

Post-High School Tests

The **BIG** Idea

- What kinds of tests might I need to take after high school?

AGENDA

Approx. 45 minutes

- I. Warm Up (10 minutes)
- II. Investigating Post-High School Tests: Two Examples (20 minutes)
- III. Sharing Information (10 minutes)
- IV. Wrap Up (5 minutes)

MATERIALS

☐ **PORTFOLIO PAGES:**

- Portfolio pages 28–30, Grade 10 Skills Checklist (Taking Tests skills only)

☐ **STUDENT HANDBOOK PAGES:**

- Student Handbook pages 66–67, So, What Do These Tests Test?
- Student Handbook pages 68–71, FedEx Sample Test Questions
- Student Handbook pages 72–77, NJATC Sample Test Questions
- Student Handbook page 78, Check-up Questions

☐ **FACILITATOR PAGES:**

- Facilitator Resource 1, DO NOW, Taking Tests 3: Post-High School Tests
- Facilitator Resource 2, Sample Questions Answer Key (one copy per group)
- Facilitator Resource 3, So, What Do These Tests Test? Answer Key

OBJECTIVES

During this lesson, student(s) will:

- Review an example of a test he or she might be required to take after high school, then list two ways that the test is like the ACT PLAN, and one way it is different.
- Recognize that students not planning on attending college may be required to take standardized tests to get a job or be promoted.

OVERVIEW

Some non-college-bound students think that once they graduate from high school they can say good-bye to standardized tests like the ACT PLAN and the ACT. These students would be surprised to learn that many jobs require such tests for hiring or promotion. During this lesson, students learn about two such tests (FedEx's Basic Skills Test for couriers, and the National Joint Apprenticeship and Training Committee's (NJATC) Apprentice Aptitude Test for budding electricians), and see how these tests are similar and different from the ACT PLAN. In addition, they will look at sample questions from these tests, and learn why it's important to graduate from high school with strong academic skills.

PREPARATION

- Write the **BIG IDEA** and the day's agenda on the board.
- Make a transparency of (or copy onto chart paper) **Facilitator Resource 1, DO NOW**.
- Make 15 copies of **Facilitator Resource 2, Sample Questions Answer Key**.
- Pair up academically stronger students with students who need more support. You could use the same pairs as during last week's lesson.

BACKGROUND INFORMATION

In addition to the two post-high school tests that are presented in detail in this lesson, the Basic Skills Test, required for some FedEx employment; and the Apprentice Aptitude Test, required by the NJATC, you may want to tell students about a few other examples of standardized tests they may encounter after high school.

VOCABULARY

Ability-to-Benefit Tests: (Discussed in the Warm Up) Some students without degrees, (or with low grades and/or test scores who want to pursue a college education) may be asked to take one of several standardized tests called an Ability-to-Benefit test if they want to receive financial aid or loans from the government. Basically, these tests are a way for students to demonstrate

to colleges (and providers of financial aid) that they have the academic skills to benefit from a college education.

Apprenticeships: Apprenticeships in the skilled trades, such as plumbing, construction, and electrical work, are a wonderful way of learning new skills. Apprentices often earn while they learn, with wages increasing as their skill and productivity levels increase. Apprenticeship sponsors may pay most of the training costs. Such programs are often very competitive, so the organizations awarding them use tests to help them select the best candidates.

Military: Any high school student who wants to join the US Army needs to take the ASVAB (which stands for Armed Services Vocational Aptitude Battery). This standardized test is divided into four sections: math knowledge, arithmetic reasoning, word knowledge, and paragraph comprehension. Your score on the ASVAB determines your career options within the army.

IMPLEMENTATION OPTIONS

DO NOW:

(You may choose to begin the Warm Up activity as a written DO NOW. Present the questions on the board or overhead, and have students write only their answers on index cards.)

Questions:

1. What test(s) do most colleges require as part of their admission process?
2. Why are these tests important to colleges?
3. True or False: People who deliver packages for FedEx have to take a test before they will be considered for an interview. (Explain your answer.)

[Give the students three minutes to answer these questions. Then start with the discussion in the Warm Up as written. Call on students to volunteer their answers when they are directly addressed in the discussion.]

In **Activity III**, if you think your students will have difficulty completing **Student Handbook pages 66-67, So, What Do These Tests Test?** in pairs, you may wish to create an overhead transparency and investigate one of the tests as a class. Students can then work on investigating the second test.

In **Activity III**, you may wish to have groups that finish early take a look at the second test.

