

# What makes up the ACT plus Writing and Work Keys?

ACT Pre-Fill Information: February 19, 2016

ACT: March 1, 2016

WorkKeys: March 2, 2016

# LHS Mission

To develop the skills and attributes necessary for students to achieve excellence in academics, activities, citizenship, and relationships

# Schedule For the ACT\*

TUESDAY, MARCH 1 ACT TESTING SCHEDULE		
Time (approx)	Activity	Duration
7:00 - 7:05	Testing Staff Arrive	5 minutes
7:05 - 7:20	Testing Staff Briefing Session (LMC South Lab)	15 minutes
7:20 - 7:25	Distribute Test Materials To Staff	5 minutes
7:25 - 7:30	Staff Report To Assigned Rooms	5 minutes
7:30 - 7:45	Arrival, identification, seating of examinees, calculator distribution	15 minutes
7:45 - 8:00	Begin reading verbal instructions; distribute test materials to examinees	15 minutes
8:00 - 8:45	Test 1 - English	45 minutes
8:45 - 8:48	Test 2 - Mathematics Directions	3 minutes
8:48 - 9:48	Test 2 - Mathematics	60 minutes
9:48 - 10:03	Break (15 minutes)	15 minutes
10:03 - 10:05	Test 3 - Reading Directions	2 minutes
10:05 - 10:40	Test 3 - Reading	35 minutes
10:40 - 10:41	Test 4 - Science Reasoning Directions	1 minute
10:41 - 11:16	Test 4 - Science Reasoning	35 minutes
11:16 - 11:18	Collect multiple choice test booklets and calculators	2 minutes
11:18 - 11:23	In Room 5 minute Break	5 minutes
11:23 - 11:28	Test 5 (Writing) Directions	5 minutes
11:28 - 12:08	Test 5 (Writing)	40 minutes
12:08 - 12:13	End of Test Directions, collect writing booklets/answer sheets Dismiss students to go to lunch	5 minutes
12:13 - 12:23	Booklet Return- (alphabetize, return books and testing forms)	10 minutes
11:50 - 12:43	Lunch for Sophomores/Seniors	60 minutes
12:13 - 12:43	Lunch For Juniors	30 minutes
12:47 - 1:46	Period 1 Class	59 minutes
1:53 - 2:52	Period 2 Class	59 minutes

# Schedule for WorkKeys\*

WEDNESDAY, MARCH 2 WORKKEYS TESTING SCHEDULE		
Time (approx)	Activity	Duration
7:00 - 7:05	Testing Staff Arrive	5 minutes
7:05 - 7:20	Testing Staff Briefing Session (LMC South Lab)	15 minutes
7:20 - 7:25	Distribute Test Materials To Staff	5 minutes
7:25 - 7:30	Staff Report To Assigned Rooms	5 minutes
7:30 - 7:45	Arrival, identification, seating of examinees, calculator distribution	15 minutes
7:45 - 8:05	Complete Demographics on Answer Document	20 minutes
8:05 - 8:15	Begin Verbal Instructions	10 minutes
8:15 - 8:20	Test 1 - Reading for Information Directions	5 minutes
8:20 - 9:05	Test 1 - Reading for Information	45 minutes
9:05 - 9:10	Test 2 - Applied Mathematics Directions	5 minutes
9:10 - 9:55	Test 2 - Applied Mathematics	45 minutes
9:55- 10:10	Break-15 minutes	15 minutes
10:10 - 10:15	Test 3 - Locating Information Directions	5 minutes
10:15 - 11:00	Test 3 - Locating Information	45 minutes
11:00 - 11:05	End of Test Directions/Collect answer documents & booklets	5 minutes
11:05 - 11:15	Booklet Return- alphabetize,return books and completed forms	10 minutes
10:35 - 11:35	Lunch for Sophomores/Seniors	60 minutes
11:05 - 11:35	Lunch For Juniors	35 minutes
11:40 - 12:40	Period 3 Class (w/announcements)	60 minutes
12:47 - 1:46	Period 4 Class	59 minutes
1:53 - 2:52	Period 5 Class	59 minutes

