



Arkansas Comprehensive Testing, Assessment, and Accountability Program

# REPORT INTERPRETATION GUIDE

## Biology End-of-Course Examination

### January 2008 and April 2008 Administrations

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## INTRODUCTION

The purpose of this *Report Interpretation Guide* is to provide district and school personnel with information on how to interpret and use reports related to the January 2008 and April 2008 administrations of the *Biology End-of-Course Examination*. This *Report Interpretation Guide* provides general information about the components of the *Biology End-of-Course Examination*, describes the purpose of the program, and provides answers to commonly asked questions regarding the program. This guide contains report samples that illustrate student-, school-, and district-level information and gives detailed explanations of the report content. This guide also provides an overview of the performance levels associated with the *Biology End-of-Course Examination*. School and district staff can use the results listed as one measure of student ability in the development of educational improvement plans to enhance student performance in the future.

**Note:** Students with less than one year in a U.S. school whose answer documents had the “LEP student less than one year in the U.S.” bubble filled in will receive individual student reports and will be included on the roster reports but will not be included in any class or school averages or in summary data.

## OVERVIEW OF THE ACTAAP

The **Arkansas Comprehensive Testing, Assessment, and Accountability Program (ACTAAP)** is authorized under Arkansas Legislative Act 35 to promote the development of the Arkansas *Biology Science Curriculum Framework* as well as the development and use of assessment in accordance with the statewide educational goals. The ACTAAP includes ongoing norm-referenced testing. The ACTAAP also includes criterion-referenced tests specifically developed to measure thinking skills and problem-solving strategies associated with real-life performance expectations for school or work.

The *Biology End-of-Course Examination* is a criterion-referenced test that became operational in the 2007–2008 school year. All test questions on the *Biology End-of-Course Examination* align with the strands and subject-specific competencies described by the Arkansas *Biology Science Curriculum Framework*. As such, student performance on the *Biology End-of-Course Examination* is directly aligned with the statewide frameworks and statewide curriculum goals.

The goals for the ACTAAP are to

- improve classroom instruction and learning;
- support public accountability;
- provide program evaluation data;
- assist policy makers in decision-making.

As the ACTAAP continues to evolve, it will offer

- performance assessment of the core concepts, thinking skills, and problem-solving skills defined by the Arkansas Curriculum Frameworks;
- a variety of testing models, including portfolio assessment and performance tasks, which should encourage greater teacher involvement in the assessment process.

## FREQUENTLY ASKED QUESTIONS

The following are commonly asked questions regarding the *Biology End-of-Course Examination* and associated answers to these questions. This list of questions has been compiled based on feedback from district staff (e.g., teachers, school and district test coordinators, principals, superintendents). This list is not exhaustive, but the questions listed have been selected due to the number of times they have been asked by a broad cross-section of the Arkansas education community.

### 1. Who is required to take the *Biology End-of-Course Examination*?

The January 2008 *Biology Mid-Year End-of-Course Examination* should be administered to **all** students completing Biology by the end of first semester for high school credit who are eligible for testing under standardized conditions, with or without accommodations. The April 2008 *Biology End-of-Course Examination* should be administered to **all** students completing Biology by the end of the spring semester for high school credit who are eligible for testing under standardized conditions, with or without accommodations.

### 2. There is too much testing required by the State. How are teachers supposed to have time for instruction?

The Arkansas Department of Education requires norm-referenced tests and criterion-referenced tests to be administered. A norm-referenced test was administered in 2008 and the *Biology End-of-Course Examination* was administered in January 2008 and in April 2008. The *Biology End-of-Course Examination* requires two days of testing. This test is part of the overall plan for education within the state and is to be used to gauge the success of curricular and instructional change. All other tests given at the district level are at the discretion of the district.

### 3. Why can't students just take some other test (or use other test results) to demonstrate performance?

The *Biology End-of-Course Examination* has been developed to specifically align with the Arkansas *Biology Science Curriculum Framework* in order to evaluate student learning relative to the curriculum being taught within the state. Other tests have been developed as general instruments that are not specific to the Arkansas curriculum. Allowing the use of another instrument, or a variety of instruments, to gauge student performance related to the Arkansas curriculum is not an accurate measure of achievement relative to the state-level goals for education.

For answers to other questions regarding the *Biology End-of-Course Examination*, please contact:

Dr. Gayle Potter, Associate Director  
Curriculum, Assessment, and Research  
Arkansas Department of Education  
4 State Capitol Mall, Room 106A  
Little Rock, AR 72201-1071  
Telephone: 501-682-4558

**EDUCATIONAL IMPROVEMENT PLANS AND  
USING THE 2008 *BIOLOGY END-OF-COURSE EXAMINATION* RESULTS**

**MULTIPLE MEASURES FOR DEVELOPING EDUCATIONAL IMPROVEMENT PLANS**

In real life, individuals are judged on a multitude of performances on a daily basis. In order to adequately identify, describe, and address specific performance strengths and weaknesses, it is necessary to acknowledge that individual competencies do not spring from a single source. To put it simply, if you want to improve individual performance, you need to identify the areas in which need is apparent. In the educational measurement setting, this has been termed “multiple measures.” The underlying thinking of multiple measures is basic common sense: in order to improve learning, individually or collectively, it is important to be able to examine information from a variety of sources to identify what needs improving and how this can be accomplished. “Multiple measures” are often categorized by classifying each measure as “quantitative” versus “qualitative.” A quantitative measure implies that a number or rating can be associated with the measurement while a qualitative measure implies that the measurement is more decision-based or anecdotal, relying on information and insights provided by an individual or group of individuals. The following describes the types of measurements that might fall into the quantitative versus qualitative categories:

**Quantitative**

- Criterion-referenced test results (e.g., Biology End-of-Course Examination)
- Norm-referenced test results
- Classroom test results (current and past)

**Qualitative**

- Classroom work in the subject area or related subject area (current and past)
- Teacher observations (current and past)
- Any other pertinent student measures related to the subject area and/or to student testing issues

In attempting to develop any plan for educational improvement for an individual student or groups of students, it is necessary to know where you are (establish a baseline), determine where you need to be (establish a goal or end result), determine the path (establish an implementation plan or model), determine how you are going to get there (establish what resources are necessary), and determine how you will know when you have arrived (establish measures of success). In order to develop an educational improvement plan that can be demonstrated to be effective, educators will need to use the quantitative and qualitative information from the sources listed above as well as other resources.

**USING THE *BIOLOGY END-OF-COURSE EXAMINATION* RESULTS**

The reports for the *Biology End-of-Course Examination* provide students, teachers, and special program staff with a performance record for students relative to the expectations outlined within the Arkansas *Biology Science Curriculum Framework*. The most important use of these data is to identify students who need remediation in specific areas. The following are suggestions for school and district personnel who are responsible for the assessment and for any school remediation programs:

- Check the reports to find out which students did not perform at a proficient level. An asterisk listed next to the student’s name on the *Class Roster Report* and the *School Roster Report* shows that the student did not perform at the Proficient performance level.
- For those students who did not perform at the Proficient performance level, notify the students, parents, and appropriate school personnel.
- Analyze the reports to determine in which skill areas students did not perform well.
- Develop and implement remediation strategies and goals for individuals and groups of students. Analyze previous remediation strategies used with students to determine necessary curricular additions or changes.
- Analyze instructional and curricular approaches to ensure that students are receiving instruction that is in direct alignment with the educational goals and competencies outlined within the Arkansas *Biology Science Curriculum Framework*.

## DISSEMINATING THE 2008 *BIOLOGY END-OF-COURSE EXAMINATION* RESULTS AND CONCLUSION

### DISSEMINATING THE *BIOLOGY END-OF-COURSE EXAMINATION* RESULTS

Make a complete and thorough analysis of the results as soon as possible. After the report forms have been received and the results have been reviewed by district staff, disseminate the results to students, parents, teachers, counselors, and others who may play a role in individual student education. The following suggestions may be helpful:

- Make certain that the appropriate teachers and guidance personnel receive the appropriate *Student Report(s)*, *Student Label(s)*, *Class Roster Report(s)*, *School Roster Report*, *School Summary Report*, *School Profile Report*, and *School Item-by-Item Selections of Correct Answers* report as soon as possible.
- Send the student (home) copy of the *Student Report* with an accompanying letter from the principal emphasizing the importance of the *Student Report*. This will likely generate numerous questions from interested parents. At the next PTA/PTO or other parent meeting, discuss the *Biology End-of-Course Examination* results to help parents better understand the results and encourage them to become more involved in any follow-up remediation, if necessary.
- Schedule both individual and group sessions with students to review the *Student Reports* and *Class Roster Reports*.
- Summarize information from the *School Roster Report*, *School Summary Report*, and *School Profile Report* or, through a newsletter or pamphlet, present information to school board members, school or district advisory committees, parent advisory groups, or other interested individuals.
- Use any other informational materials distributed by the Arkansas Department of Education to further explain and describe the test results.
- Communicate to teachers and guidance counselors, by letter or report, a list of the Biology skills with the lowest performance by students.
- If appropriate, prepare a brief summary of the results and the actions being taken by the school/district to appear in the school news section of the local newspaper(s).

### CONCLUSION

The **Arkansas Comprehensive Testing, Assessment, and Accountability Program** is the result of ongoing curriculum and instruction implementation within the state, culminating in the development of criterion-referenced testing instruments that are directly linked with the Arkansas *Biology Science Curriculum Framework*. Improving student performance on the *Biology End-of-Course Examination* is contingent upon the curricular and instructional approaches applied within a specific school and district setting. In order to move toward more effective education models, Arkansas has adopted performance standards that promote the success of all citizens. The sort of statewide implementation this undertaking implies is monumental. It requires the concerted effort of schools, districts, and thousands of educators. Moreover, all of this effort will be for nothing without the support of students, parents, and other affected members of the education community. The reports described within this guide are one step toward disseminating information to the community and beginning this concerted effort. The next step is to actively and collectively implement the statewide goals, expectations, and performance standards of the *Biology End-of-Course Examination* in order to develop educational improvement plans for individual students and for all students which best serve the citizens of Arkansas.