ACTIVITY STEPS

I. WARM UP (10 minutes)

1. **SAY SOMETHING LIKE:** Tests are an unavoidable part of high school life. You might think that you can throw away those No. 2 pencils after you graduate... but don't! The truth is, there are many other standardized tests you might need to take after high school. For example, some colleges require an entrance exam to show you've mastered the basic skills needed to succeed.

Another place you might encounter standardized tests after graduation is during a job search. Imagine that you are the head of a big company, and you need to hire 50 new employees. What do you do if 500 people apply for these jobs? Who should you pick? Are you going to have time to interview all the candidates? One easy way to narrow down a big list of candidates is to give everyone a test, and then interview those people who do really well. Companies design special tests to measure the skills that employees will need on the job.

2. **SAY SOMETHING LIKE:** Today we are going to look at two of these tests.

First we'll look at the Basic Skills Test given to people who want to work for FedEx. How many of you have heard of FedEx?

[Students respond.]

FedEx is a hugely successful company that is famous for sending packages overnight around the world. FedEx is also famous for decent salaries, excellent benefits, opportunities for promotion, and more.

To apply for some FedEx jobs, you have to do well on a standardized test. For example, to be hired as a FedEx courier — that's the person whose job is to pick up and deliver urgent packages — you have to take something called the Basic Skills Test. On their website, FedEx says, "The employment tests used by Federal Express were professionally developed for our jobs. Extensive research has shown that performance on these tests is significantly related to job performance."

In a few minutes, you'll get a sneak preview of some of the questions on that FedEx test.

3. **SAY SOMETHING LIKE:** Today, we'll also look at a test given to students who want to become electricians. Anybody here think they might want to become an electrical worker? [Students respond.] Electrical workers install and fix equipment for telephone companies, cable companies, security camera companies, and lots more. Electricians are paid well for their special knowledge. But you probably don't know that there is a national apprentice program that pays bright, hard-working students to learn the skills to become electricians. You also get raises as your skills improve.

The apprenticeships for students who want to be electrical workers are highly competitive. In New York City, for example, approximately one in 10 applicants is selected for the program.

Later today, we'll look at sample questions from this test, too.

[Source for above information: National Joint Apprenticeship and Training Committee

<http://www.njatc.org/training/apprenticeship/index.aspx>]

II. Investigating Post-High School Tests: TWO EXAMPLES (20 minutes)

1. **SAY SOMETHING LIKE:** Now we're going to take a look at sample questions from both tests, the FedEx Basic Skills Test and the NJATC apprenticeship test. All the sample questions you see today came from the official FedEx and NJATC websites. This info is on the web for anybody who's interested in applying.

Our goal is to compare each set of test questions with the kinds of questions you found on the ACT PLAN. Later, we'll review what you can do now to get the skills you need to do well on tests of this type.

2. [Divide students into pairs, and assign each pair to one of the two tests.]
3. **SAY SOMETHING LIKE:** You and your partner have been assigned either the FedEx test or the NJATC test. For this activity, you and your partner will need to carefully read through the test you have been assigned. Look over the whole test before you start answering the questions on the chart. When you finish your research, your pair will be responsible for describing your test to another team that looked at the test you didn't review.

To find the form you'll need to record your results, please turn to **Student Handbook pages 66–67, So, What Do These Tests Test?** Note that you and your partner are only responsible for completing the form for one of the tests.

The sample questions themselves are located on the pages immediately following the chart.

[Write the test names and page numbers on the board.]

4. **SAY SOMETHING LIKE:** If you finish early, you may want to see how many of the questions you can answer. I'll leave the answer keys here [show where] so you can check your answers after you're done.

You'll have 20 minutes to complete this assignment. I'll give you a 10-minute and a five-minute warning before it's time to stop.

III. Sharing Information (10 minutes)

1. [Bring class back together, and create teams of four by matching pairs who read about different tests. Each pair will have four minutes to present their information. List the questions below on an overhead projector or on chart paper. Direct your students' attention to the questions and explain that these are the questions you should be discussing in your groups.]

Discussion Questions:

- How was your test like the ACT PLAN?
- How was it different?
- What was surprising about your test?
- If your goal was to get a high score on this test, what could you do now to prepare?
- Who are some people who could help you achieve this goal?
- What other resources might you use to help you prepare for these kinds of tests?]

