



**Career
Essentials:
Assessments**

Print[ED]

Career Essentials: Assessments

Teacher Preparation Guide For Use with the Career Essentials: Assessments

*Discover, Develop and Validate Students'
Knowledge and Skill*

***INTRODUCTION TO GRAPHIC
COMMUNICATIONS ASSESSMENT***

Introduction to the Career Essentials: Assessments

The Career Essentials: Assessments can help both students and teachers discover students' occupational strengths. By implementing the Career Essentials: Assessments, students and teachers can collaboratively develop a life-long learning plan to validate and enhance students' skills and knowledge. Assessment data results are beneficial for students, teachers and administrators in validating student learning, and improving programs and their accountability.

This teacher preparation guide is a tool developed for instructors to help students capitalize on their unique strengths, which can improve individual student performance and provide a clear way forward for student success.

The Career Essentials: Assessments Teacher Preparation Guide provides an easy-to-follow road map to implement the Career Essentials: Assessments. The guide is not meant to be curriculum nor should it replace that which already exists. It provides specific information regarding the Career Essentials: Assessments so teachers can identify existing curriculum areas that may need additional emphasis.

The guide ultimately helps teachers provide students with learning opportunities. Its goal is for students to become comfortable and successful with the Career Essentials: Assessments.

Inside the guide, teachers will find:

- Major content areas of the assessment
- A blueprint of the assessment competency areas
- A checklist of the various competency areas within the assessment
- Access to a trade- or technical-specific online 10-question demo assessment
- Resources used for the assessment development
- Access to an employability skills based, online 10-question practice assessment to help students navigate the assessment system

Table of Contents

What are Career Essentials: Assessments?..... 4

Using the Career Essentials: Assessments 4

Preparing Students for the Career Essentials: Assessments 5

Workplace-Ready Skills 6

Assessment Competency Areas 7

Academic Core and Critical Skill Areas 7

Connections to National Standards 7

Student Tools: Access Directions for the Trade- or Technical Specific Online 10-Item Demo..... 8

Student Tools: Test-Taking Reminders 8

Student Testing Tips..... 8

Student Tools: Introduction to Graphic Communications Blueprint and Competency
Area Knowledge Checksheets 9

Summary and Quick Glance Testing Reminders 9

Introduction to Graphic Communications Blueprint..... 10

Knowledge Checksheets..... 15

Helpful Tips and Reminders for Students 26

Sample Assessment Questions 27

Resources 35

What are Career Essentials: Assessments?

Career Essentials: Assessments are online assessments that evaluate technical and employability skills and knowledge. They are the way ahead for the next generation of our American workforce, and they help candidates validate their technical skills and knowledge to potential employers. They also help local instructors demonstrate the value of their programs, while supporting local industries with a pool of potential employees that has been tested by a system they can trust.

Each assessment was developed by a panel of industry, high school and college/postsecondary subject matter experts (SMEs) using national technical standards. Career Essentials: Assessments were created by industry to ensure relevance to entry-level skills, meet Perkins IV accountability requirements and provide certificates to students who achieve industry-defined scores. They ensure your students are workforce ready.

Career Essentials: Assessments incorporate photographs, videos, animations and illustrations to ensure clarity for each technical question. Drag-and-drop and multiple-choice questions appeal to visual and kinesthetic learners and test content knowledge rather than test-taking abilities. Even simple multiple-choice questions are brought to life through pictures and animations.

Assessments are available in more than 40 trade, industrial and technical areas. A rigorous and educationally sound process captures critical competencies, standards and criteria as defined by industry.

Academic core and critical skill areas also exist in each assessment. State-level academic curriculum specialists identified connections to national academic standards.

Each one-hour assessment includes 50 questions. Under the supervision of a proctor, the integrity of each test is ensured by offering multiple unique versions of the assessment, which

For complete information regarding the Career Essentials: Assessments and to see all assessment areas, please visit the website at: www.careeressentials.org.

measure the same core and critical competencies. Even within the same version, questions and answers are displayed in varying orders to prevent test takers from copying others. The Career Essentials: Assessments are designed to be user-friendly and intuitive for students.

Using the Career Essentials: Assessments

Every classroom is unique. You can use the Career Essentials: Assessments in a way that best suits your program and students. The following directions are SkillsUSA's suggested and preferred method to implement the assessments so that your students gain the most from the results.

The most important step in the Career Essentials: Assessments process is to select the correct assessment for your students. You are key to the selection process. Without your involvement, the wrong assessment may be selected. Assessment titles do not provide enough information for proper selection. Review the various assessment categories that best correspond to your program.

Next, look at each of the assessment titles within the category and the corresponding blueprint. The blueprint will tell you which competencies and subjects are addressed in the assessment.