## THE 2008 *BIOLOGY END-OF-COURSE EXAMINATION* REPORTS

### OVERVIEW OF THE *BIOLOGY END-OF-COURSE EXAMINATION* REPORTS

Reports of results for the *Biology End-of-Course Examination* are sent to districts to provide information about student performance. Reports are provided separately for the January 2008 *Biology Mid-Year End-of-Course Examination* and for the April 2008 *Biology End-of-Course Examination*. Samples of the *Student Report*, *Student Label*, *Class Roster Report*, *School Roster Report*, *School Summary Report*, *School Profile Report*, and *School Item-by-Item Selections of Correct Answers* report are provided in this guide. A description of each report immediately precedes the report samples.

On the *School Roster Report*, *School Summary Report*, and *School Item-by-Item Selections of Correct Answers* report, students are reported by group. The groups are as follows:

- **Combined Population** – All students for whom answer documents were returned for the January 2008 administration or April 2008 administration of the *Biology End-of-Course Examination*.
- **Combined Population without Highly Mobile** (appears only on the *School Roster Report*) – All students for whom answer documents were returned for the January 2008 administration or April 2008 administration of the *Biology End-of-Course Examination* excluding those students who were identified on their answer documents as having enrolled in the school or moving between schools in the district after October 1, 2007.
- **General Population** – Students who were **not** identified on their answer documents with an ESI code (IEP students), as LEP, and/or as Highly Mobile. Students coded as Gifted and Talented and/or as receiving Free and/or Reduced Lunch are included in the General Population report unless they have also been coded with an ESI code (IEP students), as LEP, and/or as Highly Mobile.
- **IEP Students** – Students whose answer documents were marked with an ESI code (see page 18 for a listing of the ESI categories) identifying them as participating in a specific educational program. Students for whom more than one ESI code was marked are reported in the “Multiple Disabilities” category.
- **LEP Students** – Limited English Proficient students who were identified as LEP on their answer documents.
- **1st Year LEP Students** (appears only on the *School Roster Report*) – Students who are Limited English Proficient and have been in the U.S. less than one year.
- **Gifted and Talented Students** – Students identified on their answer documents as participating in a gifted and talented program.
- **Highly Mobile Students** – Students who were identified on their answer documents as having enrolled in the school or moving between schools in the district after October 1, 2007.
- **Free and/or Reduced Lunch** (not reported on the *School Item-by-Item Selections of Correct Answers* report) – Students who were identified on their answer documents as being eligible for free and/or reduced lunch.
- **Non-economically Disadvantaged** (not reported on the *School Item-by-Item Selections of Correct Answers* report).
- **Non-disabled Students** (not reported on the *School Item-by-Item Selections of Correct Answers* report).

On the Combined Population and General Population summary reports, the groups are further broken down for the following student populations (sub-groups):

- **All Students** – Includes all students in the group that is being reported.
- **Gender** – Results are reported separately for females and males. Students whose answer documents were not coded for gender or those for whom both options were marked are not reported in this sub-group.
- **Ethnicity** – Results are reported separately for ethnicity (Asian/Pacific Islander, African American, Hispanic, Native American, Caucasian, and Not Indicated). Students whose answer documents were not coded for ethnicity or those for whom more than one ethnic background code was marked are reported under “Not Indicated.”
- **Gender/Ethnicity** – Results are reported for females within each ethnic group and for males within each ethnic group. Students whose answer documents were not coded or contained multiple marks for one of the fields are reported under “Not Indicated.”
- **Migrant** – Results are reported for students in each group who were also identified on their answer documents as migrant.

Student name and birth date, classroom/group name, school and district name, and school and district LEA number information is printed on the reports according to what was coded on the student answer documents, Classroom/Group Information Sheet, and/or School/Course Header Sheet.

**Note:** The data in the sample reports are for display purposes only and do not represent actual results. Each sample has been prepared independently and is not meant to be tied to any other sample in this *Report Interpretation Guide*. All student names on the samples are fictitious, and any similarity to actual student names is purely coincidental.

## **STUDENT REPORT**

Each school will receive two copies of the *Student Report*, a student (home) copy in color and a school copy in black and white. The *Student Report* is a one-page, two-sided report. Side one provides information specific to the student listed. Side two provides information on how to help the student to achieve and a description of the additional informational resources that are available. A sample of the front side of the *Student Report* is provided on the opposite page.

The *Student Report* provides individual student feedback on how the student performed on the *Biology End-of-Course Examination*. The following information is provided on side one of the *Student Report*:

- Student information reflects what was coded on the student’s answer document or provided from the student’s APSCN record for student name, grade, and birth date.
- A letter from Dr. T. Kenneth James, Commissioner of Education, introduces the report.
- Scale Score Section (bottom left of report)
  - The four performance levels (Advanced, Proficient, Basic, and Below Basic) and the cut scores associated with Biology are shown. The general definition of each performance level is provided. These definitions are especially helpful for parents in understanding the level at which their student is performing.
  - The student’s scale score and performance level are shown under the performance levels with an arrow showing where the student falls in the scale score. The school, district, and state average scores are also provided and can be used for comparative data.

A student is required to have attained a scale score associated with the Proficient or Advanced performance level in order to be considered performing at an acceptable level for Biology. It is important to note that the information listed at the strand level for the student plays an important role in gauging student needs but should not be used as the only measure in determining additional instruction.

- (Raw) Scores by Strand Section (bottom right of report)
  - A table with each strand listed in the left column is provided. The strands are directly aligned with the *Arkansas Biology Science Curriculum Framework*.
  - The total number of multiple-choice and open-response points for each strand is shown in the last two columns along with the number of raw score points achieved by the student. This information provides insight into specific areas in which the student may need additional instruction. For example, the number of points attained by the student for specific strands may show that the student had greater difficulty with “Molecules and Cells” concepts than with the other strands. Also, the list of multiple-choice versus open-response points earned may provide important clues to the student’s needs. For example, a student may have performed adequately on the multiple-choice questions but poorly on the open-response questions indicating that the student may be having trouble responding in this format.
  - A score of “NA” (No Attempt) for an open-response item indicates that the student did not attempt to answer the item and is assigned a score of “0.”
  - A definition and information for scale scores are provided under the (Raw) Scores by Strand table.

## **STUDENT LABEL**

Each school will receive a *Student Label* for each student’s permanent record or transcript kept on file at the school. The *Student Label* includes the student’s total scale score for Biology with the student’s associated performance level for the January 2008 or April 2008 administration of the *Biology End-of-Course Examination*. A sample of the *Student Label* is provided on the opposite page.

The *Student Label* provides the student’s name, grade, and date of birth. It also includes the student’s scale score and performance level for the *Biology End-of-Course Examination*. This label will be added to the student’s permanent record or transcript as a permanent record of the January 2008 or April 2008 *Biology End-of-Course Examination* test results.

# 2008 *BIOLOGY* END-OF-COURSE EXAMINATION REPORT DESCRIPTIONS AND SAMPLES

## STUDENT REPORT





Arkansas Comprehensive Testing, Assessment,  
and Accountability Program

**END-OF-COURSE EXAMINATION—BIOLOGY  
STUDENT REPORT**

**For the Family of  
ASHLEY ADAMS**

**Test Date:** April 2008  
**Grade:** 9  
**Birth Date:** 07-21-1992  
**School Name:** Arkansas High School (99-99-999)  
**District Name:** Arkansas School District (99-99)

**Dear Family,**

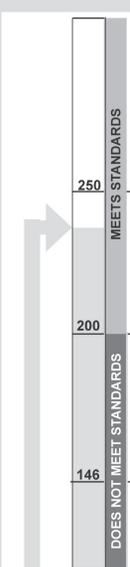
Recently, Ashley participated in the Arkansas End-of-Course Examination in Biology. Skills assessed on this test are based on the Arkansas Curriculum Frameworks and are required to be part of any Arkansas instructional program. The Curriculum Frameworks describe what Ashley is expected to know and be able to do in Biology. The End-of-Course Examination in Biology includes multiple-choice questions as well as open-response questions that require the student to construct a handwritten answer.

This report summarizes Ashley's test results. These results are used by the school to make important educational decisions for Ashley. **Please review these results with Ashley and Ashley's teachers.** Using these test results to guide Ashley in the right academic direction is an important step for ensuring future success.

Sincerely,  
T. Kenneth James, Ed.D.  
Commissioner of Education

**Ashley's Test Results**

**Biology Scale Score**



**Advanced**—Students display a comprehensive understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They are able to design and conduct scientific investigations which answer biological questions about real-world situations. These students are able to apply complex reasoning skills to make logical predictions and draw well-formulated conclusions.

**Proficient**—Students demonstrate a solid understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They are able to design and conduct scientific investigations, analyze data, and apply scientific principles to solve real-world, biological problems.

**Basic**—Students display knowledge of biological concepts, including some understanding of the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They partially demonstrate the ability to apply this knowledge. They are able to conduct basic level scientific investigations, but demonstrate a need for additional assistance.

**Below Basic**—Students fail to show sufficient mastery of biology skills to attain the basic level.

**Ashley's score of 244 is at the Proficient Level**

School Average Score	230
District Average Score	220
State Average Score	205

**Biology (Raw) Scores by Strand**

This table shows the number of points Ashley scored in each of the Biology strands.

	Multiple-Choice	Open-Response
<b>Molecules and Cells</b> Students will demonstrate an understanding of the role of chemistry in life processes, the structure and function of cells, and how cells obtain and use energy.	5 of 12	5 of 8
<b>Heredity and Evolution</b> Students will demonstrate an understanding of heredity, investigate the molecular basis of genetics, and examine the development of the theory of biological evolution.	8 of 12	7 of 8
<b>Classification and the Diversity of Life</b> Students will demonstrate an understanding that organisms are diverse.	8 of 12	8 of 8
<b>Ecology and Behavioral Relationships</b> Students will demonstrate an understanding of ecological and behavioral relationships among organisms and of the ecological impact of global issues.	9 of 12	5 of 8
<b>Nature of Science</b> Students will demonstrate an understanding that science is a way of knowing. They will further demonstrate an understanding of current life science theories; design and safely conduct a scientific inquiry to solve valid problems; use mathematics, science equipment, and technology as tools to communicate and solve life science problems; describe the connections between pure and applied science; and describe various life science careers and the training required for the selected career.	8 of 12	6 of 8

NA = No attempt to answer the item. Score of "0" (zero) assigned for the item.