IV. WRAP UP (5 minutes)

1. **SAY SOMETHING LIKE:** Tests are a part of school life, and, as you've seen today, a part of life beyond school. Knowing the kinds of questions to expect can help you do well. More important, this is a perfect example of beginning with the end in mind. Knowing that colleges and future employers are going to depend on your ability to read and do math is an excellent reason to take your high school work seriously, starting today, if you're not doing so already.
2. [Have students turn to **Student Handbook page 78, Check-up Questions** and complete it before leaving class.]

SKILLS CHECKLIST

Direct students' attention to **Portfolio pages 28–30, Grade 10 Skills Checklist**. Have students complete the skills checklist questions for Taking Tests skills.

TAKING TESTS

I can...

Identify reasons why it's a good idea to take the PSAT or the ACT PLAN.	<input type="checkbox"/> not at all	<input type="checkbox"/> somewhat	<input type="checkbox"/> very well
Identify strategies that will help me to maximize my test taking abilities.	<input type="checkbox"/> not at all	<input type="checkbox"/> somewhat	<input type="checkbox"/> very well

DO NOW

Taking Tests 3: Post-High School Tests

Directions: You will have three minutes to read the questions below and write your responses.

QUESTIONS:

1. What test(s) do most colleges require as part of their admission process?

2. Why are these tests important to colleges?

3. True or False: People who deliver packages for FedEx have to take a test before they will be considered for an interview. (Explain your answer.)

SAMPLE QUESTIONS ANSWER KEY



Federal Express Test of Basic Skills Answer Key:

Applied Reading Demonstration

1. C

Map Reading Demonstration

1. D

Listening Demonstration

1. RIGHT
2. WRONG
3. RIGHT

Sorting Demonstration

1. A
2. G
3. E
4. A
5. E
6. K
7. B
8. H

NJATC



Apprenticeship Aptitude Test Answer Key:

Algebra and Functions

1. B
2. A
3. C
4. A
5. C

Reading Comprehension

6. C
7. D
8. C

SO, WHAT DO THESE TESTS TEST? (and WHY SHOULD I CARE?)

Directions: Your mission is to review sample questions from **one** of the two tests listed below. Then you and your partner will answer the questions in the column below the test you reviewed. When you've finished, you will share your results with another pair who reviewed the other test.

If you finish early, you may want to try some of the questions to see if you're ready for a great job after high school.

	<p>FedEx Basic Skills Test</p> 	<p>NJATC Apprenticeship Apprenticeship Aptitude Test</p> 
<p>1. Why would someone want to take this test? [Inference question]</p>	<p>Anyone who wants to be a courier, someone who delivers packages for FedEx, would need to take this test. This basic skills test is a required part of the application process.</p>	<p>Anyone who wants to qualify for an apprenticeship for a job in the electrical industry needs to take this test. This test is required for consideration for the apprenticeship.</p>
<p>2. What skills are tested?</p>	<ul style="list-style-type: none"> • Reading comprehension. • Ability to read maps correctly. • Ability to listen and take notes effectively. • Ability to sort packages correctly. 	<ul style="list-style-type: none"> • Ability to add, subtract, multiply, divide, and use algebraic formulas. • Ability to read and understand graphs, charts and diagrams. • Reading comprehension.
<p>3. What skills on this test are not on the ACT PLAN?</p>	<p>The ACT PLAN does not test on reading maps, or listening and taking notes. While sorting packages is not directly tested, this topic falls under reading comprehension and analyzing charts. Both of those skills are tested on the ACT PLAN.</p>	<p>All of the skills above are tested on the ACT PLAN.</p>

SO, WHAT DO THESE TESTS TEST? (and WHY SHOULD I CARE?) *cont'd*

	<p>FedEx Basic Skills Test</p> 	<p>NJATC Apprenticeship Apprenticeship Aptitude Test</p> 
<p>4. Example of a hard question from this test</p>	<p>There is not one right answer!</p>	<p>There is not one right answer!</p>
<p>5. Ways you might prepare for this test during high school [Inference Question]</p>	<ul style="list-style-type: none"> • Pay attention in English class. • Read more books and longer magazine articles. • Practice taking effective notes in class. 	<ul style="list-style-type: none"> • Pay attention in English class. • Read more books and longer magazine articles. • Pay attention in math class. • Go to tutoring if you are struggling in math or English.
<p>6. Why do the companies give this test? [Inference Question]</p>	<p>FedEx gives this test to make sure that their couriers are competent to do the tasks of the job. The specific skills are being able to: understand written directions/documents, correctly read maps, write effective notes from oral messages, and correctly sort packages.</p>	<p>NJATC gives this test to assess whether the applicant has the basic aptitudes to perform functions necessary for an electrician. Electricians need to be proficient in basic math and English skills.</p>
<p>7. What happens if you do really well on this test? [Inference Question]</p>	<p>You could either be selected for an interview or chosen for a job.</p>	<p>You could be selected for the apprenticeship with the NJATC.</p>

SO, WHAT DO THESE TESTS TEST? (and WHY SHOULD I CARE?)