# Prepare Before

- STUDY
- Buy Books
- Use Online Resources
  - [www.actstudent.org](http://www.actstudent.org)
  - <https://www.march2success.com/%5C>
- [WorkKeys Test Taking Tips](#)

# Day of the test

- Before
  - Wear comfortable clothing in layers
  - Eat a good breakfast
  - Get a good nights sleep
- What to Bring
  - Approved Photo ID
  - #2 Pencil
  - Approved Calculator
- What NOT to Bring
  - Food and Drink
  - Electronic Devices
  - Unapproved Calculator ([Listed Here](#))

# ACT Results

- Are meant as an indicator of how your student will do in their freshman college coursework
- ACT Benchmark Scores
  - English 18
  - Math 22
  - Reading 21
  - Science 24

# Test timing

- English      75 questions      45 minutes
- Math          60 questions      60 minutes
- Reading      45 questions      30 minutes
- Science      45 questions      30 minutes
- Writing      1 prompt          40 minutes

# Make-up of the test

- English
  - Sentence Structure 24%
  - Grammar & Usage 16%
  - Strategy 16%
  - Style 16%
  - Organization 15%
  - Punctuation 13%
- Science
  - Research Summaries 45%
  - Data Representation 38%
  - Conflicting Viewpoints 17%

# Make-up of test

- Reading
  - Social Studies 25%
  - Natural Sciences 25%
  - Prose Fiction 25%
  - Humanities 25%
- Mathematics
  - Pre-Algebra 23%
  - Plane Geometry 23%
  - Elementary Algebra 17%
  - Intermediate Algebra 15%
  - Coordinate Geometry 15%
  - Trigonometry 7%

# Make-up of test

- Writing
  - The writing test is a 40-minute essay test that measures your writing skills—specifically those writing skills emphasized in high school English classes and in entry-level college composition courses.
  - The test describes an issue and provides three different perspectives on the issue. You are asked to "evaluate and analyze" the perspectives; to "state and develop" your own perspective; and to "explain the relationship" between your perspective and those given.
  - Your score will not be affected by the perspective you take on the issue.

# Failure to plan is planning to fail

- All Juniors will take the ACT plus Writing.
- Make sure this is NOT the only time you take the exam (Take in December or February)
  - In 2013, 57% of students who retook the test improved the score!
- ACT scores are the primary way colleges award scholarships.
- Scores will be available in 3-8 weeks.

# What makes up WorkKeys?

Three, 45 minute assessments

- Applied Math, 33 questions
- Reading for Information, 33 questions
- Locating information, 38 questions

[Video from PBS NewsHour on WorkKeys](#)

# National Career Readiness Certificate

- The ACT National Career Readiness Certificate (NCRC) is an industry-recognized, portable, research-based credential that certifies essential skills needed for workplace success.
- This credential is used across all sectors of the economy and documents the following cognitive skills:
  - Problem solving
  - Critical thinking
  - Reading and using work-related text
  - Applying information from workplace documents to solve problems
  - Applying mathematical reasoning to work-related problems
  - Setting up and performing work-related mathematical calculations
  - Locating, synthesizing, and applying information that is presented graphically
  - Comparing, summarizing, and analyzing information presented in multiple related graphics

# Certificate levels



**Bronze** – scores at least a level 3 in each of the three core areas and has the necessary foundational skills for 35 percent of the jobs in the WorkKeys database.



**Silver** – scores at least a level 4 in each of the three core areas and has the necessary foundational skills for 65 percent of the jobs in the WorkKeys database.



**Gold** – scores at least a level 5 in each of the three core areas and has the necessary foundational skills for 90 percent of the jobs in the WorkKeys database.



**Platinum** – scores at least a level 6 in each of the three core areas and has the necessary foundational skills for 99 percent of the jobs in the WorkKeys database.

