The BIG Idea

- What kinds of questions will be on the ACT?

AGENDA

Approx. 45 minutes

I. Warm Up: Making the Write Decision (5 minutes)

II. How to ACT (5 minutes)

III. The Real Deal (30 minutes)

IV. Wrap Up: Registration Clarification (5 minutes)

MATERIALS

- ❑ **STUDENT HANDBOOK PAGES:**
  - Student Handbook page 52, Making the 'Write' Decision
  - Student Handbook page 53, How to ACT
  - Student Handbook pages 54-56, The Real Deal: ACT English Test Sample
  - Student Handbook pages 57 and 58, The Real Deal: ACT Math Test Sample
  - Student Handbook page 59-61, The Real Deal: ACT Science Test Sample
  - Student Handbook pages 62 and 63, The Real Deal: ACT Reading Test Sample
- ❑ **FACILITATOR PAGES:**
  - Facilitator Resource 1, The Real Deal Answer Key
- ❑ Timer
- ❑ Calculators (one class set)
- ❑ Chart paper
- ❑ Overhead or LCD projector
- ❑ highlighters

OBJECTIVES

During this lesson, students will:

- Analyze whether to take the Optional ACT Writing Test.
- Learn general ACT test-taking strategies.
- Get to know the structure and content of the ACT.
- Work through sample questions from each ACT section.

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OVERVIEW

Every website and test prep guide for students taking the ACT stresses the importance of practice tests. There is no substitute for being familiar with the format and types of questions asked, and there's no doubt that having prior experience tackling real "retired" ACT questions will help students better prepare for the test day. Also, students will do better if they approach the test armed with general ACT test-taking strategies. This lesson includes practice questions, strategies, and tips.

PREPARATION

- ❑ List the day's **BIG IDEA** and activities on the board.
- ❑ For **Activity I, Warm Up,** visit a few college websites to see if they recommend taking the ACT Assessment Plus Writing. Jot down the answers so you can share them with the class. Try to find examples that might be familiar, such as a city college or state university, a popular college in town, or a desirable "reach" school in the region.
- ❑ The following handouts need to be made into overhead transparencies or copied onto chart paper:
  - **Student Handbook page 53, How to ACT.**
  - **Facilitator Resource 1, The Real Deal Answer Key**
- ❑ Visit www.actstudent.org for a complete discussion about preparing for the ACT, and also to review other test examples not included in this lesson.
- ❑ Print out extra copies of the checklist from last week's lesson (Grade 11, Test Prep 1, Introduction to ACT-SAT) **Student Handbook pages 50-51, Plan of Action for Activity IV, Wrap Up: Registration Clarification. (NOTE: Remind students that it is critical to keep this information confidential if parents decide to provide credit card information or social security information.)**

BACKGROUND INFORMATION

Understanding what to expect and practicing sample questions will help students immensely when they take the ACT. Although there is no substitute for solid schoolwork as the best prepa-

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ration for the ACT, familiarity and experience will go far in helping to boost confidence, and ultimately, scores. Many students from upper-middle class families take "prep courses" that give them this leg up; but test-taking tips and practice questions are free to students who look for them on the internet, in school guidance offices, and at public libraries. This lesson should arm students with practical knowledge about the ACT, give them a sense of what to expect and how to approach it, and also motivate them to seek out more practice on their own.

IMPLEMENTATION OPTIONS

In **Activity III, The Real Deal**, only go over as many answers as you have time for in each section – probably one or two. (Students who want to check the rest of their answers can do so on the ACT website, where these sample questions and answers were posted.) How much you cover may vary section to section. Also, it's more valuable to focus on the strategies for each section, rather than on the explanation of any one answer.

If math isn't your area of expertise, ask a star student to explain the math section answers, or refer students to their math teacher for help. **Again, the general test-taking strategies are more important than individual answers.**

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ACTIVITY STEPS

I. WARM UP: Making the 'Write' Decision (5 minutes)

1. Direct students to **Student Handbook page 52, Making the 'Write' Decision.** Give students two minutes to complete.

2. **SAY SOMETHING LIKE:** As you know, next week we'll register in class for the ACT, and you'll have to know if you're taking the ACT Assessment *Plus Writing*, which includes the essay. Let's talk a little about this decision. How many of you have thought about it?

   [Wait for hands to go up, but don't call on anyone yet.]

   Okay. And how many of you have checked with schools you might consider applying to, to see if it's required?

   [Again, wait for hands. If many go up, call on students to report their findings, and tell which schools did or didn't require it. Read the results of your own research, if no one covered them. If most hands did NOT go up, continue as follows.]

   Is it fair to say that you're still unsure about what schools to apply to, so you're having trouble making this decision?

   [Let kids nod, comment, express their anxiety.]

   I know how you feel. But this is an important decision you need to make and you need to do the right thing for *you*. So think about it carefully, talk to your parents, and check a few college websites to learn their requirements. I checked a few college websites at random and here's what I found. [Read your findings.]

   So, as you can see, schools are all different, and you have to make your decision based on an educated guess of where you might apply. Even if you don't end up applying to those schools, it won't hurt to know their requirements, and it might help you decide about the Writing Test. Of course, if you are a strong writer you'll want to take it to demonstrate your strength in this area.