Directions: Your mission is to review sample questions from **one** of the two tests listed below. Then you and your partner will answer the questions in the column below the test you reviewed. When you've finished, you will share your results with another pair who reviewed the other test.

If you finish early, you may want to try some of the questions to see if you're ready for a great job after high school.

<p>1. Why would someone want to take this test? [Inference question- the answer is not found in the text. You have to make your own predictions.]</p>	<p>FedEx Basic Skills Test</p> 	<p>NJATC Apprenticeship Apprenticeship Aptitude Test</p> 
<p>2. What skills are tested?</p>		
<p>3. What skills on this test are not on the ACT PLAN?</p>		

SO, WHAT DO THESE TESTS TEST? (and WHY SHOULD I CARE?) *cont'd*

	<p>FedEx Basic Skills Test</p> 	<p>NJATC Apprenticeship Apprenticeship Aptitude Test</p> 
<p>4. Example of a hard question from this test</p>		
<p>5. Ways you might prepare for this test during high school [Inference Question]</p>		
<p>6. Why do the companies give this test? [Inference Question]</p>		
<p>7. What happens if you do really well on this test? [Inference Question]</p>		



Job Summary

A FedEx Courier is responsible for courteous and efficient pickup and delivery of packages. Candidates work an average of 17.5 to 30 hours a week. **Pay rate is \$14.42/hr.**

General Requirements

At least 21 years of age, high school diploma/GED; valid state driver's license; able to lift 75 lbs. and maneuver packages weighing above 75 lbs. with appropriate equipment; successfully pass all basic and recurrency training; demonstrate good human relations and verbal communication skills; and maintain a neat appearance.

Sample Questions

Skill Tested: Applied Reading Demonstration

Directions: Read the passage. Select the most correct answer based on the passage. To indicate your answer, mark the letter of your answer.

Customer contact employees should advise customers on how to properly prepare their package for shipment using the following guidelines.

- Place address labels on three sides of the package, and put another one inside the package.
- Don't secure packages with string or rope.
- Seal packages securely with plastic tape. Don't use household cellophane tape, masking tape, or water-activated tape.

1. Address labels should be placed on how many side(s) of a package?

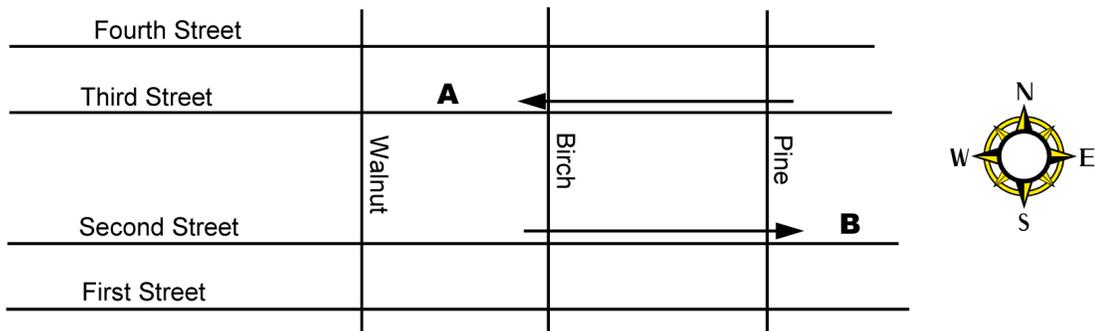
- (A) One side
- (B) Two sides
- (C) Three sides
- (D) Four sides

SOURCE: All information regarding FedEx job requirements and the Test of Basic Skills is available on their website, http://images.fedex.com/images/ascend/careers/BST_Flyer_Verbiage.pdf?link=4.



Skill Tested: Map Reading Demonstration

Directions: Using the map below, answer the following question without breaking any traffic laws. All streets on the map are two way unless marked by an arrow.



1. Which of the following is the shortest route from location A to location B?

- (A) East on Third Street, turn right on Pine, turn left on Second Street
- (B) East on Third Street, turn right on Birch, turn left on Second Street
- (C) West on Third Street, turn right on Birch, turn left on Second Street
- (D) West on Third Street, turn left on Walnut, turn left on Second Street

SOURCE: All information regarding FedEx job requirements and the Test of Basic Skills is available on their website, http://images.fedex.com/images/ascend/careers/BST_Flyer_Verbiage.pdf?link=4.