Ashley's total scores reported for Biology are scale scores. Scale scores are transformed raw scores. When multiple forms of a test are used, or when results are compared from year to year, scale scores are needed to adjust for possible differences in test form length or difficulty. They are used in numerous national testing programs, including the ACT and SAT examinations, and are routinely used in many other statewide testing programs, providing the basis for long-term, meaningful comparisons of student results across different test administrations. For more information about converting raw scores to scale scores, see the Raw to Scale Score Conversion Tables posted on the ADE website at the Testing link.

## STUDENT LABEL

ACTAAP End of Course Examination	
Biology	Date of Test: April 2008
<b>ADAMS, ASHLEY</b>	<b>Grade: 10</b>
DOB: 07-21-1992	
District: Arkansas School District (99-99)	
School: Arkansas High School (99-99-999)	
Scale Score: 244	Proficient

### CLASS ROSTER REPORT

Two copies of the *Class Roster Report* will be produced—one copy for the school and one copy for the district. The *Class Roster Report* is a one-sided, single-page or multi-page report depending on the number of students, which provides a list of students and the results for those students who participated in the January 2008 or April 2008 *Biology End-of-Course Examination*. The class name printed on the report reflects what was coded on the Classroom/Group Information Sheet for classroom/group name. A sample of this report is provided on the opposite page.

The *Class Roster Report* provides school and district staff with information on how students within a specific class or group performed on the *Biology End-of-Course Examination*. The following information is included on the *Class Roster Report*:

- The four performance levels (Below Basic, Basic, Proficient, and Advanced) are shown to the right of the school information with the associated range of scale scores for Biology.
- All students within the classroom/group are listed in alphabetical order by last name (with their respective birth dates) in the left column with the results for each student provided in the columns that follow. All of the information provided on the individual *Student Report* is also provided for each student on the *Class Roster Report* (e.g., performance level, scale score, strand-level information). Grade and information is also provided.
- Students who did not attain the Proficient or Advanced performance level in Biology are indicated with an asterisk next to their names.
- A First Year in a School in the U.S. LEP Student is designated with an “L” following the student’s birth date.
- Following the listing of students, the class average for each strand is provided. Class averages do not include First Year LEP student scores.
- The Mean Scale Scores for the school, district, region, and state in Biology are provided and can be used as comparative data.

A student is required to have attained a total scale score associated with the Proficient or Advanced performance level in order to be considered performing at an acceptable level for Biology. Again, it is important to note that the information listed at the strand level for the student can play an important role in gauging student needs but should not be used as the only measure in determining additional instruction.

**END-OF-COURSE EXAMINATION  
BIOLOGY  
CLASS ROSTER REPORT**

**PERFORMANCE LEVEL SCALE SCORE**  
Below Basic (BEL)    Basic (BAS)    Proficient (PRO)    Advanced (ADV)  
145 and below    146-199    200-249    250 and above

District Number: **99-99**  
District Name: **Arkansas School District**  
School Number: **99-99-999**  
School Name: **Arkansas High School**  
Class Name: **PIERCE**

NA = No Attempt (Zero Score)  
NI = Not Indicated  
\* = Not Proficient in Biology  
& = Modified form adapted to Braille

**Student Information**

Multiple-Choice/Open-Response Points Possible	MEAN SCALE SCORE
ADCOCK, JASON 06-11-1991	186
ADDLER, KARIE * 06-11-1991	School: 186
ANDERSON, MARK * 06-02-1991	District: 175
BANCROFT, MARY * 06-02-1992	Region: 175
BEST, COURTLAND 07-21-1991	State: 193
BIDEN, JEAN * & 06-02-1993	
BYRD, JERRY 06-02-1993 (L)	
CANTRELL, MARVIN * 06-02-1991 (L)	
DREYFUS, JUSTIN 06-02-1992	
DUNKIRK, BOB 06-02-1991	
JACKSON, JOHN 06-02-1991	
KIRK, ELLIOT 06-02-1992	
SMITH, JILIAN * 06-11-1991	
VIGGERS, CODY * 07-21-1992	
WAYLAND, JOSEPH * 06-02-1991	
<b>CLASS AVERAGE:</b>	
<b>COMBINED POPULATION:</b>	
<b>BIOLOGY</b>	

BIOLOGY							
GRADE	PERFORMANCE LEVEL	BIOLOGY SCALE SCORE	Molecules and Cells	Heredity and Evolution	Classification and the Diversity of Life	Ecology and Behavioral Relationships	Nature of Science
11	PRO	215	12/8	12/8	12/8	12/8	12/8
11	BAS	185	6/4	6/4	10/7	6/4	6/5
11	BEL	107	7/4	3/2	7/4	7/4	6/2
10	BAS	182	3/NA	3/0	3/NA	3/NA	8/NA
			7/4	3/0	7/4	7/4	7/2
11	PRO	244	5/4	10/7	10/6	9/8	8/2
09	BEL	107	3/NA	3/0	3/NA	3/NA	8/NA
09	ADV	278	7/4	10/8	12/8	11/7	7/6
11	BAS	177	6/4	3/0	10/4	6/4	6/0
10	PRO	218	5/6	5/7	5/8	5/7	5/6
11	PRO	247	10/4	10/4	10/4	10/4	10/4
11	ADV	262	10/5	10/5	10/5	10/5	10/5
10	ADV	278	10/6	10/6	10/6	10/6	10/6
11	BEL	137	4/4	3/0	4/4	3/0	5/2
10	BAS	146	6/4	3/0	6/4	3/0	6/0
11	BEL	87	4/NA	2/NA	4/NA	2/NA	3/NA
		<b>186</b>	<b>6/3</b>	<b>5/3</b>	<b>7/4</b>	<b>6/3</b>	<b>7/3</b>

Averages do not include the following groups: 1) 1st Year LEP students

L: 1st Year LEP Student

## SCHOOL ROSTER REPORT

Two copies of the *School Roster Report* will be produced—one copy for the school and one copy for the district. The *School Roster Report* is a one-sided, multi-page report providing a list of students for whom answer documents were returned for the January 2008 or April 2008 *Biology End-of-Course Examination* and the results for those students. The school information printed on the report reflects what was coded on the School/Course Header Sheet for district name, school name, and district/school LEA number. A sample of this report is provided on pages 11–13.

The *School Roster Report* provides school and district staff with information on how all students within a school performed on the *Biology End-of-Course Examination*. The following information is provided on the *School Roster Report*:

- The four performance levels (Below Basic, Basic, Proficient, and Advanced) are shown to the right of the school information with the associated range of scale scores for Biology.
- Results for students are reported separately by group. See page 5 for a listing and definitions of the groups.
- All students in the school are listed in alphabetical order by last name (with their respective birth dates) in the left column with the *Biology End-of-Course Examination* results for each student provided in the columns that follow. All of the information provided on the individual *Student Report* is also provided for each student on the *School Roster Report* (e.g., performance level, scale score, strand-level information). Grade information is also provided.
- Students who did not attain the Proficient or Advanced performance level in Biology are indicated with an asterisk next to their names.
- A First Year in a School in the U.S. LEP Student is designated with an “L” following the student’s birth date.
- Following the listing of students within each group, the school average for each strand for that group is provided. School averages do not include First Year LEP student scores.

A student is required to have attained a total scale score associated with the Proficient or Advanced performance level in order to be considered performing at an acceptable level for Biology. Again, it is important to note that the information listed at the strand level for the student can play an important role in gauging student needs but should not be used as the only measure in determining additional instruction.



**END-OF-COURSE EXAMINATION  
BIOLOGY  
SCHOOL ROSTER REPORT**

Date of Test: April 2008  
Page 1

District Number: **99-99**  
District Name: **Arkansas School District**  
School Number: **99-99-999**  
School Name: **Arkansas High School**

**PERFORMANCE LEVEL SCALE SCORE**

Below Basic (BEL)	Basic (BAS)	Proficient (PRO)	Advanced (ADV)
145 and below	146-199	200-249	250 and above

NA = No Attempt (Zero Score)  
NI = Not Indicated  
\* = Not Proficient in Biology  
& = Modified form adapted to Braille

**Student Information**

Multiple-Choice/Open-Response Points Possible

**COMBINED POPULATION**

SCHOOL AVERAGE: 181

**COMBINED POPULATION WITHOUT**

**HIGHLY MOBILE**

SCHOOL AVERAGE: 186

**GENERAL POPULATION**

GRADE	PERFORMANCE LEVEL	BIOLOGY SCALE SCORE	Molecules and Cells	Heredity and Evolution	Classification and the Diversity of Life	Ecology and Behavioral Relationships	Nature of Science
11	PRO	215	6/4	6/4	10/7	6/4	6/5
11	BAS	185	7/4	3/2	7/4	7/5	6/2
11	BEL	107	3/NA	3/0	3/NA	3/NA	8/NA
10	BAS	182	7/4	3/0	7/4	7/4	7/2
11	PRO	244	5/4	10/7	10/6	9/8	8/2
09	BEL	107	3/NA	3/0	3/NA	3/NA	8/NA
09	ADV	282	7/4	10/8	12/8	11/7	8/6
11	BAS	190	6/4	3/0	10/4	6/4	6/5
10	PRO	218	5/6	5/7	5/8	5/7	5/6
11	PRO	247	10/4	10/4	10/4	10/4	10/4
11	ADV	262	10/5	10/5	10/5	10/5	10/5
10	ADV	278	10/6	10/6	10/6	10/6	10/6
NI	PRO	236	10/5	3/5	10/8	10/8	5/2
10	ADV	250	10/6	3/6	10/8	10/8	8/2
10	BEL	100	3/NA	1/0	3/NA	3/NA	8/NA
11	BAS	192	7/4	3/0	11/2	11/2	7/2

Averages do not include the following groups: 1) 1st Year LEP students

L: 1st Year LEP Student



**END-OF-COURSE EXAMINATION  
BIOLOGY  
SCHOOL ROSTER REPORT**

Date of Test: April 2008  
Page 2

District Number: **99-99**  
 District Name: **Arkansas School District**  
 School Number: **99-99-999**  
 School Name: **Arkansas High School**