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You can explore the Writing Test in further depth on the ACT website – www.act.org. The address is on your **Student Handbook page 52, Making the 'Write' Decision**. You can also ask your school counselor for help.

II. How To ACT (5 minutes)

1. **SAY SOMETHING LIKE:** It's always smart to go into an exam as prepared as possible, and that includes knowing some strategies that will help with that particular test. You may have studied some last year, in preparation for the PSAT or the ACT PLAN, but the ACT is a little different. So, let's quickly go over some test-taking tips suggested on the ACT website. Please turn to **Student Handbook page 53, How to ACT**.

   Display **Student Handbook page 53, How to ACT**, on the overhead projector. Give each student a highlighter. Call on students to read each point aloud. Students should highlight important information as it is read aloud.

   SAY SOMETHING LIKE: Knowing how to approach a test frees you up to focus on the content. It's like knowing the rules when you play a sport. Once you have them down, you don't have to think about them anymore. So you're free to work on just being awesome! Likewise, if you learn these tips, you'll walk into the ACT test, free to focus on the questions themselves.

III. The Real Deal (30 minutes)

1. **SAY SOMETHING LIKE:** Okay, here's your chance to practice. You're going to try some real questions from previous ACT tests, which have been "retired" and made available for practice. There are examples from each of the four sections of the basic ACT Assessment: English, Math, Science, and Reading. Please turn to **Student Handbook page 54, The Real Deal: ACT English Test Sample**.

   [Hand out calculators to any student who needs one. When everyone has turned to **Student Handbook page 54**, continue.]

   You'll have two minutes to answer questions in each section, and then we'll discuss them. In addition to going over the answers, I'll give you some helpful strategies you can use if you encounter a similar type of question on the real test.

   Each section has more questions than you can finish in two minutes – you may have time to answer only one or two. Do as many as you can in the allotted time. How many you do is not important today; the goal is to try your hand at some real ACT content.

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Keep working on each designated section until I call time. Don't flip forward, or turn back to other test sections, and stop working immediately when you hear me say, "stop". In the real test, you'll be disqualified if you don't put your pencil down when the proctor says "stop".

One other thing you should know: in the real test, you will have a standardized answer sheet with ovals to fill in; today, you will just circle the answer.

The first section is the **ACT English Test Sample**.

[Get your timer ready and announce, "Go." Give students two minutes to work.]

Okay, STOP! Pencils down.

Spend five minutes discussing the answers, and going over the strategies listed on your **Facilitator Resource 1, The Real Deal Key.** Display these strategies on an overhead projector or chart paper. During your discussions, if your students provide the correct answers and seem to understand, skip the formal explanations and focus on the strategies. **If it seems unnecessary, do not go over the "wrong" answers.**

Tell students to write down at least two strategies on their page, as indicated. Then tell students to turn to the next page, and start the next section.

Continue in this manner, giving students two minutes to work, and five minutes to discuss, until you have covered the four sections of sample questions, explanations, and strategies.

III. WRAP UP: Registration Clarification (5 minutes)

1. Write this web address on the board: http://www.actstudent.org/testprep/index.html

   SAY SOMETHING LIKE: The more practice you get, the better prepared you'll be on test day. [Point to the web address on the board.] So do yourself a favor, and visit this website, where you can find many more practice questions, along with information and test-taking tips.

   Take out the copies you made of Grade 11, Test Prep 1, Introduction to ACT-SAT, **Student Handbook pages 50-51, Plan of Action**, and hold them up in front of the class.

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Remember that next week you'll register in class for the ACT exam. You will need to have completed everything on last week's checklist. I have copies here for anyone who needs one. Please raise your hands if you do.

[Give out the sheets, while going over the points out loud.]

For next week you need to:

- Select a test date and location
- Decide if you are taking the Writing Test.
- Ask your guidance counselor for a fee waiver number if you need financial assistance with the registration fee.
- Bring in credit card information, and a permission note to use the credit card from your parent. You'll also need the name and address of the credit card holder (i.e. your parent), the credit card company name (Visa, American Express, Discover, etc), the card number, the expiration date, and the three or four digit security code (located on the back of the card where the card holder's signature is).
- If you are planning on completing the paper registration, bring in a check or money order made out to "ACT Registration".

WARNING: To avoid identity theft or unauthorized purchases, please do NOT share this information with anyone.

If you're concerned about these issues, you may complete everything but the credit card information in class, and log on to add this information at home.

Any questions? [Field questions.] See you next week, on Registration Day.

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The Real Deal Answer Key

During your discussions, if your students provide the correct answers and seem to understand, skip the formal explanations and focus on the strategies. If it seems unnecessary, do not go over the "wrong" answers.

The layout of the test examples (in all sections except Math) make it difficult to put the answers immediately after the questions. Therefore, the answers appear at the end of the test questions in this answer key, except for Math.

Please note that all questions and answers have been excerpted from the ACT website: http://www.actstudent.org/sampletest/index.html. Test-taking strategies have been also been excerpted from this site. For more ACT practice questions and answers, please visit the website above.