Cross-walk the various blueprints with your classroom curriculum. The assessment blueprint will show what's emphasized and how competencies are weighed. Please remember the Career Essentials: Assessments are based on national industry standards, so the assessment may not perfectly align with the existing curriculum. Content may need to be added or emphasized to better prepare students for the Career Essentials: Assessments.

Once you have selected the assessment that best fits your program, administer that Career Essentials: Assessments at the beginning of your students' final program year. This could be considered a pre-test.

Assessment results are available as soon as your student completes the assessment. The report provides you with a gap analysis to identify your students' learning needs according to each competency area within the assessment. Dynamic reports compare your students' performance to the current state and national averages. Reports also enable you to track a student's progress on an individual basis. The assessment pre-testing results provide you with a benchmark for your students and identify student learning gaps. This data may help you adjust your own curriculum and identify areas that may need more or less emphasis. The data can be shared with students so everyone can focus on learning areas that need improvement during the school year.

Then, at the end of the school year or program semester, administer your specific Career Essentials: Assessments a second time as a post-test.

Use post-test data to improve or adjust curriculum once again for your next program year. This way, curriculum adjustments are made using the student testing data rather than arbitrarily making adjustments.

This pre- and post-test process is a "win-win" situation for the teacher and especially the student! To ensure a quality process, SkillsUSA is ready to help at any time.

Preparing Students for the Career Essentials: Assessments

Provide each student with a copy of their trade- or technical-specific Career Essentials: Assessments Blueprint. Do this at the beginning of your course. Review and discuss the blueprint with your class, providing insight on the assessment weighting and what is emphasized.

Have students discuss how they can assist each other to prepare for the assessment.

Place the Career Essentials: Assessments Blueprint on the classroom wall. The blueprint will help students focus on the appropriate course content areas that align with the assessment. It will also help everyone to be aware of the program's goals and expectations.

The Career Essentials: Assessments at a Glance

- Select the correct assessment title. *Do not* have someone select the assessment for you, as there may be several titles that may relate to your program
- Review the assessment blueprint that best aligns with your existing curriculum
- Identify gaps in your curriculum, and use additional resources to enhance or align the curriculum
- Share the assessment blueprint with the students so everyone is aware of the expectation
- Have your students take the assessment at the beginning of their final program year as a pre-test
- Use pre-test data to identify learning gaps or strengths of individual students or the class
- Remediate the students using the data analysis from pre-test to enhance, emphasize and adjust learning objectives
- Have your students take the assessment a second time (as a post-test) at the end of the program year to determine learning gains/gaps
- Use post-test data to improve or adjust curriculum for your next program year

Administer the Career Essentials: Assessments as a pre-test to identify student gaps. If possible, pre-test your students at the beginning of their final program year to identify learning gaps both individually and as a class. The data will provide an excellent “road map” to prepare students to take the assessment again (post-test) at the end of the program. Using the data, tailor the instruction to better prepare your students.

Use the Career Essentials: Assessments competency areas checksheets included in this guide to encourage class discussion and help students identify strengths and weaknesses.

Use the pre-test data to ascertain problematic learning areas. Have students identify discussion topics based on the various competency areas and their pre-test data results. Exercises, demonstrations and even questions can be developed by the students using their textbooks or other resources listed in this guide.

Assign homework that aligns to the assessment blueprint. Focus on a competency area within the assessment. Using the checksheets in this guide, have students develop questions and potential answers using the resources identified when developing the assessment. Use the questions for class discussion or “quiz bowl” activities.

Have students take the Career Essentials: Assessments trade- or technical-specific online 10-question demo assessment. This could be a homework assignment or done in class 30 days prior to taking the assessment the second time (as a post-test). This not only will provide students with specific sample questions and potential answers, but it will also allow students to experience the online system again and become more familiar with the types of questions they may encounter when taking the actual assessment.

Following the demo assessment, discuss the experience students had. What question(s) did

they not understand? Did they have difficulty navigating the online system? This experience will help students be more comfortable and confident when taking the final assessment.

Discuss as a class or individually with students which question(s) were difficult. Facilitate a discussion to glean more information regarding why certain answers were wrong. Offer techniques students can use to better determine correct answers.

Workplace-Ready Skills

Through the Career Essentials: Assessments, you have the option for your students take an Employability Assessment. This assessment tests a student’s workplace-ready skills such as communication, teamwork, time management and more. It can be used for any student in any occupational area as a practice test or a separate assessment.

If you use the Employability Assessment as a practice test have students take it in class. Not only can the Employability Assessment help students become familiar with the navigational tools of the assessment system, but it can also measure and make your students aware of another important skill set. It may also help them become comfortable in the testing environment.