# Applied Math

- There are five levels of difficulty.
- Level 3 is the least complex, and Level 7 is the most complex.
- The levels build on each other, each incorporating the skills assessed at the previous levels.
- For example, at Level 5, individuals need the skills from Levels 3, 4, and 5.

# Level Three Question

## Level 3 Applied Mathematics Sample Item

In your job as a cashier, a customer gives you a \$20 bill to pay for a can of coffee that costs \$3.84. How much change should you give back?

1. \$15.26
2. \$16.16
3. \$16.26
4. \$16.84
5. \$17.16

# Characteristics of a Level 3 Item

- Translate easily from a word problem to a math equation
- All needed information is presented in logical order
- No extra information

# Skills needed for Level 3

- Solve problems that require a single type of mathematics operation (addition, subtraction, multiplication, and division) using whole numbers
- Add or subtract negative numbers
- Change numbers from one form to another using whole numbers, fractions, decimals, or percentages
- Convert simple money and time units (e.g., hours to minutes)

# Level Four Question

## Applied Mathematics Level 4 Sample Item

Over the last 5 days, you made the following numbers of sales calls: 8, 7, 9, 5, and 7. On the average, how many calls did you make each day?

1. 5.8
2. 7.0
3. 7.2
4. 9.0
5. 36.0

# Characteristics of a Level 4 Question

- Information may be presented out of order
- May include extra, unnecessary information
- May include a simple chart, diagram, or graph

# Skills needed for Level 4

- Solve problems that require one or two operations
- Multiply negative numbers
- Calculate averages, simple ratios, simple proportions, or rates using whole numbers and decimals
- Add commonly known fractions, decimals, or percentages (e.g.,  $\frac{1}{2}$ , .75, 25%)
- Add up to three fractions that share a common denominator
- Multiply a mixed number by a whole number or decimal
- Put the information in the right order before performing calculations

# Level Five Question

## Applied Mathematics Level 5 Sample Item

Quik Call charges 18¢ per minute for long-distance calls. Econo Phone totals your phone usage each month and rounds the number of minutes up to the nearest 15 minutes. It then charges \$7.90 per hour of phone usage, dividing this charge into 15-minute segments if you used less than a full hour. If your office makes 5 hours 3 minutes worth of calls this month using the company with the lower price, how much will these calls cost?

1. \$39.50
2. \$41.48
3. \$41.87
4. \$54.00
5. \$54.54

# Characteristics of a Level 5 Question

- Problems require several steps of logic and calculation (e.g., problem may involve completing an order form by totaling the order and then computing tax)

# Skills needed for Level 5

- Decide what information, calculations, or unit conversions to use to solve the problem
- Look up a formula and perform single-step conversions within or between systems of measurement
- Calculate using mixed units (e.g., 3.5 hours and 4 hours 30 minutes)
- Divide negative numbers
- Find the best deal using one- and two-step calculations and then compare results
- Calculate perimeters and areas of basic shapes (rectangles and circles)
- Calculate percent discounts or markups

# Level Six Question

## Applied Mathematics Level 6 Sample Item

You are preparing to tile the floor of a rectangular room that is  $15\frac{1}{2}$  feet by  $18\frac{1}{2}$  feet in size. The tiles you plan to use are square, measuring 12 inches on each side, and are sold in boxes that contain enough tile to cover 25 square feet. How many boxes of tiles must you order to complete the job?

1. 11
2. 12
3. 34
4. 59
5. 287

# Characteristics of a Level 6 Question

- May require considerable translation from verbal form to mathematical expression
- Generally require considerable setup and involve multiple-step calculations

# Skills needed for Level 6

- Use fractions, negative numbers, ratios, percentages, or mixed numbers
- Rearrange a formula before solving a problem
- Use two formulas to change from one unit to another within the same system of measurement
- Use two formulas to change from one unit in one system of measurement to a unit in another system of measurement
- Find mistakes in questions that belong at Levels 3, 4, and 5
- Find the best deal and use the result for another calculation
- Find areas of basic shapes when it may be necessary to rearrange the formula, convert units of measurement in the calculations, or use the result in further calculations
- Find the volume of rectangular solids
- Calculate multiple rates

# Level Seven Question

## Applied Mathematics Level 7 Sample Item

The farm where you just started working has a vertical cylindrical oil tank that is 2.5 feet across on the inside. The depth of the oil in the tank is 2 feet. If 1 cubic foot of space holds 7.48 gallons, about how many gallons of oil are left in the tank?