**PERFORMANCE LEVEL SCALE SCORE**

Below Basic (BEL)	Basic (BAS)	Proficient (PRO)	Advanced (ADV)
145 and below	146-199	200-249	250 and above

NA = No Attempt (Zero Score)  
 NI = Not Indicated  
 \* = Not Proficient in Biology  
 & = Modified form adapted to Braille

Student Information		BIOLOGY						
GRADE	PERFORMANCE LEVEL	BIOLOGY SCALE SCORE	Molecules and Cells	Heredity and Evolution	Classification and the Diversity of Life	Ecology and Behavioral Relationships	Nature of Science	
			12/8	12/8	12/8	12/8	12/8	
<b>GENERAL POPULATION (cont'd)</b>								
11	BEL	137	4/4	3/0	4/4	3/0	5/2	
10	BAS	146	6/4	3/0	6/4	3/0	6/0	
11	BEL	87	4/NA	2/NA	4/NA	2/NA	3/NA	
		193	6/4	5/13	8/4	7/4	7/3	
<b>IEP STUDENTS</b>								
11	BEL	81	5/2	1/0	5/NA	2/0	0/NA	
		87	5/2	1/0	5/0	2/0	0/0	
<b>LEP STUDENTS</b>								
11	PRO	210	8/4	1/2	11/4	8/0	10/8	
10	BEL	137	9/4	2/2	4/1	4/0	3/NA	
		174	9/4	2/2	8/3	6/0	7/4	
<b>1ST YEAR LEP STUDENTS</b>								
09	ADV	265	7/4	10/8	12/8	11/7	7/2	
11	BAS	177	6/4	3/0	10/4	6/4	6/0	
		221	7/4	7/4	11/6	9/6	7/1	

Averages do not include the following groups: 1) 1st Year LEP students

L: 1st Year LEP Student



**END-OF-COURSE EXAMINATION  
BIOLOGY  
SCHOOL ROSTER REPORT**

Date of Test: April 2008  
Page 3

District Number: **99-99**  
 District Name: **Arkansas School District**  
 School Number: **99-99-999**  
 School Name: **Arkansas High School**

**PERFORMANCE LEVEL SCALE SCORE**

Below Basic (BEL)	Basic (BAS)	Proficient (PRO)	Advanced (ADV)
145 and below	146-199	200-249	250 and above

NA = No Attempt (Zero Score)  
 NI = Not Indicated  
 \* = Not Proficient in Biology  
 & = Modified form adapted to Braille

<b>Student Information</b>		<b>BIOLOGY</b>											
GRADE	PERFORMANCE LEVEL	BIOLOGY SCALE SCORE	Molecules and Cells	Heredity and Evolution	Classification and the Diversity of Life	Ecology and Behavioral Relationships	Nature of Science						
			12/8	12/8	12/8	12/8	12/8	12/8	12/8	12/8	12/8	12/8	
<b>Multiple-Choice/Open-Response Points Possible</b>													
<b><u>GIFTED AND TALENTED STUDENTS</u></b>													
10	ADV	250	10/6	3/6	10/8	10/8	10/8	8/2					8/2
<b>SCHOOL AVERAGE:</b>													
11	BAS	161	4/4	2/0	8/4	4/4	5/2					5/2	
10	BAS	174	6/4	2/0	10/4	6/4	6/0					6/0	
11	BEL	96	4/NA	1/NA	5/0	4/NA	3/NA					3/NA	
<b>SCHOOL AVERAGE:</b>													
		144	5/3	2/0	8/3	5/3	5/1					5/1	
<b><u>FREE AND/OR REDUCED LUNCH STUDENTS</u></b>													
		140	5/2	1/1	7/2	4/4	4/0					4/0	
<b>SCHOOL AVERAGE:</b>													
<b><u>NON-ECONOMICALLY DISADVANTAGED</u></b>													
		188	6/4	4/2	10/3	6/4	6/2					6/2	
<b>SCHOOL AVERAGE:</b>													
<b><u>NON-DISABLED STUDENTS</u></b>													
		185	6/4	4/2	8/4	6/3	7/3					7/3	
<b>SCHOOL AVERAGE:</b>													

L: 1st Year LEP Student  
 Averages do not include the following groups: 1) 1st Year LEP students

### **SCHOOL SUMMARY REPORT – OVERVIEW**

Each school will receive two copies of the *School Summary Report* and each district will receive one copy of the *School Summary Report* for the schools in the district. The Arkansas Department of Education will also receive one copy of the *School Summary Report*. The *School Summary Report* is a one-sided, multi-page report providing student results aggregated to the school level. Seven groups are reported independently from one another (see page 5 for additional information). The school information printed on the report reflects what was coded on the School/Course Header Sheet for district name, school name, and district/school LEA number.

### **SCHOOL SUMMARY REPORT: COMBINED POPULATION**

The *Combined Population Report* gives the results for **all** students\* for whom answer documents were returned for the January 2008 or April 2008 administration of the *Biology End-of-Course Examination*. A sample is provided on the opposite page.

The *School Summary Report: Combined Population* provides school and district staff with summary information on how all students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of students\* in the school for whom answer documents were returned is provided at the top of the page under the district name.
- The Combined Population group is broken out and reported for the following student populations (sub-groups):
  - All Students
  - Gender
  - Ethnicity
  - Gender/Ethnicity
  - Migrant
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates the specific student population that is being reported on that particular line (row).
- The information provided on the *School Summary Report: Combined Population* can be used to compare the performance of students in the school with the performance of students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.

**Note:** Each district will receive two copies of the *District Summary Report*, which provides student results aggregated to the district level. The Arkansas Department of Education will also receive one copy of the *District Summary Report*. The *District Summary Report* provides district staff with summary information on how students within the district performed on the January 2008 or April 2008 *Biology End-of-Course Examination*. The *School* and *District Summary Reports* are set up identically to one another, except that the district report does not include school data. The district-level report also contains an additional page for 1st Year LEP students.



**END-OF-COURSE EXAMINATION  
BIOLOGY  
SCHOOL SUMMARY REPORT: COMBINED POPULATION**

Date of Test: April 2008  
Page 1

District Number: **99-99** School Number: **99-99-999**  
 District Name: **Arkansas School District** School Name: **Arkansas High School**  
 Total Number of Students Tested: **71**

Ethnicity	Number & Percent of Students Below Basic (BEL) 145 and below				Number & Percent of Students Basic (BAS) 146-199				Number & Percent of Students Proficient (PRO) 200-249				Number & Percent of Students Advanced (ADV) 250 and above			
	School	District	Region	State	School	District	Region	State	School	District	Region	State	School	District	Region	State
All Students	14	14	799	7,167	17	17	450	4,782	16	16	471	6,671	24	24	631	14,653
Gender	20%	20%	34%	17%	24%	24%	19%	14%	23%	23%	23%	20%	34%	34%	27%	44%
Female	3	3	374	3,279	8	8	223	2,456	7	7	226	3,249	12	12	342	7,239
Male	10%	10%	32%	20%	27%	27%	19%	15%	23%	23%	19%	20%	40%	40%	29%	45%
Hispanic	11	11	424	3,876	9	9	227	2,319	9	9	245	3,417	12	12	288	7,404
Hispanic/Pacific Islander	27%	27%	36%	23%	22%	22%	19%	14%	22%	22%	21%	20%	29%	29%	24%	44%
African American	0	0	0	37	0	0	0	48	0	0	0	61	0	0	2	181
Native American	0%	0%	0%	11%	0%	0%	0%	15%	0%	0%	0%	19%	0%	0%	0	55%
Caucasian	2	2	555	3,332	4	4	249	1,480	1	1	202	1,386	1	1	186	1,556
Not Indicated	25%	25%	47%	43%	50%	50%	21%	19%	13%	13%	17%	18%	13%	13%	16%	20%
Gender/Ethnicity - Female	0	0	19	409	0	0	13	303	0	0	11	381	0	0	14	539
Asian/Pacific Islander	0%	0%	33%	25%	0%	0%	23%	19%	0%	0%	19%	23%	0%	0%	25%	33%
African American	0	0	4	41	0	0	1	21	0	0	2	57	0	0	3	100
Hispanic	0%	0%	40%	19%	0%	0%	10%	10%	0%	0%	20%	26%	0%	0%	30%	46%
Native American	0	0	216	3,253	13	13	184	2,875	15	15	252	4,711	23	23	419	101
Caucasian	12	12	216	3,253	13	13	184	2,875	15	15	252	4,711	23	23	419	101
Not Indicated	19%	19%	20%	14%	21%	21%	17%	13%	24%	24%	21%	21%	37%	37%	39%	53%
Gender/Ethnicity - Male	0	0	0	27	0	0	1	15	0	0	3	23	0	0	2	74
Asian/Pacific Islander	0%	0%	0%	19%	0%	0%	17%	11%	0%	0%	50%	17%	0%	0%	33%	53%
African American	0	0	0	19	0	0	0	19	0	0	0	28	0	0	0	91
Hispanic	0%	0%	12%	12%	0%	0%	0%	12%	0%	0%	0%	18%	0%	0%	0%	58%
Native American	0	0	257	1,509	0	0	121	766	0	0	101	740	0	0	117	876
Caucasian	0%	0%	43%	39%	0%	0%	20%	20%	0%	0%	17%	19%	0%	0%	20%	23%
Not Indicated	0	0	12	191	0	0	8	159	0	0	6	188	0	0	7	261
Gender/Ethnicity - Male	0	0	0	4	0	0	0	12	0	0	0	29	0	0	1	49
Asian/Pacific Islander	0%	0%	36%	24%	0%	0%	24%	20%	0%	0%	18%	24%	0%	0%	21%	33%
African American	0	0	4	19	0	0	0	12	0	0	1	29	0	0	1	49
Hispanic	0%	0%	67%	17%	0%	0%	0%	11%	0%	0%	17%	27%	0%	0%	17%	45%
Native American	0	0	101	1,510	8	8	93	1,473	7	7	116	2,233	12	12	213	5,882
Caucasian	3	3	19%	14%	27%	27%	18%	13%	23%	23%	22%	20%	40%	40%	41%	53%
Not Indicated	10%	10%	14%	22%	0%	0%	25%	12%	0%	0%	50%	19%	0%	0%	25%	47%
Gender/Ethnicity - Male	0	0	0	22	0	0	0	29	0	0	0	33	0	0	2	90
Asian/Pacific Islander	0%	0%	0%	11%	0%	0%	0%	17%	0%	0%	0%	19%	0%	0%	2	53%
African American	2	2	297	1,822	4	4	128	714	1	1	101	646	1	1	69	680
Hispanic	25%	25%	50%	47%	50%	50%	22%	18%	13%	13%	17%	17%	13%	13%	12%	18%
Native American	0	0	7	218	0	0	5	144	0	0	5	193	0	0	7	277
Caucasian	0%	0%	29%	26%	0%	0%	21%	17%	0%	0%	21%	23%	0%	0%	29%	33%
Not Indicated	0	0	0	22	0	0	1	9	0	0	2	28	0	0	2	51
Gender/Ethnicity - Male	0%	0%	0%	20%	0%	0%	25%	8%	0%	0%	25%	25%	0%	0%	50%	46%
Asian/Pacific Islander	0	0	115	1,742	5	5	91	1,401	8	8	136	2,478	11	11	206	6,217
African American	27%	27%	21%	15%	15%	15%	17%	12%	24%	24%	25%	21%	33%	33%	38%	53%
Hispanic	0	0	0	11	0	0	0	6	0	0	1	9	0	0	1	38
Native American	0%	0%	0%	17%	0%	0%	0%	9%	0%	0%	50%	14%	0%	0%	50%	59%
Caucasian	0	0	5	162	0	0	6	108	0	0	9	134	0	0	4	148
Not Indicated	0%	0%	21%	29%	0%	0%	25%	20%	0%	0%	38%	24%	0%	0%	17%	27%
Migrant	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: GENERAL POPULATION**