SAMPLE ENGLISH TEST

On the ACT English Test, students have 45 minutes to read five passages and answer 75 multiple choice questions about them. In this sample, they must read a passage and choose which alternatives are the best replacement for underlined words and phrases. They are being judged on their ability to find the word or phrase most appropriate for standard written English, or most consistent with the style and tone of the passage as a whole. Your guide has answers for the first four questions, which should be more than enough to discuss in four minutes.

Philosophy and Baseball

In the fall of 1967, the Boston Red Sox were playing in the World Series. I was a freshman at a <u>university that was located in the Midwest</u> at the time, enrolled in a philosophy course that met at two in the afternoon. The course was taught by a native Bostonian. He wanted to watch the games on television but he was too responsible to cancel class. So he conducted classes, those October afternoons, while actually listening to the games on a small transistor radio propped up inside his lectern, the volume turned down so that only he could hear.

1.	**A.**	NO CHANGE
	B.	midwestern university then
	C.	midwestern university
	D.	university which was in the Midwest

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2 Baseball is unique among	**2.**	**Which of the following sentences, if inserted at this point, would provide the most effective transition to the second paragraph?**	
		F.	Accounting for this kind of behavior is easy.
		G.	Most of the students in the class were not fond of this instructor.
		H.	Today, most World Series games are played in the evening.
		J.	He did a remarkable job, considering how distracted he must have been.
American sports <u>by</u> its ability to appeal to a	**3.**	**A.**	NO CHANGE
		B.	as
		C.	in
		D.	because
<u>love resembling that of a child</u> of fable and legend.	**4.**	**F.**	NO CHANGE
		G.	love that seems to occur during childhood
		H.	love like that of children
		J.	childlike love

ENGLISH TEST ANSWERS:

1. **The best answer is C,** which concisely and clearly expresses the idea that the university the writer attended was in the Midwest. The other choices all contain defects of style. Choices A and D are both needlessly wordy; in addition, the confusing arrangement of relative clauses and prepositional phrases they contain oddly suggests that the university was "in the Midwest at the time" - but may later have moved. Choice B is pointlessly redundant, because the word *then* and the phrase "at the time" mean the same thing here.

2. **The best answer is F,** which is the only sentence to directly connect the topic of the first para-

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graph (the professor's behavior) with the topic of the second paragraph (the hold that baseball has on people's imagination). The other choices add sentences that do not make that shift clear and that also do not serve as accurate introductions or signals to the topic of the second paragraph - something a good transition must do. The claim in Choice G is unsupported by either paragraph and thus cannot link them. While Choices H and J are logical offshoots of the first paragraph, they do not signal the shift in focus from the professor to the magic of baseball and, in fact, are unconnected to anything in the second paragraph. Therefore, they don't work as transitions.

3. **The best answer is C,** which is the most idiomatically standard usage. The other choices are nonstandard usage, and some create other grammatical problems as well. Choice A is nonstandard usage ("Baseball is unique . . . by its ability"). Choices B and D replace the preposition needed with a conjunction (*as* and *because,* respectively), an action which creates sentence fragments in addition to nonstandard usage.

4. **The best answer is J,** because it avoids unnecessary wordiness and because it logically and clearly places the noun *love* closest to the prepositional phrase "of fable and legend" that modifies it. Choices F, G, and H are excessively wordy and separate the noun from its prepositional phrase, which unnecessarily clouds the meaning of the sentence.

ENGLISH TEST STRATEGIES:

- Be aware of the writing style used in each passage.
- Consider the elements of writing that are included in each underlined part of the passage. Some questions will ask you to base your decision on some specific element of writing, such as the tone or emphasis the text should convey.
- Be aware of questions with no underlined portions—that means you will be asked about a section of the passage or about the passage as a whole.
- Examine each answer choice and determine how it differs from the others. Many of the questions in the test will involve more than one aspect of writing.
- Read and consider all of the answer choices before you choose the one that best responds to the question.
- Determine the best answer.
- Reread the sentence, using your selected answer.

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SAMPLE MATH TEST

Note: On the ACT Mathematics Test, you have 60 minutes to answer 60 multiple-choice questions.

DIRECTIONS: Solve each problem, choose the correct answer, and circle it.
You are permitted to use a calculator on this test. You may use your calculator for any problems you choose, but some of the problems are best done without one.

Note: Unless otherwise stated, all of the following should be assumed:

1. Illustrative figures are NOT necessarily drawn to scale.
2. Geometric figures lie in a plane.
3. The word *line* indicates a straight line.
4. The word *average* indicates arithmetic mean.

START

1. Which of the following is equivalent to $(x)(x)(x)(x)$, for all x ?

A. $4x$

B. x^4

C. $x + 4$

D. 4^x

E. $2x^2$

ANSWER: The correct answer is B.

By definition, x^4 means the product of 4 factors of x so x^4 is equivalent to $(x)(x)(x)(x)$.

A. $4x = x + x + x + x$, which is not the same as the product of 4 factors of x.
C. $x + 4$ is not the same as the product of 4 factors of x.
D. 4^x is x factors of 4, which is not the same as the product of 4 factors of x.
E. $2x^2$ is $2 \cdot x \cdot x$, which is not the same as the product of 4 factors of x.

2. A rectangle is twice as long as it is wide. If the width of the rectangle is 3 inches, what is the rectangle's area, in square inches?