Skill Tested: Listening Demonstration

Directions: You will hear spoken information that is recorded on tape, and you will then answer questions about what you heard. You will be able to take notes while you listen.

Example Message:

“Go to the supply room and get 6 shipping boxes and a package of shipping forms. Take them to the front office and give them to Cindy, who is waiting for you. Ask her if she needs any help in packaging the employee files being sent to Memphis, and help her with them if she says she does.”

After you listen to the message, you will listen to statements. If the statement is correct, based on what was said in the message, check the line next to RIGHT. If the statement is not correct, based on what was said in the message, then check the line next to WRONG.

1. The employee files are being shipped to Memphis.

___RIGHT ___ WRONG

2. You are to get 6 shipping forms from the supply room.

___RIGHT ___ WRONG

3. The boxes and forms are to be taken to Cindy, who is in the front office.

___RIGHT ___ WRONG

SOURCE: All information regarding FedEx job requirements and the Test of Basic Skills is available on their website, http://images.fedex.com/images/ascend/careers/BST_Flyer_Verbiage.pdf?link=4.



Skill Tested: Sorting Demonstration

Directions: Packages are marked with a shipping code that is used to sort packages. Packages are taken to a location within a depot depending on the first two numbers of the shipping code. The following location chart shows the locations to which packages with each of the sorting codes are taken. For example, packages beginning with the numbers 00 through 10 all go to location A. A package whose sorting code is followed by either “(DANGEROUS)” or “(PRIORITY)” is marked for one of our two special services. Packages marked for a special service are always placed in the appropriate special service location, regardless of what the first two numbers of its shipping code are.

LOCATION CHART			
SHIPPING CODE (First two numbers only)	LOCATION	SHIPPING CODE (First two numbers only)	LOCATION
00-10	A	65-85	G
11-25	B	86-93	H
26	C	94-99	I
27	D	Special Services	
28-45	E	DANGEROUS	J
46-65	F	PRIORITY	K

Mark the correct letter location for the problems below. The first two shipping codes have already been done for you.

SHIPPING CODE	LOCATION
1. 02BZT	<input checked="" type="radio"/> A B C D E F G H I J K
2. 81TNM	A B C D E F <input checked="" type="radio"/> G H I J K
3. 38JSV	A B C D E F G H I J K
4. 07MMN	A B C D E F G H I J K

SHIPPING CODE	LOCATION
5. 43CPH	A B C D E F G H I J K
6. 90LUA (PRIORITY)	A B C D E F G H I J K
7. 22CCK	A B C D E F G H I J K
8. 92DAY	A B C D E F G H I J K

SOURCE: All information regarding FedEx job requirements and the Test of Basic Skills is available on their website, http://images.fedex.com/images/ascend/careers/BST_Flyer_Verbiage.pdf?link=4.



Apprenticeship Summary

The National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) jointly sponsor apprenticeship training programs that offer you the opportunity to earn wages and benefits while you learn the skills needed for a trade that can be both challenging and rewarding. You will have the chance to use your mind, as well as your physical skills, to complete work in a variety of settings with the constant opportunity to learn something new.

The sample questions are designed to help you prepare for the NJATC Aptitude Test. This test is a mandatory part of the application process.

Apprenticeship programs range from three to five years. For a list of electrical specialties and the skills needed for this kind of work, see...
<http://www.njatc.org/training/apprenticeship/index.aspx> .

General Requirements

- Minimum age 18
- High School Education
- One Year of High School Algebra
- [Qualifying Score on an Aptitude Test](#)
- Drug Free

SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.



SAMPLE QUESTIONS: Math Ability Skills

1. Consider the following formula: $A = B + 3(4 - C)$

If B equals 5 and C equals 2, what is the value of A?

- (A) 7
(B) 11
(C) 12
(D) 17

2. Consider the following formula: $y = 3(x + 5)(x - 2)$

Which of the following formulas is equivalent to this one?

- (A) $y = 3x^2 + 9x - 30$
(B) $y = x^2 + 3x - 10$
(C) $y = 3x^2 + 3x - 10$
(D) $y = 3x^2 + 3x - 30$

SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.



SAMPLE QUESTIONS: Math Ability Skills

3. Consider the following pattern of numbers: 110, 112, 107, 109, 104

What is the next number in the pattern?