See the Career Essentials: Assessments website for more information: www.careeressentials.org.

The Employability Assessment is *not* intended to familiarize students with the Introduction to Graphic Communications assessment content.

Please note: For all Career Essentials: Assessments to be valid, instructors cannot be present in the room where their students will be taking the test. A proctor is required. Proctors can be other instructors, a school administrator or school counselor.

Assessment Competency Areas

Career Essentials: Assessments Introduction to Graphic Communications Assessment covers nine major technical competency areas (unit areas). In the online assessment, these nine competencies are tested with 50 interactive, multiple-choice items. Each competency area has a different number of items. The chart lists the major technical competency areas and the percentage of the assessment in each one.

Technical Competency Areas for Introduction to Graphic Communications

Competency	Percentage of Area Assessment
Industry Overview	12%
Safety and Health	10%
File Creation to Output	32%
Offset Press	7%
Digital Press	7%
Substrates	7%
Binding, Finishing and Distribution	7%
Math and Measurement	6%
Job Application and Interpersonal Skills	12%

Academic Core and Critical Skill Areas

Academic core and critical skill areas also exist in each assessment. The SkillsUSA national technical committee identified that the following academic skills are embedded in the Introduction to Graphic Communications training program and assessment:

Math Skills

- Use fractions to solve practical problems
- Simplify numerical expressions
- Solve practical problems involving percents
- Solve single variable algebraic expressions

Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of nonverbal communication skills: eye contact, posture and gestures using interviewing techniques to gain information
- Demonstrate knowledge of appropriate reference materials

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Geometry
- Measurement
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: standards.nctm.org/document/chapter7/index.htm. Select “Standards” from menu.

Science Standards

- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view and search the compendium, visit: www2.mcrel.org/compendium/.

Language Arts Standards

- Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire

new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, and graphics).
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, and vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks and video) to gather and synthesize information and to create and communicate knowledge.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.readwritethink.org/standards/index.html.

Student Tools:

Access Directions for the Trade- or Technical-Specific Online 10-Item Demo Assessment

Have your students copy and paste this link www.careeressentials.org/assessments/demo-our-assessments/ into their browser. The sample programmatic questions will give you and your students an idea of the types of questions on the assessment and how the questions are generally written.

Student Tools:

Test-Taking Reminders

Encourage your students to have good study habits. Below are basic reminders to better prepare students for life-long learning and workplace success. You may want to have this discussion at the beginning of the year to encourage students to incorporate these strategies.

- Develop a regular study schedule
- Identify a specific location to study
- Always take notes while studying in class or on your own
- Take short breaks during your study session
- Perform “mini-testing” to make sure you understand and comprehend the program concepts
- Join small study groups to help focus on the program content
- If you need special assistance in testing, tell your teacher or counselor so they can make accommodations.

Student Testing Tips

The most important tip for your students is to be prepared mentally and physically for the testing session. Make sure to tell them to get plenty of rest and eat healthy. Suggest they wear comfortable and appropriate clothing to the testing session. If they are able to bring items to the testing session, such as a non-programmable calculator, make sure they have the items ready the night before. Have students check our website at www.careeressentials.org/wp-content/uploads/2017/07/Permitted-Testing-Tools-Aids.pdf for permitted tools or job aids that can be used during testing. The more organized they are before the testing period, the more relaxed they will be during the actual testing session.

Encourage your students to be relaxed and positive. If they begin to panic during the testing, suggest they take some deep breaths to relax and think positive thoughts.

Do not rush through the questions. Instruct your students to read the question and potential answers thoroughly. Tell them to make sure

they know exactly what the question is asking before answering. Let them know that if they are unsure, they can mark the question and return to it.

Use process of elimination. If your students are not sure of the correct answer, tell them to study the potential answers and eliminate the ones that they know are not correct.

If all else fails, tell students to *guess*. After they have exhausted all options, tell them to take their best guess at the correct answer. If they have studied the content area, they may intuitively know the correct answer. The Career Essentials: Assessments system does not penalize students for guessing and they may guess correctly!

Student Tools:

Introduction to Graphic Communications Blueprint and

Competency Area Knowledge Checksheets

The next section provides the assessment blueprint and detailed topics within each competency area covered within the Introduction to Graphic Communications assessment. Photocopy and share the following blueprints and checksheets with your students so they can better prepare for each of the competency areas within the Introduction to Graphic Communications assessment.

Summary and Quick Glance Testing

Reminders

The Career Essentials: Assessments process is designed for program and curriculum improvement. This is a continuous improvement process to better meet the educational needs of your students by strategically using data results.

Advanced planning and preparation is a key component in implementing this process. Below we have attempted to summarize the steps in the suggested Career Essentials: Assessments implementation pre- and post-test process.