F. 6

G. 9

H. 12

J. 15

K. 18

ANSWER: The correct answer is K.

The rectangle is 3 inches by 6 inches, so the area is 3(6) = 18 square inches.

F. If the area were 6, then $l = \frac{8}{13} = 2$, but this length isn't twice the width.
G. If the area were 9, then $l = \frac{9}{3} = 3$, but this length isn't twice the width.
H. If the area were 12, then $l = \frac{12}{3} = 4$, but this length isn't twice the width.
J. If the area were 15, then $l = \frac{15}{3} = 5$, but this length isn't twice the width.

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3. A vendor has 14 helium balloons for sale: 9 are yellow, 3 are red, and 2 are green. A balloon is selected at random and sold. If the balloon sold is yellow, what is the probability that the next balloon, selected at random, is also yellow?

A. $\frac{8}{13}$

B. $\frac{9}{13}$

C. $\frac{5}{14}$

D. $\frac{8}{14}$

E. $\frac{9}{14}$

ANSWER: The correct answer is A.

There are 14 balloons, of which 9 are yellow. If a yellow balloon is sold, there are 13 balloons left, of which 8 are yellow. The probability of selecting a yellow balloon is $\frac{8}{13}$.

B. $\frac{9}{13}$ cannot be the probability of selecting a yellow balloon; $\frac{9}{13} \neq \frac{8}{13}$ because $9(13) \neq 8(13)$.

C. $\frac{5}{14}$ cannot be the probability of selecting a yellow balloon; $\frac{5}{14} \neq \frac{8}{13}$ because $5(13) = 65$, $14(8) = 112$, and $65 \neq 112$.

D. $\frac{8}{14}$ cannot be the probability of selecting a yellow balloon; $\frac{8}{14} \neq \frac{8}{13}$ because $8(13) \neq 8(14)$.

E. $\frac{9}{14}$ cannot be the probability of selecting a yellow balloon; $\frac{9}{14} \neq \frac{8}{13}$ because $9(13) = 117$, $14(8) = 112$, and $117 \neq 112$.

4. $3\ 3\ 10^{-4} = ?$

F. –30,000

G. –120

H. 0.00003

J. 0.0003

K. 0.12

ANSWER: The correct answer is J.

$$3\ 310^{-4} = 3\ 3\ \frac{1}{10^4} = 3\ 3\ \frac{1}{1000} = 0.0003$$

F. -30,000 in scientific notation is $-3\ 310^4$, not $3\ 310^{-4}$.
G. -120 in scientific notation is $-1.2\ 310^2$, not $3\ 310^{-4}$.
H. 0.00003 in scientific notation is $3\ 310^{-5}$, not $3\ 310^{-4}$.
K. 0.12 in scientific notation is $1.2\ 310^{-1}$, not $3\ 310^{-4}$.

MATH TEST STRATEGIES:

- Read each question carefully to make sure you understand the type of answer required.
- If you use a calculator, be sure it is working on test day and has reliable batteries. Use your calculator wisely.
- Solve the problem.
- Locate your solution among the answer choices.
- Make sure you answer the question asked.
- Make sure your answer is reasonable.
- Check your work.

Excerpted from the ACT website: http://www.actstudent.org/sampletest/index.html

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SAMPLE SCIENCE TEST

Note: On the ACT Science Test, you have 35 minutes to answer 40 multiple-choice questions.

DIRECTIONS: The passage in this section is followed by several questions. After reading the passage, choose the best answer to each question and circle it. You may refer to the passage as often as necessary.

You are NOT permitted to use a calculator on this section.

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START

Measles is an extremely contagious viral infection spread by the respiratory route. **Figure 1** shows the course of measles from time of exposure to recovery from the infection.

After recovery from measles, the infected individual develops immunity or resistance to reinfection. Figure 1 shows the development of immunity indicated by the antibody level.

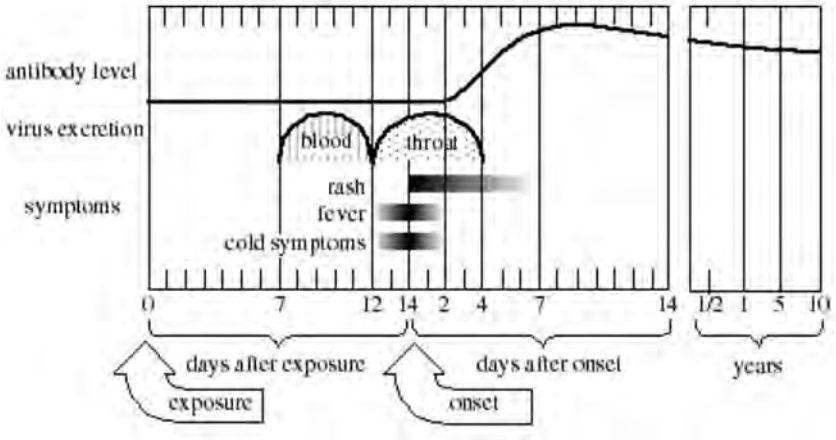

Figure 1 adapted from D. M. McLean, *Virology in Health Care*. ©1980 by Williams & Wilkins.