Students included in the *General Population Report* are those who were **not** identified with an ESI code (IEP students), as limited English proficient (LEP students), and/or as Highly Mobile. Students identified as Gifted and Talented and/or as receiving Free and/or Reduced Lunch are included in the *General Population Report* unless they have also been identified with an ESI code, as limited English proficient, and/or as Highly Mobile. A sample is provided on the opposite page.

The *School Summary Report: General Population* provides school and district staff with summary information on how General Population students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of General Population students\* in the school is provided at the top of the page under the district name.
- The General Population group is broken out and reported for the following student populations (sub-groups):
  - All Students
  - Gender
  - Ethnicity
  - Gender/Ethnicity
  - Migrant
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates the specific student population that is being reported on that particular line (row).
- The information provided on the *School Summary Report: General Population* can be used to compare the performance of General Population students in the school with the performance of General Population students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.

**2008 BIOLOGY END-OF-COURSE EXAMINATION REPORT DESCRIPTIONS AND SAMPLES**



Arkansas Comprehensive Testing,  
Assessment, and Accountability Program

**END-OF-COURSE EXAMINATION  
BIOLOGY**

**SCHOOL SUMMARY REPORT: GENERAL POPULATION**

Date of Test: April 2008  
Page 2

District Number: **99-99**  
District Name: **Arkansas School District**  
Total Number of Students Tested: **71**

School Number: **99-99-999**  
School Name: **Arkansas High School**

	Number & Percent of Students Below Basic (BEL) 145 and below			Number & Percent of Students Basic (BAS) 146-199			Number & Percent of Students Proficient (PRO) 200-249			Number & Percent of Students Advanced (ADV) 250 and above					
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region
All Students	14	14	20%	799	17	450	4,782	16	471	6,671	24	631	24	24	14,653
Gender															
Female	3	3	10%	374	8	223	2,456	7	226	3,249	12	342	12	12	7,239
Male	11	11	27%	424	9	227	2,319	9	245	3,417	12	288	12	12	7,404
Ethnicity															
Asian/Pacific Islander	0	0	0%	0	0	0	48	0	0	61	0	2	0	0	181
African American	2	2	5%	555	4	249	1,480	1	202	1,386	1	186	1	1	555
Hispanic	0	0	0%	19	0	13	303	0	11	381	0	14	0	0	539
Native American	0	0	0%	4	0	1	21	0	2	57	0	3	0	0	100
Caucasian	12	12	19%	216	13	184	2,875	15	252	4,711	23	419	23	23	101
Not Indicated	0	0	0%	0	0	1	15	0	3	23	0	2	0	0	74
Gender/Ethnicity - Female															
Asian/Pacific Islander	0	0	0%	0	0	0	19	0	0	28	0	0	0	0	91
African American	0	0	0%	257	0	121	766	0	101	740	0	117	0	0	587
Hispanic	0	0	0%	12	0	8	159	0	6	188	0	7	0	0	261
Native American	0	0	0%	4	0	0	12	0	1	29	0	1	0	0	33
Caucasian	3	3	10%	101	8	93	1,473	7	116	2,233	12	213	12	12	5,882
Not Indicated	0	0	0%	0	0	1	9	0	2	14	0	1	0	0	35
Gender/Ethnicity - Male															
Asian/Pacific Islander	0	0	0%	0	0	0	29	0	0	33	0	2	0	0	90
African American	2	2	5%	297	4	128	714	1	101	646	1	69	1	1	53
Hispanic	0	0	0%	7	0	5	144	0	5	193	0	7	0	0	680
Native American	0	0	0%	0	0	1	9	0	1	28	0	2	0	0	51
Caucasian	9	9	27%	115	5	91	1,401	8	136	2,478	11	206	11	11	6,217
Not Indicated	0	0	0%	0	0	0	6	0	1	9	0	1	0	0	38
Migrant	0	0	0%	5	0	6	108	0	9	134	0	4	0	0	148

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: IEP STUDENTS**

The results in this section of the *School Summary Report* are for those students who were identified with an ESI category. IEP students are included as part of the *Combined Population Report* but are not included in the *General Population Report*. A sample is provided on the opposite page.

The *School Summary Report: IEP Students* provides school and district staff with summary information on how exceptional students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of IEP students\* in the school is provided at the top of the page under the district name.
- Data are first provided for “All IEP Students” and then broken down by the following ESI categories listed on the left side of the report:

Autism	Other Health Impairment
Deaf-Blindness	Serious Emotional Disturbance
Hearing Impairment	Specific Learning Disability
Mental Retardation	Speech or Language Impaired
Multiple Disabilities	Traumatic Brain Injury
Orthopedic Impairment	Visual Impairment

**NOTE:** Students for whom more than one ESI code was marked on their answer documents are reported in the “Multiple Disabilities” category.

- The information provided for “Non-disabled” includes only those students who were not identified with an ESI code.
- The information provided for “Migrant” includes only those IEP students who were also coded on their answer documents as being Migrant students.
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates which students are being reported on that particular line (row).
- The information provided on the *School Summary Report: IEP Students* can be used to compare the performance of exceptional students in the school with the performance of exceptional students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores for students who are also special education students are not included in this report.

Date of Test: April 2008  
Page 3



**END-OF-COURSE EXAMINATION  
BIOLOGY  
SCHOOL SUMMARY REPORT: IEP STUDENTS**

District Number: **99-99**      School Number: **99-99-999**  
 District Name: **Arkansas School District**      School Name: **Arkansas High School**  
 Total Number of Students Tested: **4**

	Number & Percent of Students Below Basic (BEL) 145 and below			Number & Percent of Students Basic (BAS) 146-199			Number & Percent of Students Proficient (PRO) 200-249			Number & Percent of Students Advanced (ADV) 250 and above										
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region		
All IEP Students	4	4	168	2,296	543	15%	0	0	23	7%	0	0	0	0	47	3%	0	0	434	12%
	100%	100%	79%	61%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ESI Categories																				
Autism	0	0	1	29	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	0%	0%	100%	51%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%
Deaf-Blindness	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Hearing Impairment	1	1	1	29	5	67%	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	100%	100%	33%	63%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Mental Retardation	0	0	74	503	33	5	0	0	2	16	3%	0	0	0	0	0	0	0	0	8
	0%	0%	91%	90%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Multiple Disabilities	0	0	5	34	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	0%	0%	100%	85%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%
Orthopedic Impairment	0	0	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	0%	0%	0%	50%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%
Other Health Impairment	0	0	13	375	117	1	0	0	1	74	13%	0	0	0	0	0	0	0	0	50
	0%	0%	87%	60%	19%	7%	0%	0%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Serious Emotional Disturbance	0	0	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	0%	0%	0%	61%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Specific Learning Disability	1	1	51	100	870	9	0	0	6	240	16%	0	0	0	0	0	0	0	0	175
	100%	100%	72%	59%	17%	13%	0%	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%
Speech or Language Impaired	1	1	18	285	75	5	0	0	3	110	14%	0	0	0	0	0	0	0	0	170
	100%	100%	62%	45%	12%	17%	0%	0%	10%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%
Traumatic Brain Injury	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	0%	0%	0%	0%	13%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Visual Impairment	0	0	5	14	5	1	0	0	0	1	0	0	0	0	0	0	0	0	0	4
	0%	0%	83%	60%	17%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%
Non-Disabled	10	10	631	4,800	4,100	420	20	16	450	6,100	25	25	25	25	600	14,000	36%	36%	28%	50%
	15%	15%	29%	15%	26%	18%	26%	24%	21%	21%	36%	36%	36%	28%	28%	50%	36%	36%	28%	50%
Migrant	0	0	0	62	17	0	0	0	0	12	0	0	0	0	0	3	0	0	0	3
	0%	0%	0%	66%	18%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	3%	0%	0%	0%	3%

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: LEP STUDENTS**

The results in this section of the *School Summary Report* are for students who were identified as Limited English Proficient (LEP). LEP students are included as part of the *Combined Population Report* but are not included in the *General Population Report*. A sample is provided on the opposite page.

The *School Summary Report: LEP Students* provides school and district staff with summary information on how LEP students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of LEP students\* in the school is provided at the top of the page under the district name.
- The information provided for “Migrant” includes only those LEP students who were also coded on their answer documents as being Migrant students.
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates which students are being reported on that particular line (row).
- The information listed on the *School Summary Report: LEP Students* can be used to compare the performance of LEP students in the school with the performance of LEP students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.