- Identify the correct assessment for your program.

- Share the selected assessment blueprint with your students, parents, advisory board members and others. Place the blueprint on the classroom wall
- Pre-test your students at the beginning of their final programmatic year
- Use the data results to identify “learning gaps”
- Share the pre-test data with the student(s)
- Tailor learning experiences to meet student needs and supplement current curriculum
- Develop homework assignments around the competency knowledge checksheets located in this guide
- Have students take the demo 10-question practice test 30 days prior to the post-test
- For students that need more time in the actual testing environment, use the Employability Assessment to review navigational tools and to make students more comfortable in the testing lab
- Finally, review the blueprint and knowledge checksheets in totality before taking the post-test to ensure students are aware of the expectation

Using the above steps, you and your students should see improvement in the post-test assessment score report and a percentage of knowledge gained.

Introduction to Graphic Communications Blueprint

The PrintED/SkillsUSA Graphic Communications competencies encompass the knowledge and skill set a student should master to exhibit proficiency in graphics communications. The PrintED/SkillsUSA Graphic Communications Career Essentials Assessment test questions align with the PrintED/SkillsUSA Graphic Communications competencies.

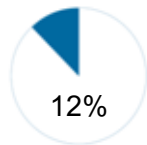
This Blueprint contains the subject matter content of this Career Essentials Assessment.

Note: To fully prepare for **Introduction to Graphic Communications** SkillsUSA Championships contest, refer to the current year's SkillsUSA Championships Technical Standard, now included with your SkillsUSA Professional Membership. If you need help in accessing this benefit, contact the SkillsUSA Membership Office at 1-800-355-8422.

Standards and Competencies

Competencies are weighted throughout the assessment. The percent shown is the weight of the competency. There are 50 questions per assessment.

Industry Overview (A)



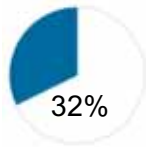
- Describe the purpose of local and national graphic communications associations
- Describe the common printing processes, flexography, gravure, letterpress, offset lithography, screen printing, digital
- Identify samples of each printing process
- Discuss the advantages and disadvantages of each printing process
- Define counterfeiting, copyright, and intellectual property infringement
- Discuss emerging technologies related to printing
- Describe the function and use of basic production equipment used in a commercial printing plant, computer workstation, scanner, proofing device, plate setter, offset lithographic press, digital press, paper cutter, folder, saddle stitcher, perfect binder, paper padding press, paper drill
- Locate production information on a job ticket
- List, in order, a typical technical production flow from idea to finished product
- Identify the types of businesses and organizations that comprise the industry
- Describe the markets that use printing direct mail, books, magazines, stationary, packaging
- Compare the role of print to other communication mediums, Television, Radio, Internet, Social Media
- Review the common steps in a typical print workflow

Safety and Health (B)



- Review applicable national and local government safety regulations
- Explain the use and locations of safety interlocks on machinery
- Identify safety regulations in place at the school graphics lab as they relate to proper paper movement
- Explain the proper procedures to clean up any spills at school graphics lab
- Describe a Safety Data Sheet (SDS)
- Explain the use of Safety Data Sheet (SDS)
- Evaluate Safety Data Sheets (SDS) in place in the school lab

File Creation to Output (C)



- Identify common components of pages: a. text; b. illustrations, photographs
- Define terms page layout, image editing and illustration
- Review professional software applications: a. page layout i.e. Adobe InDesign, QuarkXPress; b. Image Editing i.e. Adobe Photoshop; c. illustration i.e. Adobe Illustrator
- Create a page that includes fonts, styles, margins, indents, tabs and photographs and illustrations using a professional layout software
- Compare the differences between supplying PDF files versus native files for print
- Define RGB and CMYK color reproduction
- Discuss the Pantone color process
- Contrast color reproduction viewed on digital display (monitor, TV, tablet, smartphone) versus print
- Identify different types of graphics: a. line art; b. continuous tone; c. raster; d. vector
- Describe pixel per inch resolution
- Cite examples of various file formats and their extensions: .doc; .pdf; .tif; .eps; .jpg; .bmp; .indd; .ai; .xls; .ePub
- Review minimum resolution requirements for different reproduction devices: a. screen display b. print
- Compare use of scanner versus lens based image capture (digital camera)
- Describe preflighting
- List common file issues found during preflight
- Define imposition
- Define trapping
- Define bleed
- Compare hard and soft proofs
- Review how content may be published digitally: A. publishing to the web; b. social media; c. mobile devices
- Compare the advantages/disadvantages of e-publishing/e-books versus traditional books

Offset Press (D)