The number of reported cases of measles from 1950 through 1987 is depicted in **Figure 2**.

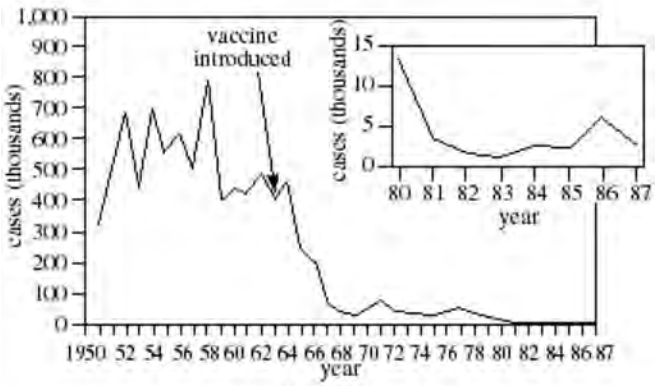

Figure 2 adapted from MMWR, "*Summary of Notifiable Diseases*." ©1986 Communicable Disease Center.

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1. On Day 10 after exposure to measles, one could conclude that the greatest concentration of the measles virus would most likely be found in which of the following locations?

A. Skin

B. Mouth

C. Blood

D. Throat

2. The introduction of the measles vaccine had which of the following effects, if any, on the occurrence of measles?

F. It completely eradicated measles after 1963.

G. It caused a decrease in the number of measles cases only during 1963.

H. It caused a gradual decrease from 400,000 measles cases in 1963 to approximately 1,500 in 1983.

J. The introduction of the measles vaccine had no effect on the occurrence of measles after 1963.

3. Based on the information presented in the passage and in Figure 1, would it be possible to determine that a person had immunity against the measles virus 6 months after exposure?

A. Yes; the level of protective antibodies against measles would be elevated 6 months after exposure.

B. Yes; the virus would still be present in the respiratory tract to protect against reinfection.

C. No; the level of protective antibodies against measles would be undetectable 6 months after exposure.

D. No; the virus would no longer be present in the blood to protect against reinfection.

4. On the basis of Figure 1, one can conclude that there is a rise in the antibody level when the:

F. fever vanishes.

G. rash first appears.

H. cold symptoms are most severe.

J. virus is present in the blood.

SCIENCE TEST ANSWERS

1. The best answer is C.
Figure 1 indicates where the virus excretion is found. Therefore, **Figure 1** should be used to answer this question.

A. *Skin*
Incorrect. **Figure 1** does not indicate an elevated concentration of measles in the skin. Thus there is no evidence to support the claim that on Day 10, the greatest concentration of the measles virus would be on the skin.

B. *Mouth*
Incorrect. **Figure 1** does not indicate an elevated concentration of measles in the mouth. Thus there is no evidence to support the claim that on Day 10, the greatest concentration of the measles virus would be in the mouth.

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C. *Blood*
Correct. **Figure 1** indicates that virus excretion is present in the blood between Day 7 and Day 12 of exposure. **Figure 1** does not indicate that virus excretion is present in any other part of the body on Day 10. Thus, C is correct.

D. *Throat*
Incorrect. **Figure 1** indicates that virus excretion is present in the throat on Day 12 after exposure, but not before Day 12. Thus, there is no indication of a high concentration of the measles virus in the throat on Day 10.

2. The best answer is H.
Figure 2 indicates that the measles vaccine was introduced during 1963. **Figure 2** also indicates the number of reported cases (in thousands) of measles from 1950 through 1987.

F. *It completely eradicated measles after 1963.*
Incorrect. **Figure 2** indicates that cases of measles were reported after 1963. Therefore it is not correct to say that measles were eradicated after 1963.

G. *It caused a decrease in the number of measles cases only during 1963.*
Incorrect. **Figure 2** does show a slight dip in the number of measles cases during 1963, however, the figure also indicates that following the introduction of the measles vaccine, the number of reported cases continued to drop through 1967.

H. *It caused a gradual decrease from 400,000 measles cases in 1963 to approximately 1,500 in 1983.*
Correct. According to **Figure 2**, in 1963, there were approximately 400,000 measles cases reported. Following 1963, this number continued to drop, reaching approximately 1,500 in 1985. Thus, H is the correct answer.

J. *The introduction of the measles vaccine had no effect on the occurrence of measles after 1963.*
Incorrect. According to Figure 2, prior to the introduction of the measles vaccine, the number of reported cases of the measles never fell below 300,000. However, once the measles vaccine was introduced in 1963, the number of reported cases of measles gradually fell.

3. The best answer is A.
Figure 1 depicts the progression of the measles from time of exposure until 10 years after exposure. Figure 1 also indicates the antibody level in the body.

EXPLANATION:

A. *Yes; the level of protective antibodies against measles would be elevated 6 months after exposure.*
Correct. Figure 1 indicates that 6 months after exposure, the antibody level is elevated. Since this level is not elevated prior to infection, it would be possible to determine that a person had immunity against the measles virus 6 months after exposure by measuring the antibody level and determining that it was elevated.

B. *Yes; the virus would still be present in the respiratory tract to protect against reinfection.*

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Incorrect. Figure 1 indicates that the virus excretion is present in the throat 2 to 3 weeks after exposure. However, the virus excretion is not present in the throat after 6 months.