1. 37
2. 59
3. 73
4. 230
5. 294

# Characteristics of a Level 7 Question

- Content or format may be unusual
- Information may be incomplete or implicit
- Problems often involve multiple steps of logic and calculation

# Skills needed for Level 7

- Solve problems that include nonlinear functions and/or that involve more than one unknown
- Find mistakes in Level 6 questions
- Convert between systems of measurement that involve fractions, mixed numbers, decimals, and/or percentages
- Calculate multiple areas and volumes of spheres, cylinders, or cones
- Set up and manipulate complex ratios or proportions
- Find the best deal when there are several choices
- Apply basic statistical concepts

# Reading for Information

- There are five levels of difficulty.
- Level 3 is the least complex, and Level 7 is the most complex.
- The levels build on each other, each incorporating the skills assessed at the preceding levels.
- For example, at Level 5, individuals need the skills from Levels 3, 4, and 5.
- The reading materials at Level 3 are short and direct. The material becomes longer, denser, and more difficult to use as readers move toward Level 7.
- The tasks also become more complex as readers move from Level 3 to Level 7.
- At Level 3, readers begin by finding very obvious details and following short instructions. At the more complex levels, tasks can also involve more application and interpretation.

# Level Three Question

## Level 3 Reading for Information Sample Item

### ATTENTION CASHIERS:

All store employees will now get 20% off the price of clothes they buy here. Please follow the new directions listed below.

#### Selling clothes to employees

- Ask to see the employee's store identification card.
- Enter the employee's department code number into the cash register.
- Use the cash register to take 20% off the price. Then push the sales tax button.
- Write your initials on the sales receipt.
- Sell clothes to employees during store hours only.

#### Accepting clothing returns from employees

- Employees receive a store credit certificate for clothes they return to the store.
- Store credit certificates are next to the gift certificates.
- Employees may not get a cash refund for clothes they return to the store.

**You are a cashier. According to the notice shown, what should you write on a store employee's receipt?**

1. The employee's identification number
2. The employee's department number
3. The amount of sales tax
4. The 20% discount price
5. Your initials

# Characteristics of a Level 3 Question

- Reading materials include basic company policies, procedures, and announcements
- Reading materials are short and simple, with no extra information
- Reading materials tell readers what they should do
- All needed information is stated clearly and directly
- Items focus on the main points of the passages
- Wording of the questions and answers is similar or identical to the wording used in the reading materials

# Skills needed for Level 3

- Identify main ideas and clearly stated details
- Choose the correct meaning of a word that is clearly defined in the reading
- Choose the correct meaning of common, everyday workplace words
- Choose when to perform each step in a short series of steps
- Apply instructions to a situation that is the same as the one in the reading materials

# Level Four Question

## Level 4 Reading for Information Sample Item

### INSTRUCTIONS TO SORTING DEPARTMENT: SPECIAL PROJECT TO FIX ORDER #888

Five long, blue plastic bins have been placed over by the overhead door. Piled on the other side of this room, near the time clock, are several thousand steel rods of varying lengths. All of those rods must be sorted by length and placed in the bins.

- Bin “1” is for rods that are four to five meters long.
- Bin “2” is for rods that have a length of over five meters, up to six meters.
- Bin “3” is for rods that have a length of over six meters, up to eight meters.
- Bin “4” is for rods that have a length of over eight meters, up to ten meters.
- Bin “5” is for warped or unsmoothed rods. These will not be accepted.

If these rods are not all sorted correctly, the customer will reject the order. We cannot afford to let that happen again. Work as quickly as you can because Friday is the deadline for delivery of the order.