- Discuss the imaging process of an offset press
- Review the components of an offset press.
- Compare feeding system of a sheet fed press (roll, sheet fed)
- Describe the use of color bars

Digital Press (E)



- Discuss the imaging process of a digital press
- Review components of digital presses

Substrates (F)



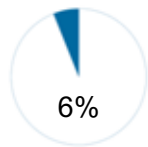
- Discuss the impact that substrates have on a printed project
- Identify wood pulp based paper substrates
- Review common paper types, weights, grades and classifications commonly used in the printing industry
- List common page and sheet sizes used in the United States and Europe
- Describe parent sheet
- Identify non-traditional specialty substrates
- Gather examples of pulp, plastic and metal based substrates
- Discuss sustainability/recyclability of pulp based substrates
- Discuss sustainability of print versus digital media

Binding, Finishing and Distribution (G)



- Determine grain direction of paper
- Explain the importance of grain direction
- Describe a folded signature
- Describe binding and finishing options: a. loose leaf; b. saddle stitch; c. perfect bind; d. case binding; e. lay flat binding; f. die cutting; g. embossing/debossing; h. foil stamping
- Contrast use and benefits of each binding option
- Create 16-page saddle stitch booklet
- Describe in-line, near line and off-line finishing
- Identify commonly used finishing and binding equipment and supplies: a. padding; b. stapling; c. stitching; d. punching/drilling; e. folding; f. collating

Math and Measurement (H)



- Identify die cut products; embossing and foil stamping products; and procedures/equipment used for each
- Describe English and Metric measurement system
- Define Points and Picas
- Demonstrate the measurement of type in points and line length in picas
- Calculate reduction or enlargement percentage of original photograph to final size
- Determine optimum layout for minimizing waste when cutting smaller sheets out of larger sized sheet of paper

Job Application and Interpersonal Skills (I)



- Locate job listing through a variety of sources
- Gather job postings for positions in the graphic communications industry
- Write a personal résumé that highlights the candidate's experience, skills, and talents and include references
- Write a cover letter for a specific job that differentiates the candidate from other job seekers
- Demonstrate how to customize a résumé and cover letter to match a job listing and employer
- Complete an employment application form
- Discuss and demonstrate ways to prepare for a successful job interview
- Prepare responses to common interview questions

- Develop appropriate questions to ask prospective employers during interviews
- Conduct a mock job interview conducted by a teacher, parent or another student
- Prepare a letter or email to follow-up a job interview
- Evaluate an employment benefits package
- Review roles and responsibilities of employment positions in the graphic communications industry
- Describe work ethic skills that should be exhibited by employees in the graphic communications industry
- Describe the positive and negative impact of social media on personal brand

SkillsUSA is of the understanding that students who take the PrintED/SkillsUSA Graphic Communications Career Essentials Assessment have been enrolled in a graphic communications training program with the following competencies embedded within the curriculum.

Identified Academic Skills

Math

- Use fractions to solve practical problems
- Simplify numerical expression
- Solve practical problems using percents
- Solve single variable algebraic expressions

Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of nonverbal communication skills: eye contact, posture and gestures using interviewing techniques to gain information
- Demonstrate knowledge of appropriate reference materials

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Geometry
- Measurement
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards visit: <https://www.nctm.org/standards/>.

Science

- Understands the structure and properties of matter
- Understands the structure and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view high school standards visit:
<https://www.mcrel.org/standards-curriculum/>.

Language Arts Standards

- Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
- Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound letter correspondence, sentence structure, context and graphics).
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, and vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks and video) to gather and synthesize information and to create and communicate knowledge.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view high school standards visit:
<https://ncte.org/statement/standards/>

Competency Area 1: Industry Overview

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Describe the purpose of local and national graphic communications associations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Describe the common printing processes - a. Flexography b. Gravure c. Letterpress d. Offset lithography e. Screen print f. Digital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify samples of each printing process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Discuss the advantages and disadvantages of each printing process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Define counterfeiting, copyright and intellectual property infringement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Discuss emerging technologies related to printing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Describe the function and use of basic production equipment used in a – a. Commercial printing plant b. Computer workstation c. Scanner d. Proofing device e. Plate setter f. Offset lithographic press g. Digital press h. Paper cutter i. Folder j. Saddle stitcher k. Perfect binder l. Paper padding press m. Paper drill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Review Dates:

Competency Area 1: Industry Overview con't

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
8. Locate production information on a job ticket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. List, in order, a typical technical production flow from idea to finished product?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Identify the types of businesses and organizations that comprise the industry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Describe the markets that use printing direct mail, books, magazines, stationary, packaging?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Compare the role of print to other communication mediums – a. Television b. Radio c. Internet d. Social Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Review the common steps in a typical print workflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Review Dates:

