning experiences.
- **9.3** Career Awareness, Exploration, & Preparation: All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.
- **9.3.12.C.3** Develop personal interests and activities that support declared career goals and plans.
- **9.3.12.C.7** Pursue a variety of activities related to career preparation (e.g., volunteer, seek employment, and/or apply for training grants, higher education grants, and loans).
- **LA.K-12.3.1.3** - [*Cumulative Progress Indicator*] - Give directions and/or instructions to others.
- **LA.K-12.3.3.2** - [*Cumulative Progress Indicator*] - Demonstrate the ability to sequence and organize thoughts and information using graphic symbols for a variety of audiences and situations
- **CRP2**. Apply appropriate academic and technical skills.
- **CRP6**. Demonstrate creativity and innovation.

## ENDURING UNDERSTANDING

- Correct body measurements are critical to choosing the pattern that will fit correctly.
- Patterns will provide all necessary information needed to complete the chosen sewing project.
- Knowledge of pattern terminology and symbols will help allow for the successful completion of sewing projects.

## ESSENTIAL QUESTIONS

- What are the possible consequences of body measurements that are taken incorrectly?
- What types of information does the pattern provide?
- How can the pattern envelope be used to determine size, the type and amount of fabric to purchase?
- Why is the pattern guide sheet an invaluable source of information when using a pattern?
- What are the possible effects of an incorrect pattern layout?
- Why is accurate cutting and marking extremely important? How do pattern symbols help you to construct the project?

## KNOWLEDGE AND SKILLS

- Properly take all necessary body measurements.
- Purchase necessary fabric and notions.
- Use the pattern envelope and their body measurements to determine their personal pattern size.
- Prepare fabric so that it is ready for pattern layout and cutting.
- Choose and follow a cutting layout. Use the cutting layout to place pattern on fabric correctly.
- Cut pattern from fabric following guidelines discussed in class.
- Mark necessary pattern symbols on fabric using appropriate marking techniques.
- Read and follow guide sheet directions to construct garment

## STAGE TWO

### PERFORMANCE TASKS

- Students will choose a fabric to use with pattern to be made in class.
- Measurements must be known in advance in order to purchase correct size.
- Students will use pattern information to purchase the correct amount and type of fabric along with all required notions.
- Students will prepare fabric for cutting and use the proper cutting layout when pinning pattern to fabric.
- Students will use proper cutting and marking techniques. Students will use guide sheet instructions to construct the garment.
- Students will choose a fabric of their choice emphasizing pattern envelope suggestions for completing handbag project.
- Students will follow pattern directions to complete step by step instructions given for sewing activity.  
Students will use dressmaker shears and fabric markers to trace and cut the design.  
Students will choose the appropriate color of thread for fabric emphasizing a decorative stitch.  
Students will be introduced to fleece material used to give structure and support to handbag.  
Students will identify proper closure material and apply it as well by following teacher demonstration.  
Students will follow safety procedures.

### OTHER EVIDENCE

- Test: Reading pattern envelope
- Test: Pattern symbols
- Rubric: Evaluation of each construction step.
- Self-assessment
- Final Project Grade

## STAGE THREE

### LEARNING PLAN

- Students will each be given a pattern to examine as teacher points out the three main parts.
- Discussion: What types of information does the pattern provide?
- Students will look at sample patterns to identify information provided.
- Student will view PowerPoint presentation on parts of and reading of a pattern envelope. Students will use copies of pattern envelopes to complete questions about the information that can be gathered from a specific envelope.
- Students will view PowerPoint presentation on pattern symbols and their uses.
- Students will complete worksheets identifying pattern symbols and how to use symbols during lay out, cutting, marking and construction.
- Students will view sample pattern guide sheets to determine what information is needed to choose the correct cutting layout.
- Students will discuss how to use fabric key on guide sheet to determine the proper ways of folding fabric as indicated in cutting layout.
- Teacher demonstration of pattern layout skills.
- Students will choose and follow pattern layout for their specific fabric, pattern size and views.
- Students will cut pattern from fabric and mark all necessary symbols.