**According to the instructions shown, what is a condition for project success other than delivery on time?**

- A. All rods must be sorted by both length and diameter.
- B. Rods eleven meters long must be leaned against the overhead door.
- C. The customer does not want rods that are warped.
- D. The five-meter-long rods must go in Bin 2.
- E. The ten-meter-long rods must arrive at the customer in Bin 4.

# Characteristics of a Level 4 Question

- Reading materials include company policies, procedures, and notices
- Reading materials are straightforward but have longer sentences and contain a number of details
- Reading materials use common words but do have some harder words, too
- Reading materials describe procedures that include several steps
- When following the procedures, individuals must think about changing conditions that affect what they should do
- Questions and answers are often paraphrased from the passage

# Skills needed for Level 4

- Identify important details that may not be clearly stated
- Use the reading material to figure out the meaning of words that are not defined
- Apply instructions with several steps to a situation that is the same as the situation in the reading materials
- Choose what to do when changing conditions call for a different action (follow directions that include "if-then" statements)

# Level Five Question

## Level 5 Reading for Information Sample Item

- Goldberg's Auto Parts is served by more than fifty different accounts, each with its own sales representative, company name, corporate address, and shipping address. As a shipping and receiving clerk at Goldberg's, you are required to return defective merchandise to the manufacturer.
- Standard procedure for returning an item begins with your written request to the company for authorization. Always send the request to the corporate address, not to the shipping address. Unless the company file folder contains a form for this procedure, write a business letter to the manufacturer supplying the item's stock number, cost, and invoice number; the date it was received; and the reason for its return. The manufacturer's reply will include an authorization number from the sales representative, a sticker for you to place on the outside of the box to identify it as an authorized return, and a closing date for the company's acceptance of the returned item. If you do not attach the provided sticker, your returned box will be refused by the manufacturer as unauthorized, and you will need to obtain a new letter, authorization, sticker, and closing date. Always send a returned box to the shipping address, not to the company's corporate address.

**According to the policy shown, what should you do if you lose an authorization sticker?**

1. Send a request for a return authorization along with the rejected part directly to the manufacturer's shipping address.
2. Send a request for return authorization along with the rejected part directly to the manufacturer's corporate address.
3. Repeat the standard procedure to obtain a new letter, authorization, sticker, and closing date.
4. Use a sticker from another company's folder.
5. Send the rejected part to your sales representative.

# Characteristics of a Level 5 Question

- Policies, procedures, and announcements include all of the information needed to finish a task
- Information is stated clearly and directly, but the materials have many details
- Materials also include jargon, technical terms, acronyms, or words that have several meanings
- Application of information given in the passage to a situation that is not specifically described in the passage
- There are several considerations to be taken into account in order to choose the correct actions

# Skills needed for Level 5

- Figure out the correct meaning of a word based on how the word is used
- Identify the correct meaning of an acronym that is defined in the document
- Identify the paraphrased definition of a technical term or jargon that is defined in the document
- Apply technical terms and jargon and relate them to stated situations
- Apply straightforward instructions to a new situation that is similar to the one described in the material
- Apply complex instructions that include conditionals to situations described in the materials

# Level Six Question

## Level 6 Reading for Information Sample Item

From: J. Kimura, Senior Vice President of Molten Metals, Inc.

To: All e-mail users at Molten Metals, Inc.

To permit our employees to communicate directly with one another as well as with vendors and customers, Molten Metals, Inc. provides a network of e-mail accounts. Access to e-mail is at the sole discretion of Molten Metals, Inc., and we will determine who is to be so empowered. Under President Duarte's leadership, all messages sent and received (even those intended as personal) are treated as business messages. Molten Metals, Inc. has the capability to and reserves the right to access, review, copy, and delete any messages sent, received, or stored on the company e-mail server. Molten Metals, Inc. will disclose these messages to any party (inside or outside the company) it deems appropriate. Employees should treat this server as a constantly reviewed, shared file stored in the system.