- (A) 97
(B) 99
(C) 106
(D) 109

4. Consider the following formula: $a = \frac{1}{2}b - 4$

Which of the following statements is true for this formula?

- (A) When the value of b is less than 8, a is negative.
(B) When the value of b is greater than 8, a is negative.
(C) When the value of b is less than 8, a is positive.
(D) When the value of b is greater than 4, a is positive.

SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.



SKILL: Competency with Graphs, Charts, and Diagrams

5. Consider the following table:

X	Y
0	-5
1	-4
2	-3
3	-2
4	-1
5	0
6	1

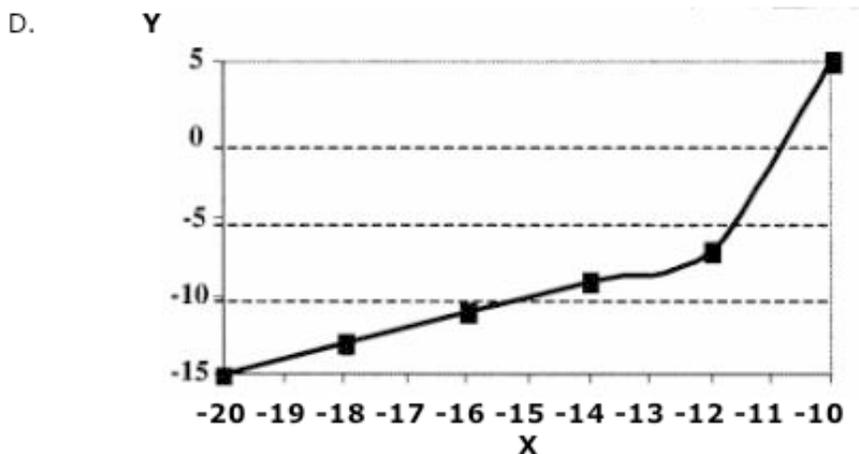
Which of the following choices represents the same relationship as demonstrated in this table?

A.

X	Y
10	-40
20	-30
30	-20
40	-10

B. $Y = x/2 - 5$

C. Y is equivalent to the difference between the value of X and a constant C, where C equals 5.



SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.



Sample Reading Comprehension

This test measures your ability to obtain information from written passages. You will be presented with a passage followed by a number of questions about it. A sample passage is shown below, followed by three sample questions. This passage is shorter than those on the actual test.

Passage

The timing of New Year's Day has changed with customs and calendars. The Mayan civilization, on what is now called the Yucatan peninsula of Mexico, celebrated the New Year on one of the two days when the noonday sun is directly overhead. In the equatorial regions of the earth, between the Tropics of Cancer and Capricorn, the sun is in this position twice a year, once on its passage southward, and once on its passage northward. At the early Mayan city of Izapa in the southern Yucatan, the overhead date for the sun on its southward passage was August 13. The Mayans celebrated this as the date for the beginning of the New Year. Later at the more northerly Mayan site at Edzna, the corresponding overhead date is July 26. Analyses of Mayan pictorial calendars indicate that they celebrated the New Year on August 13 prior to 150 AD, and on July 26 after that year. This change has been explained by archaeological dating showing that 150 AD was the time that the Mayans moved the hub of their civilization from the southern to the northern site.

6. According to the passage, the sun at Edzna was directly overhead at noon on:

- (A) July 26 only
- (B) August 13 only
- (C) July 26 and one other date
- (D) August 13 and one other date



Sample Reading Comprehension

7. If the Mayans had moved their civilization's center south of Izapa, their new date for celebration of the New Year would probably have been closest to which of the following dates?

- (A) January 1
(B) February 20
(C) March 25
(D) September 15

SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.

8. Based on the information in the passage, which of the following statements is true?

- (A) Mayans made Edzna the capital because it was more temperate than Izapa.
(B) All Mayans moved to Edzna in 150 AD.
(C) Mayans used calendars to mark the passage of time.
(D) The Mayan city of Izapa was destroyed in 150 AD.

SOURCE: All information regarding NJATC apprenticeships and testing is available on their website, <http://www.njatc.org/training/apprenticeship/index.aspx>.

CHECK-UP QUESTIONS

1. Of the three tests we looked at during the last three weeks, which do you think you would you be most interested in taking?

- The ACT PLAN
- The FedEx Basic Skills Test
- The NJATC Apprenticeship Test

2. What's one thing you could do between now and high school graduation to make sure you do well on this type of test?

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