C. *No; the level of protective antibodies against measles would be undetectable 6 months after exposure.*
Incorrect. Figure 1 indicates that the antibody level remains elevated for at least 10 years. Thus, the protective antibodies against measles would be detectable 6 months after exposure, making C incorrect.

D. *No; the virus would no longer be present in the blood to protect against reinfection.*
Incorrect. Even if the virus was no longer present in the blood, other factors could be measured to determine that a person had immunity against the measles virus 6 months after exposure. For example, the antibody level remains elevated for at least 10 years.

4. The best answer is F, fever vanishes.
Figure 1 indicates the change in antibody level. It also indicates the presence of a fever, the presence of a rash, the presence of cold symptoms, and when the virus is found in the blood. Therefore, Figure 1 should be used to answer this question.

F. *fever vanishes.*
Correct. The fever vanishes on Day 2 of onset. This is also when the antibody level begins to increase. Therefore, one can conclude that there is a rise in the antibody level when the fever vanishes.

G. *rash first appears.*
Incorrect. The rash first appears on Day 0 of onset. The antibody level remains constant until Day 2 of onset. Thus, the antibody level does not rise when the rash first appears.

H. *cold symptoms are most severe.*
Incorrect. Cold symptoms are most severe on approximately Day 0 of onset. The antibody level remains constant until Day 2 of onset. Thus, the antibody level does not rise when cold symptoms are most severe.

J. *virus is present in the blood.*
Incorrect. Figure 1 indicates that the virus excretion is present in the blood between Day 7 of exposure and Day 12 of exposure. Day 12 of exposure is 2 days before onset and 4 days before the antibody level begins to rise.

SCIENCE TEST STRATEGIES:

- Read the passage carefully.
- Refer to the scientific information in the passage when answering the question.
- Read and consider all of the answer choices before you choose the one that best responds to the question.
- Note conflicting viewpoints in some passages.

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ACT READING TEST SAMPLE

Note: On the ACT Reading Test, you have 35 minutes to answer 40 questions – 10 questions about each of four passages.

DIRECTIONS: The passage in this test is followed by several questions. After reading the passage, choose the best answer to each question and circle it. You may refer to the passage as often as necessary.

HUMANITIES: This passage is adapted from the article "Japan's Tansu: Cabinetry of the 18th and 19th Centuries" by Rosy Clarke (©1985 by W.R.C. Smith Publishing Company).

The Japanese, always pressed for room on their island empire, have long been masters at utilizing space. This is especially evident in the native handmade Japanese cabinetry known as *tansu*, produced from about 1750 to 1900. A prolific range of wooden tansu was created for a variety of needs, and a diverse group of pieces emerged, ranging from small, portable medicine chests to giant trunks on wheels.

Prior to Japan's Edo Period (1603-1867), ownership of furniture was limited to the nobility. Primarily, these were black-and-gold lacquered pieces of Chinese inspiration. But with the demise of Japan's feudal society and the rise of a moneyed merchant class by the mid-Edo Period, furniture in Japan took on its own personality, as craftsmen enjoyed the freedom to create original designs that combined function and beauty. Today, examples of these skillfully constructed chests tell us much about the lifestyle and accoutrements of people during the Edo Period and the Meiji Era (1868-1912).

The greatest demand was for clothing and merchants' chests; within these two categories, hundreds of stylistic variations occurred. Most clothing tansu were constructed with four long drawers for kimono storage

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30 weight and subtle, natural sheen. In the Edo Period, it was customary for Japanese fathers to plant a paulownia tree when a daughter was born. When she married, the tree was cut down and made into a trousseau chest.

1. According to the passage, the original popularity of tansu resulted primarily from the:

   A. desire to display clothing and other personal items.

   B. need to make good use of space.

   C. need to disguise a merchant's wealth.

   D. desire to be different from the Chinese.

2. The author claims that by studying examples of handcrafted Japanese tansu that are still available today, scholars can learn about which of the following?

   I. How mass production first began in Japan

   II. How Japanese industrialists developed shortcuts in building furniture

   III. How the Japanese lived during the Edo Period and the Meiji Era

   F. II only

   G. III only

   H. I and II only

   J. I, II, and III

STOP

READING TEST ANSWERS:

1. **The best answer is B.** Support for the answer is found in the first two lines of the passage.

2. **The best answer is G.** Support for the answer exists in lines 17–20, where the passage states that tansu can "tell us much about the lifestyle and accoutrements of people during the Edo Period and the Meiji Era."

READING TEST STRATEGIES:

- Read the passage carefully.
- Read and consider all of the answer choices before you choose the one that best responds to the question.
- Refer to the passage when answering the questions.

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Making the 'Write' Decision

Next week we will be registering for the ACT Assessment in class. You must decide before then if you are taking the "optional" Writing portion. The following statements may help you decide. Read them, and then answer the question below.

DID YOU KNOW …

1. The word "optional" is tricky. The "option" really belongs to colleges; *they* have the option of requiring it. If you apply to schools that require it, you have to take it.

2. Not all schools require or recommend it. To be sure, you must check directly with the institutions you are considering.