Due to the reduced human effort required to redistribute electronic information, a greater degree of caution must be exercised by employees transmitting MM, Inc. confidential information using company e-mail accounts. Confidential information belonging to MM, Inc. is important to our independence and should never be transmitted or forwarded to persons or companies not authorized to receive that information. Likewise, it should not be sent or forwarded to other employees inside the company who do not need to know that information.

MM, Inc. strongly discourages the storage of large numbers of e-mail messages for a number of reasons. First, because e-mail messages frequently contain company confidential information, it is good to limit the number of such messages to protect the company's information. Second, retention of messages fills up large amounts of storage space on the e-mail server and personal hard disks, and can slow down the performance of both the network and individual personal computers. Finally, in the event that the company needs to search the network server, backup tapes, or individual hard disks for genuinely important documents, the fewer documents it has to search through, the more economical the search will be. Therefore, employees are to delete as soon as possible any e-mail messages they send or receive.

**Based on the memo shown, personal messages transmitted or received using Molten Metals, Inc., e-mail accounts will be:**

- A. automatically deleted upon detection.
- B. avoided by server staff to save company time.
- C. forwarded to private, personal accounts.
- D. grounds for personnel action.
- E. treated no differently from other messages.

# Characteristics of a Level 6 Question

- Reading materials include elaborate procedures, complicated information, and legal regulations found in all kinds of workplace documents
- Complicated sentences with difficult words, jargon, and technical terms
- Most of the information needed to answer the items is not clearly stated

# Skills needed for Level 6

- Identify implied details
- Use technical terms and jargon in new situations
- Figure out the less common meaning of a word based on the context
- Apply complicated instructions to new situations
- Figure out the principles behind policies, rules, and procedures
- Apply general principles from the materials to similar and new situations
- Explain the rationale behind a procedure, policy, or communication

# Level Seven Question

## Reading for Information Level 7 Sample Item

### Confidentiality

Client and Consultant agree to maintain the confidentiality of each other's trade secrets and any confidential business information disclosed during the term of this agreement, except as authorized by the party that disclosed the information. When the consulting services have been completed, the parties will return all confidential materials and equipment provided during the term of this agreement, unless keeping the materials is authorized by the party that provided them. Each party is responsible for identifying all trade secrets, confidential business information, and confidential materials.

Nothing in this or in any other agreement will prevent any party from using or disclosing confidential information to the extent necessary to carry out the responsibilities in this agreement; or will restrict any party's use or disclosure of information that is or becomes publicly known through lawful means, that was rightfully in that party's possession or part of that party's general knowledge prior to the term of this agreement, or that is disclosed to that party without confidential or proprietary restrictions by a person who rightfully possesses the information; or will prevent any party from responding to a lawful subpoena or court order.

Client agrees that Consultant will neither use nor disclose the trade secrets, confidential information, or confidential materials of third parties, and Client will neither ask nor require Consultant to do so.

### Miscellaneous Provisions

All agreements and understandings between the parties concerning the subject matter of this agreement are embodied in this agreement and any proposal to which the parties agreed. It is understood and agreed by both parties that there are no oral or other agreements or understanding between the parties affecting this agreement.

This agreement shall supersede all prior and contemporaneous agreements and understandings between the parties, with respect to any subject covered by this agreement, except as otherwise provided in this agreement.

This agreement may not be amended except in writing by an instrument, signed by each of the parties. No failure or delay in exercising any right under this agreement shall operate as a waiver thereof.

Neither party shall assign or otherwise transfer any rights or obligations under this agreement without the written consent of the other party. Subject to the foregoing agreement, this agreement shall be binding upon and shall inure to the benefit of the parties' respective heirs, successors, attorneys, and permitted assignees.

If any provision of this agreement, or its application to any person, place, or circumstance, is held by an arbitrator or a court of competent jurisdiction to be invalid, unenforceable, or void, such provision shall be enforced to the greatest extent permitted by law, and the remainder of this agreement and such provision as applied to the other persons, places, and circumstances shall remain in full force and effect.