**Unit Name:** Textile Fibers

**Time Frame:** 3-4 weeks

**Author:** Judy Tucci

## UNIT IV

**Subject:** Fashion Design & Technology

**Country:** USA

**Course/Grade:** 9-12

**State/Group:** NJ

**School:** EHTHS

### UNIT SUMMARY

Students will be exposed to technology used to produce textile, apparel and home furnishings. Students will demonstrate the integration of knowledge, skills, and practices required for careers in textile, apparel, housing, and interiors. Students will learn why it is important for a designer and a consumer to have textile knowledge and how they will use this knowledge in a fashion career. They will do a hands on activity to learn what a fiber is and the difference between a staple and filament fiber. Career opportunities in the textile industry will also be covered. Students will learn the characteristics of fibers during a burn test. (STEM) The students will participate in a lab where they will be able to see the characteristics as fibers are burning. They will be able to identify the fiber based on characteristics as it approaches the flame, while in the flame, when it is removed from the flame, the odor, and the ash after the flame is gone.

### UNIT RESOURCES

- Overhead or media projector
- Document Camera or Demonstration Mirror
- Textile Lab handouts (printed on card stock) (one set per student)
- 5 Plastic Storage boxes for materials at each station
- Fabric Testing Kit
- Clothing Fibers DVD
- Textiles Display

### Internet Resource Links:

## STAGE ONE

### GOALS AND STANDARDS

#### NEW JERSEY CORE CURRICULUM STANDARDS

- CCSS.ELA-Literacy.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

- CCSS.Math.Content.HSG-MG.A.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).
- CCSS.Math.Content.HSF-LE.A.1a Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.
- TEC.5-8.8.1.8.A.5 - [*Cumulative Progress Indicator*] - Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
- TEC.5-8. - [*Content Statement*] - The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.
- 9.1.12.A.1 Apply critical thinking and problem solving strategies during structured learning experiences.
- 9.3.12.C.2 Characterize education and skills needed to achieve career goals, and take steps to prepare for
  - postsecondary options, including course selections, assessments, and extra-curricular activities.
- 9.3.12.C.3 Develop personal interests and activities that will support declared career goals and plans.
- 9.3.12.C.5 Identify transferable skills in career choices and design alternative career plans based upon those
  - skills.
- 9.3.12.C.6 Develop job readiness skills by participating in structured learning experiences and employment
  - seeking opportunities.
- 9.3.12.C.7 Pursue a variety of activities related to career preparation (e.g., Volunteer, seek employment,
  - apply for training grants, higher education grants and loans).
- 9.1.12.F2 Demonstrate a positive work ethic in various settings, including the classroom and during
  - structures learning experiences.

## **National Standards for Family and Consumer Sciences**

16.2.4 Analyze effects of textile characteristics on design, construction, care, use, and maintenance of products.

16.2.5 Apply appropriate procedures for care of textile products.

16.3.2 Apply basic and complex color schemes and color theory to develop and enhance visual effects.

16.3.3 Utilize elements and principles of design in designing, constructing, and/or altering textile, apparel, and fashion products.

16.4.1 Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel, and textile construction, alteration, and repair.

16.4.5 Demonstrate basic skills for producing and altering textile products and apparel.

### **ENDURING UNDERSTANDING**

- Identify the various career opportunities within the segments of fashion design, manufacturing and merchandising industry.

- Investigate careers related to the industry and the requirements for education and training.
- Assess the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in fashion design, manufacturing and merchandising career.
- Describe the impact and uses of technology in the fashion design, manufacturing and merchandising industry.
- Describe the impact of color on fashion design.
- Identify the primary, secondary and intermediate colors on the color wheel.
- Describe color schemes.
- Understand trends in fashion related to color.
- Understand how individual color can flatter an individual.
- Demonstrate basic knowledge of art elements and design principles as it relates to clothing design/construction including color theory and forecasting.
- Relate the application of principles and elements of design to environmental, sociological, psychological, technical and economic issues and trends.
- Use correct technical terms to describe products, procedures and equipment commonly used in the apparel and textile industries.
- Identify appropriate styles to meet special clothing needs of clients.
- Identify and describe standard types of print design, such as geometric and abstract.
- Define the principles of design.
- Demonstrate the use of the principles of design and how they relate to the elements of design in choosing and creating fashion.
- Be able to use the elements and principles in designing fabric.
- Describe fashion trends in various periods throughout history.
- Analyze how fashion, at particular periods in history, was influenced by politics, society, economics, cultures, and aesthetics.
- Analyze current trends and forecast future trends.
- Identify and describe the general characteristics and maintenance requirements of fibers, yarns, fabrics and finishes.
- Understand textile properties, fiber, finishes, fabric bolt information and clothing labels.
- Identify and describe textile-manufacturing methods for producing fabrics.
- Relate textile characteristics to garment design, construction, care, and maintenance.
- Analyze and make critical assessment about fabrics, textile properties and design elements as it relates to apparel production.
- Know the factors that contribute to quality customer relations, service, and sales.
- Evaluate the impact of cultural factors on customers' needs, desires, and satisfaction.
- Understand effective sales and marketing techniques.
- Know strategies for helping customers select merchandise and recommend related services appropriate to their needs (e.g., budget, personality, figure type, coloring, and personal preference).