END-OF-COURSE EXAMINATION  
BIOLOGY

SCHOOL SUMMARY REPORT: LEP STUDENTS

Date of Test: April 2008  
Page 4

District Number: **99-99** School Number: **99-99-999**  
 District Name: **Arkansas School District** School Name: **Arkansas High School**  
 Total Number of Students Tested: **0**

	Number & Percent of Students Below Basic (BEL) 145 and below			Number & Percent of Students Basic (BAS) 146-199			Number & Percent of Students Proficient (PRO) 200-249			Number & Percent of Students Advanced (ADV) 250 and above					
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region
Limited English Proficient	0 0%	0 0%	15 45%	0 0%	0 0%	7 21%	0 0%	0 0%	5 15%	0 0%	0 0%	6 18%	0 0%	0 0%	237 25%
Migrant	0 0%	0 0%	4 31%	0 0%	0 0%	4 31%	0 0%	0 0%	3 23%	0 0%	0 0%	2 15%	0 0%	0 0%	36 22%

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: GIFTED AND TALENTED STUDENTS**

The results in this section of the *School Summary Report* are for students who were identified as Gifted and Talented. Gifted and Talented students are included in the results for both the *Combined Population Report* and the *General Population Report*. A sample is provided on the opposite page.

The *School Summary Report: Gifted and Talented Students* provides school and district staff with summary information on how Gifted and Talented students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of Gifted and Talented students\* in the school is provided at the top of the page under the district name.
- The information provided for “Migrant” includes only those Gifted and Talented students who were also coded on their answer documents as being Migrant students.
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates which students are being reported on that particular line (row).
- The information listed on the *School Summary Report: Gifted and Talented Students* can be used to compare the performance of Gifted and Talented students in the school with the performance of Gifted and Talented students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.

Date of Test: April 2008  
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**END-OF-COURSE EXAMINATION  
BIOLOGY**

**SCHOOL SUMMARY REPORT: GIFTED AND TALENTED STUDENTS**

District Number: **99-99**      School Number: **99-99-999**  
 District Name: **Arkansas School District**      School Name: **Arkansas High School**  
 Total Number of Students Tested: **10**

	Number & Percent of Students Below Basic (BEL)			Number & Percent of Students Basic (BAS)			Number & Percent of Students Proficient (PRO)			Number & Percent of Students Advanced (ADV)							
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region	State	
Gifted and Talented	0 0%	0 0%	1 0%	0 0%	0 0%	7 2%	0 0%	0 0%	0 0%	0 0%	0 0%	80 2%	0 0%	0 0%	0 0%	0 0%	20 0%
Migrant	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 100%
													10 100%	10 100%	250 81%	3,237 89%	

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: HIGHLY MOBILE STUDENTS**

The results in this section of the *School Summary Report* are for students who were identified on their answer documents as having enrolled in the school or moving between schools in the district after October 1, 2007. Highly Mobile students are included as part of the *Combined Population Report* but are not included in the *General Population Report*. A sample is provided on the opposite page.

The *School Summary Report: Highly Mobile Students* provides school and district staff with summary information on how Highly Mobile students in the school performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of Highly Mobile students\* in the school is provided at the top of the page under the district name.
- The information provided for “Migrant” includes only those Highly Mobile students who were also coded on their answer documents as being Migrant students.
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates which students are being reported on that particular line (row).
- The information listed on the *School Summary Report: Highly Mobile Students* can be used to compare the performance of Highly Mobile students in the school with the performance of Highly Mobile students at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.

Date of Test: April 2008  
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**END-OF-COURSE EXAMINATION  
BIOLOGY**

**SCHOOL SUMMARY REPORT: HIGHLY MOBILE STUDENTS**

District Number: **99-99**      School Number: **99-99-999**  
 District Name: **Arkansas School District**      School Name: **Arkansas High School**  
 Total Number of Students Tested: **3**

	Number & Percent of Students			Number & Percent of Students			Number & Percent of Students			Number & Percent of Students					
	Below Basic (BEL) 145 and below			Basic (BAS) 146-199			Proficient (PRO) 200-249			Advanced (ADV) 250 and above					
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region
Highly Mobile	0 0%	0 0%	27 24%	590 30%	1 33%	22 19%	399 20%	0 0%	28 25%	371 19%	2 67%	36 32%	602 31%	2 0%	20 100%
Migrant	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%

The following groups are not included in this report: 1) 1st Year LEP students

**SCHOOL SUMMARY REPORT: FREE AND/OR REDUCED LUNCH STUDENTS**

The results in this section of the *School Summary Report* are for students who were identified as receiving Free and/or Reduced Lunch. Students who receive Free and/or Reduced Lunch are included in the results for both the *Combined Population Report* and the *General Population Report*. A sample is provided on the opposite page.

The *School Summary Report: Free and/or Reduced Lunch Students* provides school and district staff with summary information on how students in the school who receive Free and/or Reduced Lunch performed on the *Biology End-of-Course Examination*. The following information is provided:

- The total number of students\* who receive Free and/or Reduced Lunch is provided at the top of the page under the district name.
- The information provided for “Non-economically Disadvantaged” includes only those students who were not identified as receiving Free and/or Reduced Lunch.
- The information provided for “Migrant” includes only those Free and/or Reduced Lunch students who were also coded on their answer documents as being Migrant students.
- In the columns on the *School Summary Report*, data are provided for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). The associated scale score range for each performance level is also provided. Results are provided in terms of the numbers and percents of students performing at each level in the school, district, region, and state. The first column on the report indicates which students are being reported on that particular line (row).
- The information listed on the *School Summary Report: Free and/or Reduced Lunch Students* can be used to compare the performance of students in the school who receive Free and/or Reduced Lunch with the performance of students who receive Free and/or Reduced Lunch at the district, region, and state levels.

\* First Year in a School in the U.S. LEP Student scores are not included in this report.

Date of Test: April 2008  
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**END-OF-COURSE EXAMINATION  
BIOLOGY**

**SCHOOL SUMMARY REPORT: FREE AND/OR REDUCED LUNCH STUDENTS**

District Number: **99-99**      School Number: **99-99-999**  
 District Name: **Arkansas School District**      School Name: **Arkansas High School**  
 Total Number of Students Tested: **39**

	Number & Percent of Students Below Basic (BEL)			Number & Percent of Students Basic (BAS)			Number & Percent of Students Proficient (PRO)			Number & Percent of Students Advanced (ADV)								
	School	District	Region	School	District	Region	School	District	Region	School	District	Region	School	District	Region			
Free and/or Reduced Lunch	7	24%	685	41%	5	17%	338	20%	8	28%	328	20%	9	24%	328	20%	5,500	31%
Non-Economically Disadvantaged	9	21%	114	17%	11	26%	146	22%	17	40%	293	44%	5	12%	107	16%	1,555	11%
Migrant	0	0%	5	23%	0	0%	6	23%	0	0%	9	41%	0	0%	3	14%	134	26%

The following groups are not included in this report: 1) 1st Year LEP students

## SCHOOL PROFILE REPORT

The *School Profile Report* provides school and district staff with summary information on how students in the school performed on the *Biology End-of-Course Examination*.

Each school will receive two copies of the *School Profile Report*, and each district will receive one copy of the *School Profile Report*. The *School Profile Report* is a four-page booklet providing an overview of the school's results for the *Biology End-of-Course Examination*. District- and state-level data are also included so that student performance within the school can be compared with the performance of students at the district and state levels. A sample of the report is provided on pages 30–33.

The following information is provided on the *School Profile Report*:

- District and school information that reflects what was coded on the School/Course Header Sheet.
- Overall Results (Combined Population)
  - The Overall Results (Combined Population) table is located on page 1 of the *School Profile Report*.
  - The “Percent of Student Scores: Proficient and Advanced” bar graph shows the percent of students in the school who scored at Proficient and Advanced performance levels.
  - The “Percent of Student Scores in Performance Levels” bar graph shows the percent of students who scored at each of the four performance levels (Below Basic, Basic, Proficient, and Advanced) at the school, district, region, and state levels. The associated scale score range for each performance level is also provided.
- Results by Population Group and Results by Gender and Ethnicity
  - The “Results by Population Group” table is located on page 1, and the “Results by Gender and Ethnicity” table is located on page 2 of the *School Profile Report*.
  - The first column in the “Results by Population Group” table indicates the specific student population that is being reported on that particular line (row). With the exception of “Migrant Students,” these groups can also be found on the *School Roster Report*. In the “Results by Gender and Ethnicity” table, information is provided by gender and by ethnicity.
  - The columns in the “Results by Population Group” and “Results by Gender and Ethnicity” tables provide data for each of the four performance levels (Below Basic, Basic, Proficient, and Advanced). Results are provided in terms of the numbers and percents of students performing at each performance level. The first column in the table indicates the specific student population that is being reported on that particular line (row).
  - The columns on the right side of the “Results by Population Group” and “Results by Gender and Ethnicity” tables provide the Mean Scale Scores, which are broken out by group for the school, district, and state.

**Note:** Each district and the Arkansas Department of Education will receive one copy of the *District Profile Report*. The *District Profile Report* provides an overview of the district's results. The *School* and *District Profile Reports* are set up identically to one another, except that the district report does not include school data.

**SCHOOL PROFILE REPORT (CONTINUED)**

- Performance on Multiple-Choice Items
  - The “Performance on Multiple-Choice Items” table is located on page 3 of the *School Profile Report*.
  - Each line (row) provides the strand name and description, the number of multiple-choice points possible, and data on the average number of items students answer correctly. The results are provided in terms of numbers and percents at the school, district, and state levels.
- Performance on Open-Response Items
  - The “Performance on Open-Response Items” table is located on page 3 of the *School Profile Report*.
  - Each line (row) provides the strand name, the number of open-response points possible, and data on the average number of items students answer correctly. The results are provided at the school, district, and state levels.
- Proficient and Advanced Performance History
  - The “Proficient and Advanced Performance History” bar graph is located on page 4 of the *School Profile Report*.
  - The “Proficient and Advanced Performance History” bar graph shows the number and percent of students in the school who scored at the Proficient and Advanced performance levels on the *Biology End-of-Course Examination* since January 2008.
- Performance Level Descriptors
  - The “Performance Level Descriptors” table is located on page 4 of the *School Profile Report*.
  - Each line (row) provides the performance level, the associated scale score range, and the performance level description.