Competency Area 2: Safety and Health

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Review applicable national and local government safety regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Explain the use and locations of safety interlocks on machinery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify safety regulations in place at the school graphics lab as they relate to proper paper movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Explain the proper procedures to clean up spills at the school graphics lab?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Describe a Safety Data Sheet (SDS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Explain the use of Safety Data Sheet (SDS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Evaluate Safety Data Sheets (SDS) in place in the school lab?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Competency Area 3: File Creation to Output

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify common components of pages –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Text			
b. Illustrations			
c. Photographs			
2. Define terms page layout, image editing and illustration?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Review professional software applications –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Page layout i.e. Adobe in Design, QuarkXPress;			
b. Image Editing i.e. Adobe Photoshop;			
c. Illustration i.e. Adobe Illustrator			
4. Create a page that includes fonts, styles, margins, indents, tabs and photographs and illustrations using a professional layout software?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Compare the differences between supplying PDF files versus native files for print?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Define RGB and CMYK color reproduction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Discuss the Pantone color process?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Contrast color reproduction viewed on digital display (monitor, TV, tablet, smartphone) versus print?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Identify different types of graphics –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Line art			
b. Continuous tone			
c. Raster			
d. Vector			
10. Describe pixel per inch resolution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Competency Area 3: File Creation to Output con't

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
11. Cite examples of various file formats and their extensions –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Doc			
b. Pdf			
c. Tif			
d. Eps			
e. Jpg			
f. Bmp			
g. Indd			
h. Ai			
i. Xls			
j. ePub			
12. Review minimum resolution requirements for different reproduction devices –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Screen display			
b. Print			
13. Compare use of scanner versus lens based image capture (digital camera)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Describe preflighting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. List common file issues found during preflight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Define imposition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Define trapping?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Define bleed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Compare hard and soft proofs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Review how content may be published digitally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Publishing to the web			
b. Social media			
c. Mobile device			
21. Compare the advantages/disadvantages of e-publishing/e-books versus traditional books?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Review Dates:

Competency Area 4: Offset Press

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Discuss the imaging process of an offset press?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Review the components of an offset press?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Compare feeding system of a sheet fed press (roll, sheet fed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Describe the use of color bars?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Review Dates:

Competency Area 5: Digital Press

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Discuss the imaging process of a digital press?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Review components of digital presses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Review Dates:

Competency Area 6: Substrates

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Discuss the impact that substrates have on a printed project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify wood pulp based paper substrates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Review common paper types, weights, grades and classifications commonly used in the printing industry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. List common page and sheet sizes used in the United States and Europe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Describe parent sheet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Identify non-traditional specialty substrates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Gather examples of pulp, plastic, and metal based substrates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Discuss sustainability/recyclability of pulp based substrates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Discuss sustainability of print versus digital media?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Competency Area 7: Binding, Finishing and Distribution

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Determine grain direction of paper?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Explain the importance of grain direction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Describe a folded signature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Describe binding and finishing options –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Loose leaf			
b. Saddle stitch			
c. Perfect bind			
d. Case binding			
e. Lay flat binding			
f. Die cutting			
g. Embossing/debossing			
h. Foil stamping			
5. Contrast use and benefits of each binding option?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Create 16-page saddle stitch booklet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Describe in-line, near line and off-line finishing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Identify commonly used finishing and binding equipment and supplies –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Padding			
b. Stapling			
c. Stitching			
d. Punching/drilling			
e. Folding			
f. Collating			

Areas I Need To Review:

Review Dates:

Competency Area 8: Math and Measurement

Knowledge Check

How well do you know how to:

	Very Well	Somewhat Well	Not Well
1. Identify die cut products; embossing and foil stamping products; and procedures/equipment used for each?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Describe English and Metric measurement system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Define Points and Picas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Demonstrate the measurement of type in points and line length in picas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Calculate reduction or enlargement percentage of original photograph to final size?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Determine optimum layout for minimizing waste when cutting smaller sheets out of larger sized sheet of paper?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Competency Area 9: Job Application and Interpersonal Skills

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Locate job listing through a variety of sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Gather job postings for positions in the graphic communications industry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Write a personal resume that highlights the candidate's experience, skills and talents and include references?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Write a cover letter for a specific job that differentiates the candidate from other job seekers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Demonstrate how to customize a resume and cover letter to match a job listing and employer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Complete an employment application form?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Discuss and demonstrate ways to prepare for a successful job interview?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Prepare responses to common interview questions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Develop appropriate questions to ask prospective employers during interviews?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Conduct a mock job interview conducted by a teacher, parent or another student?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Prepare a letter or email to follow-up a job interview?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Evaluate an employment benefits package?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Review roles and responsibilities of employment positions in the graphic communications industry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Review Dates:

Competency Area 9: Job Application and Interpersonal Skills

Knowledge Check (*continued*)

How well do you know how to:	Very Well	Somewhat Well	Not Well
14. Describe work ethic skills that should be exhibited by employees in the graphic communications industry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Describe the positive and negative impact of social media on personal brand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Areas I Need To Review:

Helpful Tips and Reminders for Students

Access Directions to the Trade- or Technical-Specific Online 10-question Demo Assessment

Access the Web link www.careeressentials.org/assessments/demo-our-assessments/ with your browser. The sample programmatic questions will help give you an idea of the types of questions on the assessment and how they are generally written.