## Resources

- Fabric samples labeled in 6x9 envelopes (cotton, linen, wool, silk)
- Information cards about Natural fibers and Manmade fibers
- Textbooks
- Cotton balls
- Snack size bags
- Stapler, staples
- Microscope (optional)
- Pre-prepared textile slides
- Glue
- Egg carton bottom section
- DVD Textile Fibers
- Guest Speaker
- Textile Fiber Test
- Fiber Research Project

### ESSENTIAL QUESTIONS

What is the difference between a natural fiber and a synthetic fiber?

What careers in textiles and design might be the most interesting to you?

### KNOWLEDGE AND SKILLS

- Students will be able to define the meaning of: *Fabric, Fibers, Yarn, Finish, Grain, Pilling, Blend, Nap, Natural fibers, Man-made fibers, Synthetic, and Textile.*
- Students will be able to describe various characteristics of fibers and textiles.
- Students will be able to classify different fibers and textiles. (Bloom's – Analysis)
- Students will be able to predict what will happen when testing different fibers/fabrics.
- Students will be able to answer the Essential Question – *What is the difference between a fiber and a fabric? What careers in textiles and design are most interesting to you?* (Bloom's – Evaluation)
- The students will be able explain what a fiber is and how it is used to create textiles.
- The students will be able to demonstrate the difference between a staple and filament fiber.

- The students will be able to explain how a staple or filament fiber change the final textile for both a designer and consumer.

## STAGE TWO

### PERFORMANCE TASKS

1. What is a textile fiber? How would you demonstrate this with a piece of woven fabric?
2. What is wrong with the statement: “textile fibers are either natural or synthetic”?
3. What are the two main sources of natural fibers, and what is the name of the main material of which each is made?
4. What are the two main terms to do with length of fibers?
5. Name five properties necessary for a textile fiber. Name three fibrous materials from which you cannot make a fabric, i.e., they are not textile fibers.
6. Name five generic names for natural fibers, and five for manufactured fibers. Will you find these names on labels? Why or why not?
7. Find five examples of textile trademark names, and record if you also found the fiber generic group identified.
8. Of the major generic fiber types, which is the only one not ever used as 100 percent of a fabric?
9. What two properties have most to do with comfort in apparel? Which property most affects smoothness retention? What two properties have most to do with creating fabrics that insulate well? How is *permanent heat set* defined in this text? Can a fiber be both heat sensitive and flame resistant?
10. List three important advantages of natural fibers over MF. List four significant advantages of MF fibers over natural. What are four main advantages of the major synthetic fibers among the MF types? What are four disadvantages?
11. What was the first manufactured fiber? What was the first synthetic fiber? What is the difference?
12. Give three main reasons for the huge increase in use of cotton in the 19<sup>th</sup> century. Give three main reasons for the huge increase in use of synthetic fibers from the middle of the 20<sup>th</sup> century, and still continuing in the 21<sup>st</sup>.