3. Most colleges will accept scores from the Writing Test even if they don't require it.

4. It's scored separately. It won't affect your subject area scores.

5. The test is 30 minutes. You write one essay on a given topic. You are given two points of view on the topic; you can choose one of these to write on, or pick your own point of view on the same topic.

6. You can find more information and sample essays at http://www.actstudent.org/writing/index.html .

Are you planning to register for the writing portion of the ACT? ❑ **yes** ❑ **no**

Explain why._____

_____

_____

_____

_____

_____

_____

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How to ACT

The ACT contains multiple-choice tests in four areas: *English, Mathematics, Reading*, and *Science*. Each of these tests contains questions that offer either four or five answer choices from which you are to choose the correct, or best, answer. The following suggestions apply to all four tests:

- Carefully read the instructions on the cover of the test booklet.
- Read the directions for each test carefully. Note that the English, Reading, and Science Tests ask for the "best" answer. The Mathematics Test asks for the "correct" answer. You should know these directions before the day of the test so that you won't waste valuable time.
- Read each question carefully. Note that some questions may require you to go through several steps, others can be done more quickly.
- Pace yourself. Figure out approximately how much time you have for each question, and use it as a guideline. For example, in the Math section, you have 60 minutes to answer 60 multiple-choice questions: that's about one per minute. The Reading Test has 40 questions to answer in 35 minutes (a little under a minute).
- Don't spend too much time on any one answer. If you get stuck, go on to the other questions and come back if there is time.
- Pay attention to the announcement of five minutes remaining for each test section.
- Answer the easy questions first, then go back and answer the more difficult ones.
- On difficult questions, use logic to eliminate as many incorrect answers as you can. Then compare the remaining answer choices, and make an educated guess.
- Answer every question. Your scores on the multiple-choice tests are based on the number of questions you answer correctly. There is no penalty for guessing on the ACT.
- Review your work. If you finish a test before time is called, go back and check your work. Be sure that you marked only one answer to each question. However, do not go back to any other section! You may not return to a section after time has been called on it.

Note: this is a compilation from the ACT website. Please visit this Internet address to find out more: http://www.actstudent.org/testprep/index.html.

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ACT ENGLISH TEST SAMPLE

Note: On the ACT English Test, you have 45 minutes to read five passages and answer 75 multiple choice questions about them.

DIRECTIONS: In the passage that follows, certain words and phrases are underlined and numbered. In the right-hand column, you will find alternatives for the underlined part.

In most cases, you are to choose the one that best expresses the idea, makes the statement appropriate for standard written English, or is worded most consistently with the style and tone of the passage as a whole. If you think the original version is best, choose "NO CHANGE." In some cases, you will find in the right-hand column a question about the underlined part. You are to choose the best answer to the question.

You will also find questions about a section of the passage, or about the passage as a whole. These questions do not refer to an underlined portion of the passage, but rather are identified by a number or numbers in a box.

For each question, choose the alternative you consider best and circle it. Read the passage through once before you begin to answer the questions that accompany it. For many of the questions, you must read several sentences beyond the question to determine the answer. Be sure that you have read far enough ahead each time you choose an alternative.

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START

Philosophy and Baseball

In the fall of 1967, the Boston Red Sox were playing in the World Series. I was a freshman at a

university that was located in the Midwest at the time, enrolled in a philosophy course that met at two in the afternoon. The course was taught by a native Bostonian. He wanted to watch the games on television but he was too responsible to cancel class. So he conducted classes, those October afternoons, while actually listening to the games on a small transistor radio propped up inside his lectern, the volume turned down so that only he could hear.

1.	**A.**	NO CHANGE
	B.	midwestern university then
	C.	midwestern university
	D.	university which was in the Midwest

2 Baseball is unique among

2.	**Which of the following sentences, if inserted at this point, would provide the most effective transition to the second paragraph?**	
	F.	Accounting for this kind of behavior is easy.
	G.	Most of the students in the class were not fond of this instructor.
	H.	Today, most World Series games are played in the evening.
	J.	He did a remarkable job, considering how distracted he must have been.

American sports by its ability to appeal to a

3.	**A.**	NO CHANGE
	B.	as
	C.	in
	D.	because

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love resembling that of a child of fable and legend.	**4.**	**F.**	NO CHANGE
		G.	love that seems to occur during childhood
		H.	love like that of children
		J.	childlike love

STOP

STRATEGIES FOR THE ENGLISH TEST:

- _____
- _____

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ACT MATH TEST SAMPLE

Note: On the ACT Mathematics Test, you have 60 minutes to answer 60 multiple-choice questions.

DIRECTIONS: Solve each problem, choose the correct answer, and circle it.
You are permitted to use a calculator on this test. You may use your calculator for any problems you choose, but some of the problems are best done without one.

Note: Unless otherwise stated, all of the following should be assumed:

1. Illustrative figures are NOT necessarily drawn to scale.
2. Geometric figures lie in a plane.
3. The word *line* indicates a straight line.
4. The word *average* indicates arithmetic mean.

START

(on next page)

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START

1. Which of the following is equivalent to $(x)(x)(x)(x)$, for all x ?

A. $4x$

B. x^4

C. $x + 4$

D. 4^x

E. $2x^2$

2. A rectangle is twice as long as it is wide. If the width of the rectangle is 3 inches, what is the rectangle's area, in square inches?