This agreement shall not become binding on either party until both parties execute it.

**You have hired a consultant to work with your firm. Based on the agreement shown, what will happen if the consultant's business is taken over by a major competitor?**

- A. The agreement will confidentially go into arbitration.
- B. The agreement will not be enforceable and is void.
- C. The consultant is bound by the agreement.
- D. The obligations will pass to the new owner.
- E. You must renegotiate the agreement with the new owner.

# Characteristics of a Level 7 Question

- Very complex reading materials
- Information includes a lot of details
- Complicated concepts
- Difficult vocabulary
- Unusual jargon and technical terms are used but not defined
- Writing often lacks clarity and direction
- Readers must draw conclusions from some parts of the reading and apply them to other parts

# Skills needed for Level 7

- Figure out the definitions of difficult, uncommon words based on how they are used
- Figure out the meaning of jargon or technical terms based on how they are used
- Figure out the general principles behind policies and apply them to situations that are quite different from any described in the materials

# Locating Information

- There are four levels of difficulty.
- Level 3 is the least complex, and Level 6 is the most complex.
- The levels build on each other, each incorporating the skills assessed at the preceding levels.
- For example, Level 5 includes the skills used at Levels 3, 4, and 5.
- At Level 3, examinees look for information in simple graphics and fill in information that is missing from simple graphics.
- At Level 6, examinees may use the information in one or more complex graphics to draw conclusions and make decisions. The complexity can also increase as the quantity and/or density of the information increases.

# Level Three Question

## Level 3 Locating Information Sample Item



You regularly check the pressure gauge on a large tank. According to the gauge shown, what is the current pressure (in PSI)?

1. 30
2. 35
3. 40
4. 45
5. 100

# Characteristics of a Level 3 Question

- Elementary workplace graphics such as simple order forms, bar graphs, tables, flowcharts, maps, instrument gauges, or floor plans
- One graphic used at a time

# Skills needed for Level 3

- Find one or two pieces of information in a graphic
- Fill in one or two pieces of information that are missing from a graphic



# Characteristics of a Level 4 Question

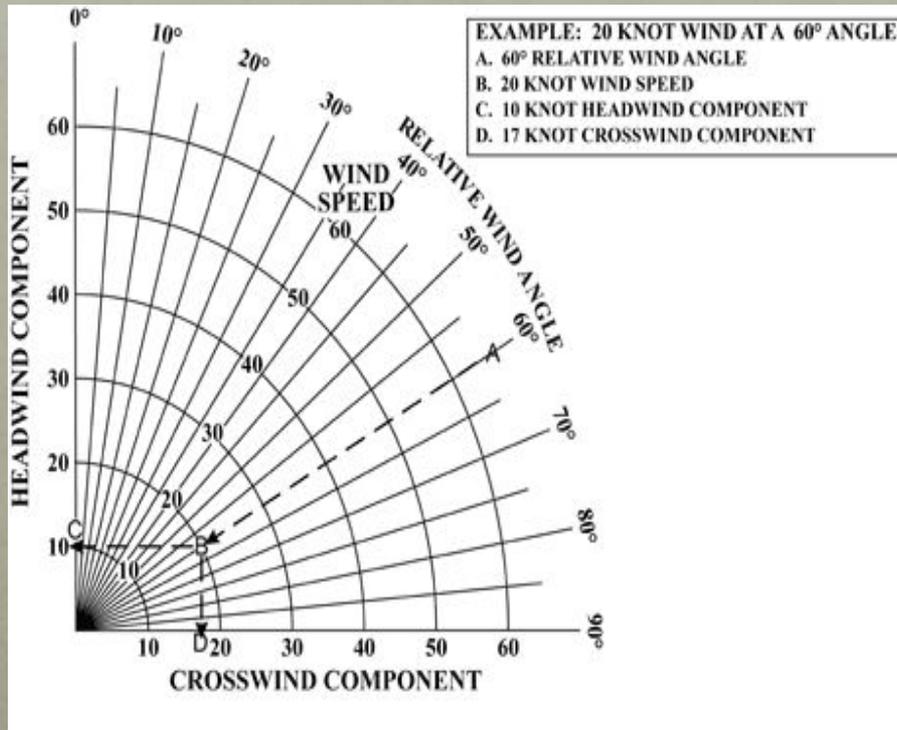
- Straightforward workplace graphics such as basic order forms, diagrams, line graphs, tables, flowcharts, instrument gauges, or maps
- One or two graphics are used at a time