**2008 *BIOLOGY END-OF-COURSE EXAMINATION* REPORT DESCRIPTIONS AND SAMPLES**



**SCHOOL PROFILE—BIOLOGY**

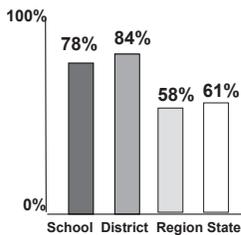
District: **Arkansas School District (99-99)**  
 School: **Arkansas High School (99-99-999)**  
 Test Date: **April 2008**

**END-OF-COURSE EXAMINATION  
BIOLOGY**

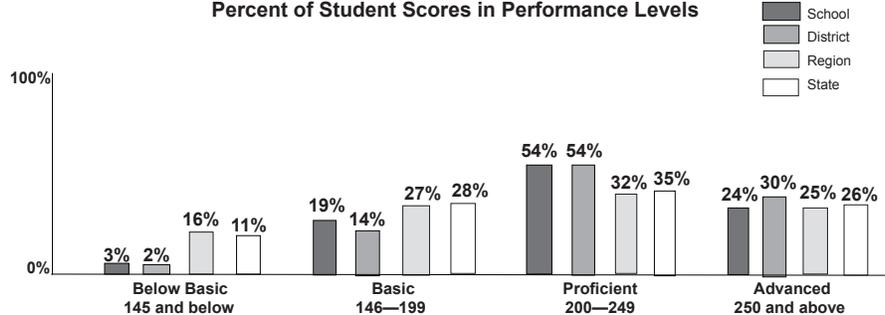
The *Biology End-of-Course Examination* was administered in April to students who have completed coursework in Biology. This School Profile provides a summary of your School's overall performance on this examination. Additional detail is provided in the accompanying School Level reports (Rosters, Summary Reports, and Item-by-Item Reports).

**Biology Overall Results (Combined Population)**

**Percent of Student Scores Proficient and Advanced**



**Percent of Student Scores in Performance Levels**



**Results by Population Group**

The following table shows the number and percent at each performance level and the mean scale scores for students in each population group for your School, District, and the State.

Population Group	Below Basic		Basic		Proficient		Advanced		Mean Scale Scores		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	School	District	State
Combined Population <sup>1</sup>	2	3%	13	19%	37	54%	16	24%	221	229	213
Combined Population without Highly Mobile <sup>2</sup>	2	3%	12	18%	37	54%	16	24%	222	230	214
General Population <sup>3</sup>	0	0%	10	16%	36	59%	15	25%	226	233	220
Students with Disabilities	1	33%	0	0%	1	33%	1	33%	197	197	163
Non-Disabled Students	1	2%	13	20%	36	55%	15	23%	222	230	217
Limited English Proficient Students	1	33%	2	67%	0	0%	0	0%	162	162	181
1st Year LEP Students	0	0%	0	0%	0	0%	0	0%			180
Economically Disadvantaged Students <sup>4</sup>	2	6%	6	18%	20	59%	6	18%	213	222	198
Non-Economically Disadvantaged Students	0	0%	7	21%	17	50%	10	29%	229	235	226
Migrant Students	1	33%	1	33%	0	0%	1	33%	180	180	191

Notes:

- <sup>1</sup> Combined Population includes all students tested except those classified as 1st Year LEP.
- <sup>2</sup> Combined Population without Highly Mobile includes all students tested except those classified as 1st Year LEP or Highly Mobile.
- <sup>3</sup> General Population does not include students who are classified as IEP, LEP, or Highly Mobile.
- <sup>4</sup> Based on Free and/or Reduced Lunch.

**SCHOOL PROFILE—BIOLOGY**

**Results by Gender and Ethnicity**

The following table shows the number and percent of students in your School at each performance level for the Gender and Ethnicity Population Groups. More detailed data for these and other population groups and comparisons to District, Region, and State results can be found in your School Summary Reports.

Population Group	Below Basic		Basic		Proficient		Advanced		Mean Scale Scores		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	School	District	State
Combined Population	2	3%	13	19%	37	54%	16	24%	221	229	213
Gender											
Male	1	3%	5	16%	19	59%	7	22%	221	229	211
Female	1	3%	8	22%	18	50%	9	25%	221	228	215
Ethnicity											
Asian/Pacific Islander	0	0%	0	0%	1	100%	0	0%	224	224	226
African American	0	0%	0	0%	1	100%	0	0%	202	202	181
Hispanic	1	33%	1	33%	0	0%	1	33%	180	198	196
Native American	0	0%	1	50%	1	50%	0	0%	201	201	213
Caucasian	1	2%	11	18%	34	56%	15	25%	224	232	225

Note: 1st Year LEP students are not included in this summary.

**SCHOOL PROFILE—BIOLOGY**

**Performance on Test Items**

**Performance on Multiple-Choice Items**

The table below indicates the overall skill demonstrated by students on the multiple-choice items for each Biology strand.

Biology Strands	Number of Items	Average Number and Percent Correct					
		School		District		State	
<b>Molecules and Cells</b> Students will demonstrate an understanding of the role of chemistry in life processes, the structure and function of cells, and how cells obtain and use energy.	12	7.8	65%	8.2	68%	7.0	58%
<b>Heredity and Evolution</b> Students will demonstrate an understanding of heredity, investigate the molecular basis of genetics, and examine the development of the theory of biological evolution.	12	8.1	62%	8.5	65%	7.5	58%
<b>Classification and the Diversity of Life</b> Students will demonstrate an understanding that organisms are diverse.	12	8.6	71%	9.0	75%	7.3	61%
<b>Ecology and Behavioral Relationships</b> Students will demonstrate an understanding of ecological and behavioral relationships among organisms and of the ecological impact of global issues.	12	7.6	63%	8.0	66%	7.2	60%
<b>Nature of Science</b> Students will demonstrate an understanding that science is a way of knowing. They will further demonstrate an understanding of current life science theories; design and safely conduct a scientific inquiry to solve valid problems; use mathematics, science equipment, and technology as tools to communicate and solve life science problems; describe the connections between pure and applied science; and describe various life science careers and the training required for the selected career.	12	6.5	59%	6.8	62%	6.9	62%

**Performance on Open-Response Items**

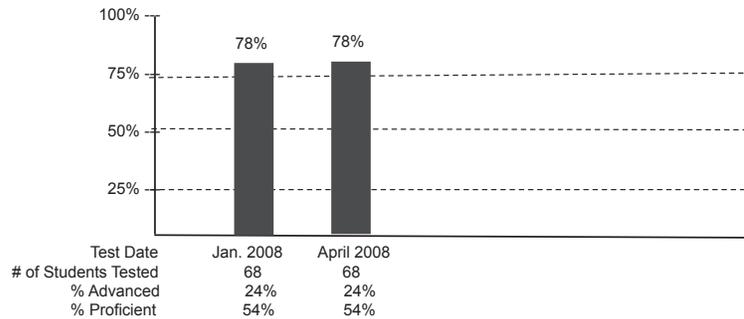
The table below indicates the overall skill demonstrated by students on the open-response items in Biology. Open-response items require students to write a response to a biology item.

Biology Strands	Possible OR Points	Average Points Scored		
		School	District	State
<b>Molecules and Cells</b>	8	2.4	2.6	2.2
<b>Heredity and Evolution</b>	8	3.7	4.2	3.8
<b>Classification and the Diversity of Life</b>	8	3.2	3.5	2.7
<b>Ecology and Behavioral Relationships</b>	8	2.1	2.3	2.1
<b>Nature of Science</b>	8	0.9	0.9	1.2

## SCHOOL PROFILE—BIOLOGY

### Proficient and Advanced Performance History

The following graph displays the number of students tested in your School and percent scoring at the Proficient or Advanced performance levels on the *Biology End-of-Course Examinations* since January 2008.



### Performance Level Descriptors

Performance Level	Score Range	Description
Advanced	145 and Above	Students display a comprehensive understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They are able to design and conduct scientific investigations which answer biological questions about real-world situations. These students are able to apply complex reasoning skills to make logical predictions and draw well-formulated conclusions.
Proficient	146—199	Students demonstrate a solid understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They are able to design and conduct scientific investigations, analyze data, and apply scientific principles to solve real-world, biological problems.
Basic	200—249	Students display knowledge of biological concepts, including some understanding of the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. They partially demonstrate the ability to apply this knowledge. They are able to conduct basic level scientific investigations, but demonstrate a need for additional assistance.
Below Basic	250 and Below	Students fail to show sufficient mastery of biology skills to attain the Basic level.

**SCHOOL ITEM-BY-ITEM SELECTIONS OF CORRECT ANSWERS REPORT**

The *School Item-by-Item Selections of Correct Answers* report provides school and district staff with information on how students within a school performed on the released common items that contributed to individual student results. This report is intended for use in conjunction with the Released Item Booklets for the *Biology End-of-Course Examination* in order to examine school results for individual items. A sample is provided on pages 36 and 37.

Each school and each district will receive one copy of the *School Item-by-Item Selections of Correct Answers* report. The Arkansas Department of Education will also receive one copy of this report. The *School Item-by-Item Selections of Correct Answers* report provides the results for each item (multiple-choice and open-response). The first page of the *School Item-by-Item Selections of Correct Answers* report contains information to be used in conjunction with the released items, and the second page of the report contains information for items not released<sup>+</sup>. The *School Item-by-Item Selections of Correct Answers* report is produced for the same groups as reported on the *School Summary Report* with the exception of Free and/or Reduced Lunch Students. The following information is provided on the *School Item-by-Item Selections of Correct Answers* report:

- The number of students\* in the school for the reported group is provided under the school information.
- Released Items
  - Data for released items are located on page 1 of the *School Item-by-Item Selections of Correct Answers* report.
  - The first column (Item # in Test Booklet) provides the item number and the testing session that corresponds to where the item appeared in the student test booklets. This information can be used to review session information and to determine whether position within the testing schedule had an impact on student results.
  - The second column (Item # in Released Item Booklet) provides the item number that corresponds to where the item appears in the Released Item Booklet.
  - The third column (Item Type) describes the item type: multiple-choice (MC) or open-response (OR).
  - The fourth column (Key) provides the correct answer choice for all multiple-choice items. The open-response items indicate “Rubric,” meaning that a scoring rubric was used to determine the student scores. The scoring rubrics for these items are provided in the Released Item Booklet.
  - For multiple-choice items, the remaining columns provide the number and percent of students who selected the correct answer at the school, district, and state levels. This information allows school and district staff to compare results for each multiple-choice item at the school level to district- and state-level results.
  - For open-response items, the remaining columns provide the average score attained by students at the school, district, and state levels. This information allows school and district staff to compare results for each open-response item at the school level to district- and state-levels results.