F. 6

G. 9

H. 12

J. 15

K. 18

3. A vendor has 14 helium balloons for sale: 9 are yellow, 3 are red, and 2 are green. A balloon is selected at random and sold. If the balloon sold is yellow, what is the probability that the next balloon, selected at random, is also yellow?

A. $\frac{8}{13}$

B. $\frac{9}{13}$

C. $\frac{5}{14}$

D. $\frac{8}{14}$

E. $\frac{9}{14}$

4. $3 \times 10^{-4} = ?$

F. –30,000

G. –120

H. 0.00003

J. 0.0003

K. 0.12

STOP

STRATEGIES FOR THE MATH TEST:

- _____
- _____

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ACT SCIENCE TEST SAMPLE

Note: On the ACT Science Test, you have 35 minutes to answer 40 multiple-choice questions.

DIRECTIONS: The passage in this section is followed by several questions. After reading the passage, choose the best answer to each question and circle it. You may refer to the passage as often as necessary.

You are NOT permitted to use a calculator on this section.

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START

Measles is an extremely contagious viral infection spread by the respiratory route. **Figure 1** shows the course of measles from time of exposure to recovery from the infection.

After recovery from measles, the infected individual develops immunity or resistance to reinfection. Figure 1 shows the development of immunity indicated by the antibody level.

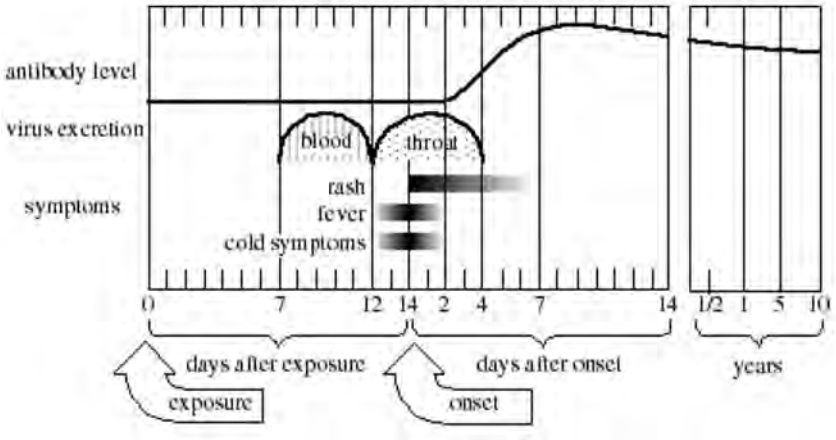

Figure 1 adapted from D. M. McLean, *Virology in Health Care*. ©1980 by Williams & Wilkins.

The number of reported cases of measles from 1950 through 1987 is depicted in **Figure 2**.

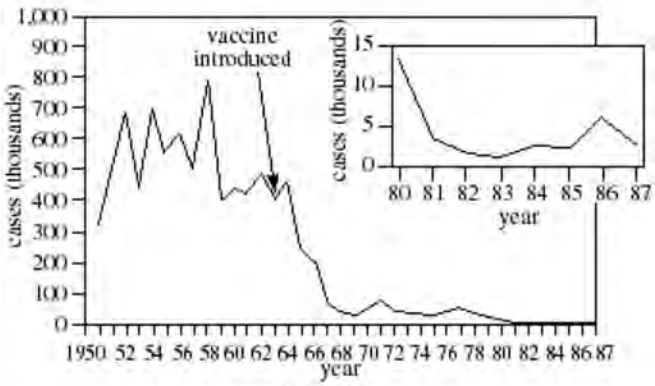

Figure 2

Figure 2 adapted from MMWR, "*Summary of Notifiable Diseases*." ©1986 Communicable Disease Center.

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1. On Day 10 after exposure to measles, one could conclude that the greatest concentration of the measles virus would most likely be found in which of the following locations?

   A. Skin

   B. Mouth

   C. Blood

   D. Throat

2. The introduction of the measles vaccine had which of the following effects, if any, on the occurrence of measles?

   F. It completely eradicated measles after 1963.

   G. It caused a decrease in the number of measles cases only during 1963.

   H. It caused a gradual decrease from 400,000 measles cases in 1963 to approximately 1,500 in 1983.

   J. The introduction of the measles vaccine had no effect on the occurrence of measles after 1963.

3. Based on the information presented in the passage and in Figure 1, would it be possible to determine that a person had immunity against the measles virus 6 months after exposure?

   A. Yes; the level of protective antibodies against measles would be elevated 6 months after exposure.

   B. Yes; the virus would still be present in the respiratory tract to protect against reinfection.

   C. No; the level of protective antibodies against measles would be undetectable 6 months after exposure.

   D. No; the virus would no longer be present in the blood to protect against reinfection.

4. On the basis of Figure 1, one can conclude that there is a rise in the antibody level when the:

   F. fever vanishes.

   G. rash first appears.

   H. cold symptoms are most severe.

   J. virus is present in the blood.

STOP

STRATEGIES FOR THE SCIENCE TEST:

- _____

- _____

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- _____

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