# Skills needed for Level 4

- Find several pieces of information in one or two graphics
- Understand how graphics are related to each other
- Summarize information from one or two straightforward graphics
- Identify trends shown in one or two straightforward graphics
- Compare information and trends shown in one or two straightforward graphics

# Level Five Question

## Level 5 Locating Information Sample Item



As an airplane pilot, you need to determine the crosswind component of the wind speed to ensure safe takeoffs and landings. According to the graph shown, if the reported wind speed is 45 knots at a 20° angle, what is the crosswind component, in knots?

- A. 15
- B. 25
- C. 43
- D. 45
- E. 65

# Characteristics of a Level 5 Question

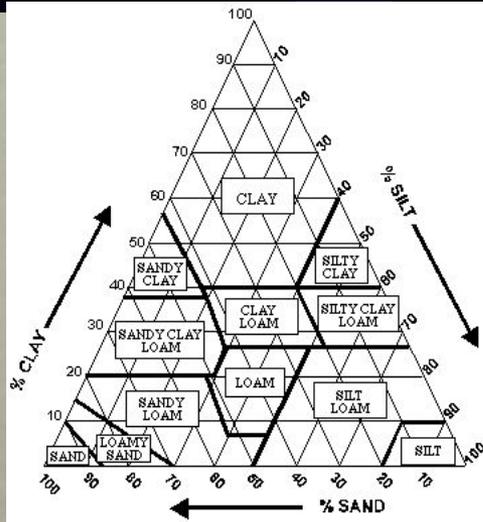
- Complicated workplace graphics, such as detailed forms, tables, graphs, diagrams, maps, or instrument gauges
- Graphics may have less common formats
- One or more graphics are used at a time

# Skills needed for Level 5

- Sort through distracting information
- Summarize information from one or more detailed graphics
- Identify trends shown in one or more detailed or complicated graphics
- Compare information and trends from one or more complicated graphics

# Level Six Question

## Locating Information Sample Item



You are a road contractor and you have analyzed a soil that you want to use for road fill. Your analysis shows that the soil contains 15% sand, 65% silt, and 20% clay. You need to know what the shrink-swell potential is for the soil because it will affect the durability of the road. Based on the diagram and table shown, what is the shrink-swell potential at a 30-inch depth for this soil?

Soil name	Texture class	Depth (inches)	Shrink-swell potential
Sarpy	sandy loam	0-7 7-60	low low to moderate
Kennebec	silt loam	0-38 38-60	moderate low to moderate
Colo	silty clay loam	0-31 31-60	high high
Blend	silty clay	0-17 17-29 29-60	high moderate to high high
Nevin	clay loam	0-28 28-48 48-60	moderate to high moderate moderate
Kenmoor	loamy sand	0-24 24-60	low high

1. Low
2. Low to moderate
3. Moderate
4. Moderate to high
5. High

# Characteristics of a Level 6 Question

- Very complicated and detailed graphs, charts, tables, forms, maps, and diagrams
- Graphics contain large amounts of information and may have challenging formats
- One or more graphics are used at a time
- Connections between graphics may be subtle

# Skills needed for Level 6

- Draw conclusions based on one complicated graphic or several related graphics
- Apply information from one or more complicated graphics to specific situations
- Use the information to make decisions

# Thank You For Attending!

## LHS Mission

To develop the skills and attributes necessary for students to achieve excellence in academics, activities, citizenship, and relationships