Test-Taking Reminders

Implementing good study habits is essential for any test or class. Below are basic reminders to better prepare you for life-long learning and workplace success. Incorporate these strategies into your everyday habits.

- Develop a regular study schedule
- Identify a specific location to study
- Always take notes while studying in class or on your own
- Take short breaks during your study session
- Perform “mini-testing” to make sure you understand and comprehend the program concepts
- Join small study groups to help focus on the program content
- If you need special assistance in testing, tell your teacher or counselor so he or she can make accommodations

Student Testing Tips

The most important tip for you is to be prepared mentally and physically for the testing session. Make sure to get plenty of rest and eat healthy. Wear comfortable and appropriate clothing to the testing session. Find out if you can bring items to the testing session, such as a non-programmable calculator, and make sure you have the items ready the night before. Check the website at www.careeressentials.org/wp-content/uploads/2017/07/Permitted-Testing-Tools-Aids.pdf for permitted tools or job aids that can be used during testing. The more organized you are before the testing period, the more relaxed you will be during the actual testing session.

Be relaxed and positive. If you begin to panic during the testing, take some deep breaths to relax, and think positive thoughts.

Do not rush through the questions. Read the question and potential answers thoroughly. Make sure you know exactly what the question is asking before answering. If you are unsure, note the question and return to it. Use process of elimination. If you are not sure of the correct answer, study the potential answers and eliminate the ones that you know are not correct.

If all else fails – *guess*. After you have exhausted all options, take your best guess at the correct answer. If you have studied the content area, you may intuitively know the correct answer. The Career Essentials: Assessments does not penalize you for guessing, and you may guess correctly!

Sample Assessment Questions

Question 1

Identify the production process for which the pre-press technician is responsible.



Choose one answer

- A. Estimating
- B. File preparation*
- C. Printing
- D. Binding

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > A Industry Overview. > A20 Review the common steps in a typical print workflow

Question 2

Why might font substitution occur when a print project is output?

Choose one answer

- A. Output device is limited to using only fonts from particular manufacturer
- B. The font used to create the project is not available during output*
- C. Font is not a legal copy
- D. Size of individual characters in the project are too large