## OTHER EVIDENCE

### STAGE THREE

#### LEARNING PLAN○

- Opening Activity - Textile-Fabrics Word Scramble
- Review Textile-Fabrics Word Scramble. Using Textile-Fabrics Word Scramble for note taking introduce new vocabulary. *Fabric, Fibers, Yarn, Finish, Grain, Pilling, Blend, Nap, Natural fibers, Man-made fibers, Synthetic, and Textile.* (ELA)
- DVD Textile Fibers
- Ask the question: “How many of you are wearing a plant today?” Discuss fact that jeans are made from cotton and cotton is a plant. Explain the differences between natural versus man made and plant versus animal.
- Show the video Clothing Fibers on one or more fibers and how they are processed into fabric.
- Handout Textile Lab handouts; students should label all with their full name. Explain
- that students will be going to each of five stations to complete their sheets. They are to
- use the glue sparingly to attach each textile sample and use the Information Cards
- located at each station to fill in their handouts (use of their textbook is also allowed).
- At the Natural fibers station they will try to create a strand of yarn by spinning cotton
- Fibers (cotton ball) with their fingers. They are to attach their attempt to the back of the Natural Fibers handout by putting it into a plastic snack bag and stapling it.
- At the Fabric Construction station they will compare and contrast two different fabric samples and create a Venn diagram on the back of their handout.
- At both the Natural and Synthetic stations students can view various different fibers/textiles using the microscope as an option.
- At the Fabric testing station students will follow the procedure outline to test 2-3 different fabric samples with a partner. This activity requires at least one partner in order to complete it.
  
- Opening Activity – How are Textiles Made?
- Review Textile Lab Handouts and procedures discussed the class before.

- Fabric testing methods are designed as standard testing procedures with a purpose to help the textile industry and apparel industry monitor quality.
- The fabric testing methods allow clothing manufacturers to follow uniformed test procedures to evaluate fabric, textiles, and apparel in a consistent manner. Utilizing pre-determined testing methods for conducting tests, is the only way to maintain a consistent and level playing field in regard to the testing of textiles.
- In order to properly measure quality, specific standards must be set and specific testing methods (testing procedures), must be followed. Following an exact and detailed method allows for testing to be consistent in multiple locations.
- Demonstrate the testing methods to the whole class for Fiber Burn and the Chemical (solution) tests with sodium hydroxide, acetone, and bleach. Students should record the results on their Textile Lab handouts.

•  
**Projects:**

1. (a). What five fibers are present in most of your own clothing? Make up a table showing the article, the fiber content, and the properties of that fiber that make it suitable for that use.  
(b). Do the same for your household fabrics (bedding, towels, drapes, upholstery, carpets, table linens).
  
2. (a). You are the interior designer for an office suite, which will include selection of drapes, upholstery, and carpet. What flammability regulations must be met? Whose responsibility is it to ensure that fabrics meet these?  
(b). You are the buyer for children's sleepwear. What flammability and other regulations must be met? Whose responsibility is it to ensure that fabrics meet these?

### 3. Fashion Barbie Draping Assignment

# Curriculum Resources - Differentiated Instruction

## **Special Education Interventions in General Education**

Visual Supports

Extended time to complete tests and assignments

Graphic Organizers

Mnemonic tricks to improve memory

Study guides

Use agenda book for assignments

Provide a posted daily schedule

Use of classroom behavior management system

Use prompts and model directions

Use task analysis to break down activities and lessons into each individual step needed to complete the task

Use concrete examples to teach concepts

Have student repeat/rephrase written directions

Heterogeneous grouping

*Resources:*

Do to Learn:

<http://www.do2learn.com/>

Sen Teacher:

<http://www.senteacher.org/>

Intervention Central:

<http://www.interventioncentral.org/>

Learning Ally:

<https://www.learningally.org/>

## **English Language Learners Interventions in Regular Education**

*Resources:*

FABRIC - Learning Paradigm for ELLs (NJDOE)

[www.nj.gov/education/bilingual/pd/fabric/fabric.pdf](http://www.nj.gov/education/bilingual/pd/fabric/fabric.pdf)

Guide to Teaching ELL Students

<http://www.colorincolorado.org/new-teaching-ells>

Edutopia - Supporting English Language Learners

<https://www.edutopia.org/blog/strategies-and-resources-supporting-ell-todd-finley>

Reading Rockets

<http://www.readingrockets.org/reading-topics/english-language-learners>

### **Gifted and Talented Interventions in Regular Education**

*Resources:*

Who are Gifted and Talented Students

<http://www.npr.org/sections/ed/2015/09/28/443193523/who-are-the-gifted-and-talented-and-what-do-they-need>

Hoagies Gifted Education Page

<http://www.hoagiesgifted.org/programs.htm>

### **21st Century Learning**

*Resources:*

Partnership for 21st Century Learning

<http://www.p21.org/>

Career Ready Practices (NJDOE)

<http://www.nj.gov/education/cte/hl/CRP.pdf>