Mapped skill standards

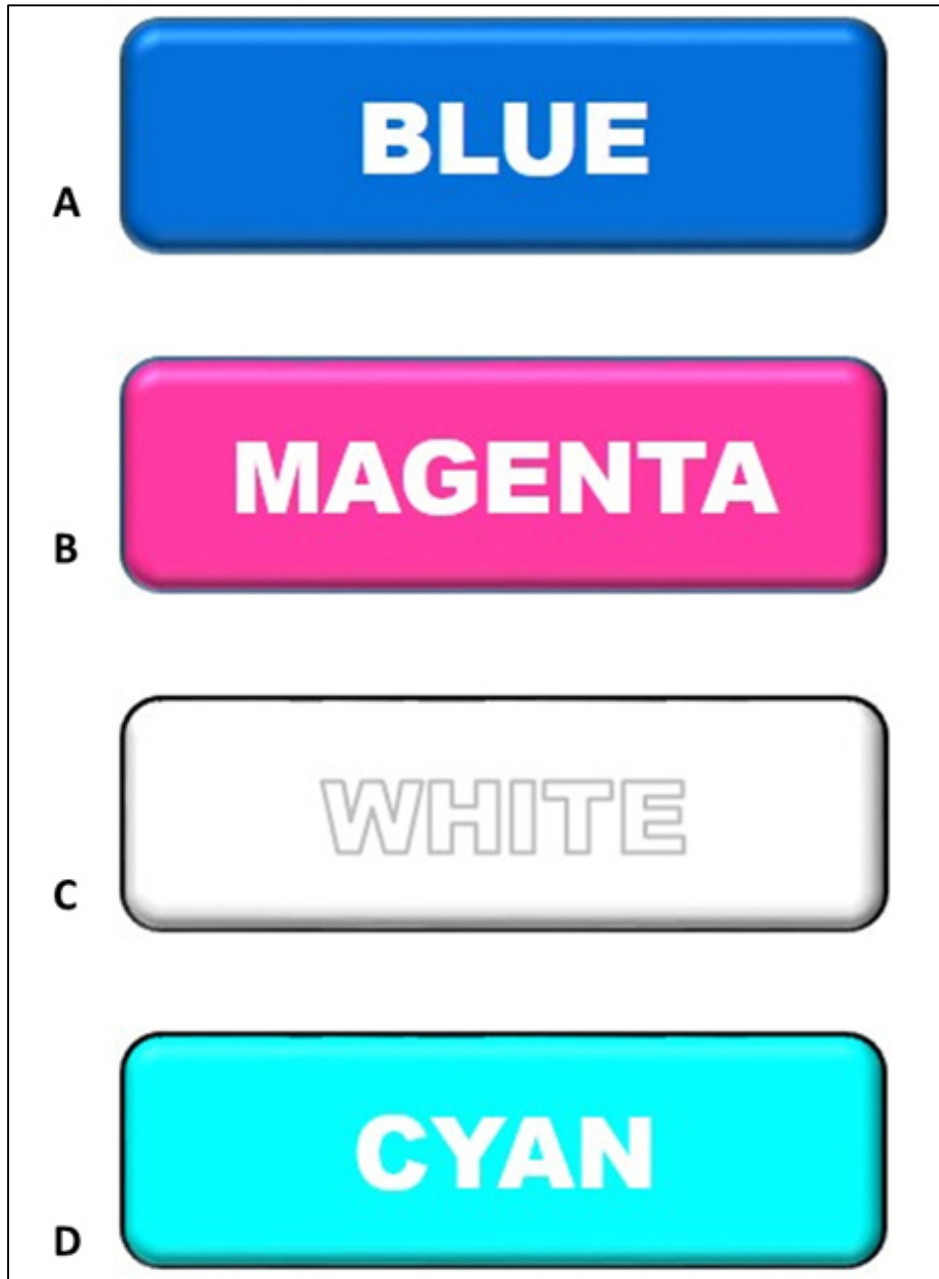
Graphic Communications - Skill Connect Assessment Blueprint > C File Creation to Output. > C44 Compare the differences between supplying PDF files versus native files for print

Question3

What color is produced when magenta and cyan are overprinted?

Choose the correct image

- A. *
- B.
- C.
- D.



Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > C File Creation to Output. > C45 Define RGB and CMYK color reproduction

Question 4

Which product is most likely to have been printed on a metal substrate?

Choose one answer

- A. *
- B.
- C.
- D.



Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > F79 Gather examples of pulp, plastic and metal based substrates.

Question 5

What is the maximum number of 6" x 9" pieces that can be cut from a 24" x 36" sheet?

Choose one answer

- A. 10
- B. 11
- C. 16*
- D. 24

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > H Math and Measurement. > H95

Determine optimum layout for minimizing waste when cutting smaller sheets out of larger sized sheet of paper.

Question 6

Which printing process transfers the image from a plate to a blanket?

Choose one answer

- A. Flexography
- B. Gravure
- C. Letterpress
- D. Offset lithography*

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > A Industry Overview. > A11Describe the common printing processes, flexography, gravure, letterpress, offset lithography, screen printing, digital.

Question 7

When printing a full-color photograph, arrange the following paper choices that will result in the smallest to the largest color gamut



Drag and drop

Newsprint
Uncoated Text
Matte Cover
Coated Cover

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > > F73 Discuss the impact that substrates have on a printed project.

Question 8

Identify the job role that has responsibility of ensuring customer job specifications are communicated to the production department.

Choose one answer

- A. Premedia technician
- B. Bindery operator
- C. Press operator
- D. Customer service representative*

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > I Job Application and Interpersonal Skills. > I 96 review roles and responsibilities of employment positions in the graphic communications industry

Question 9

Identify the primary production process for which the press technician is responsible.

Choose one answer

- A. Costing and Estimating
- B. File preparation
- C. Printing*
- D. Binding

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > A Industry Overview. > A20 Review the common steps in a typical print workflow

Question 10

What are the production steps in an offset prepress workflow?



Drag and drop in correct order

Preflight customer files
Create proof
Create plates
Send to production

Mapped skill standards

Graphic Communications - Skill Connect Assessment Blueprint > A Industry Overview. > A20 Review the common steps in a typical print workflow

Resources

Additional Resources

Below are resources that will be helpful in preparing for the Assessments which were created based on industry standards nationwide. Use the Career Essentials: Assessments Blueprint as a guideline for competencies tested. Use the resources below to find curriculum or additional study guides for industry standards.

Introduction to Graphic Communications Resources:

www.careeressentials.org/assessments/assessment-resources/