<sup>+</sup> All items were released for the April 2008 administration of the *Biology End-of-Course Examination*. The “Items Not Released” section of this report is included only for the *Biology Mid-Year End-of-Course Examination*.

\* First Year in a School in the U.S. LEP Student responses are not included in this report.

**SCHOOL ITEM-BY-ITEM SELECTIONS OF CORRECT ANSWERS REPORT (CONTINUED)**

- Items Not Released<sup>+</sup> *Biology Mid-Year End-of-Course Examination* only
  - Data for items not released are located on page 2 of the *School Item-by-Item Selections of Correct Answers* report.
  - The number of students\* in the school for the reported group is provided under the school information.
  - The first column numbers the items for reference purposes only. These numbers do not correlate with numbers or positions of the items in the test booklets.
  - The second column (Item Type) describes the item type: multiple-choice (MC) or open-response (OR).
  - The third column (SLE) provides the strand, content standard, and student learning expectation associated with each non-released item.
  - For multiple-choice items, the remaining columns provide the number and percent of students who selected the correct answer at the school, district, and state levels. This information allows school and district staff to compare results for each multiple-choice item at the school level to district- and state-level results.
  - For open-response items, the remaining columns provide the average score attained by students at the school, district, and state levels. This information allows school and district staff to compare results for each open-response item at the school level to district- and state-level results.

<sup>+</sup> All items were released for the April 2008 administration of the *Biology End-of-Course Examination*. The “Items Not Released” section of this report is included only for the *Biology Mid-Year End-of-Course Examination*.

\* First Year in a School in the U.S. LEP Student responses are not included in this report.

**Note:** Each district and the Arkansas Department of Education will also receive one copy of the *District Item-by-Item Selections of Correct Answers* report. The *District Item-by-Item Selections of Correct Answers* report provides individual item results for the April 2008 *Biology End-of-Course Examination* at the district and state levels. The *School* and *District Item-by-Item Selections of Correct Answers* reports are set up identically to one another except that the district report does not include school data.

**2008 BIOLOGY END-OF-COURSE EXAMINATION REPORT DESCRIPTIONS AND SAMPLES**



**END-OF-COURSE EXAMINATION  
SCHOOL ITEM-BY-ITEM SELECTIONS  
OF CORRECT ANSWERS  
BIOLOGY: COMBINED POPULATION  
DATE OF TEST: JANUARY 2008**

Page 1

District Number: **99-99**                      District Name: **Arkansas School District**  
School Number: **99-99-999**              School Name: **Arkansas School**

Total Number of Students Tested: **38**

**RELEASED ITEMS**

Item # In Test Booklet	Item # In Released Item Booklet	Item Type	Key	Number and Percent Selecting the Correct Answer						
				School #	School %	District #	District %	State #	State %	
1 (Session B1)	1	MC	A	14	36.6%	14	36.6%	14,217	42.9%	
2 (Session B1)	2	MC	A	20	76.7%	20	76.7%	23,370	71.8%	
3 (Session B1)	3	MC	C	20	76.7%	20	76.7%	22,164	66.9%	
4 (Session B1)	4	MC	B	28	73.7%	28	73.7%	25,555	77.2%	
21 (Session B1)	5	MC	B	31	81.6%	31	81.6%	20,829	62.9%	
6 (Session B1)	6	MC	A	28	73.1%	28	73.1%	16,627	50.2%	
7 (Session B1)	7	MC	C	27	71.1%	27	71.1%	16,455	49.3%	
8 (Session B1)	8	MC	D	26	68.4%	26	68.4%	19,499	58.9%	
9 (Session B1)	9	MC	C	12	31.6%	12	31.6%	12,093	38.6%	
22 (Session B1)	10	MC	A	20	52.6%	20	52.6%	14,333	43.3%	
11 (Session B1)	11	MC	D	9	23.7%	9	23.7%	14,630	44.2%	
19 (Session B1)	12	MC	B	36	94.7%	36	94.7%	22,326	68.6%	
13 (Session B1)	13	MC	B	16	42.1%	16	42.1%	16,451	49.9%	
14 (Session B1)	14	MC	D	27	71.1%	27	71.1%	23,888	72.1%	
23 (Session B1)	15	MC	D	26	68.4%	26	68.4%	21,028	68.2%	
16 (Session B1)	16	MC	A	23	60.5%	23	60.5%	20,814	62.8%	
17 (Session B1)	17	MC	C	35	92.1%	35	92.1%	20,324	83.7%	
18 (Session B1)	18	MC	A	20	52.6%	20	52.6%	14,333	43.3%	
12 (Session B1)	19	MC	D	35	92.1%	35	92.1%	23,894	72.1%	
20 (Session B1)	20	MC	B	33	86.8%	33	86.8%	20,270	61.2%	
24 (Session B1)	21	MC	D	20	76.3%	20	76.3%	20,963	63.3%	
25 (Session B1)	22	MC	B	33	86.9%	33	86.9%	27,714	83.7%	
26 (Session B1)	23	MC	C	32	84.2%	32	84.2%	19,454	58.7%	
27 (Session B1)	24	MC	B	25	65.8%	25	65.8%	20,592	62.2%	
28 (Session B1)	25	MC	D	34	89.5%	34	89.5%	18,233	55.0%	
29 (Session B1)	26	MC	B	21	55.3%	21	55.3%	15,470	46.7%	
30 (Session B1)	27	MC	C	28	73.1%	28	73.1%	24,711	74.6%	
31 (Session B3)	28	MC	D	25	65.9%	25	65.9%	18,815	56.2%	
32 (Session B3)	29	MC	A	26	68.4%	26	68.4%	18,200	56.0%	
38 (Session B3)	30	MC	D	25	65.9%	25	65.9%	21,325	64.4%	
39 (Session B3)	31	MC	A	30	79.9%	30	79.9%	18,484	55.7%	
40 (Session B3)	32	MC	D	35	92.1%	35	92.1%	24,078	72.7%	
41 (Session B3)	33	MC	C	12	31.6%	12	31.6%	12,093	38.6%	
42 (Session B3)	34	MC	D	26	68.4%	26	68.4%	20,512	61.9%	
43 (Session B3)	35	MC	B	12	31.6%	12	31.6%	12,093	38.6%	
44 (Session B3)	36	MC	B	16	42.1%	16	42.1%	14,802	44.7%	
45 (Session B3)	37	MC	A	9	23.7%	9	23.7%	14,630	44.2%	
57 (Session B3)	38	MC	A	16	42.1%	16	42.1%	14,802	44.7%	
58 (Session B3)	39	MC	C	20	52.6%	20	52.6%	14,333	43.3%	
59 (Session B3)	40	MC	B	9	23.7%	9	23.7%	14,630	44.2%	
60 (Session B3)	41	MC	B	12	31.6%	12	31.6%	12,093	38.6%	

The following groups are not included in this report: 1) 1st Year LEP students



**END-OF-COURSE EXAMINATION  
SCHOOL ITEM-BY-ITEM SELECTIONS  
OF CORRECT ANSWERS  
BIOLOGY: COMBINED POPULATION  
DATE OF TEST: JANUARY 2008**

District Number: **99-99**                      District Name: **Arkansas School District**  
School Number: **99-99-999**              School Name: **Arkansas School**

Total Number of Students Tested: **38**

**ITEMS NOT RELEASED**

	Item Type	SLE*	School #	School %	Number and Percent Selecting the Correct Answer			StAte %
					District #	District %	State #	
1	MC	H5.9	14	36.6%	14	36.6%	14,217	42.9%
2	MC	M1.4	20	76.7%	20	76.7%	23,370	71.8%
3	MC	H5.6	20	76.7%	20	76.7%	22,164	66.9%
4	MC	N10.5	28	73.7%	28	73.7%	25,555	77.2%
5	MC	C7.4	31	81.6%	31	81.6%	20,829	62.9%
6	MC	H5.1	28	73.1%	28	73.1%	16,627	50.2%
7	MC	C7.8	27	71.1%	27	71.1%	16,455	49.3%
8	MC	E8.1	26	68.4%	26	68.4%	19,499	58.9%
9	MC	E8.4	12	31.6%	12	31.6%	12,093	38.6%
10	MC	H5.1	20	52.6%	20	52.6%	14,333	43.3%
11	MC	E9.3	9	23.7%	9	23.7%	14,630	44.2%
12	MC	M1.1	36	94.7%	36	94.7%	22,326	68.6%
13	MC	M1.9	16	42.1%	16	42.1%	16,451	49.9%
14	MC	H4.2	27	71.1%	27	71.1%	23,888	72.1%
15	MC	N11.5	26	68.4%	26	68.4%	21,028	68.2%
16	MC	H5.7	23	60.5%	23	60.5%	20,814	62.8%
17	MC	H4.2	35	92.1%	35	92.1%	20,324	83.7%
18	MC	M1.7	20	52.6%	20	52.6%	14,333	43.3%
19	MC	H5.3	35	92.1%	35	92.1%	23,894	72.1%
20	MC	C7.6	33	86.8%	33	86.8%	20,270	61.2%
21	MC	M1.6	20	76.3%	20	76.3%	20,963	63.3%

	Item Type	SLE*	Average Score of All Students		
			School	District	State
1	OR	N19.4	0.5	0.5	2.5
2	OR	M2.3	3.2	0.5	2.5
3	OR	H4.1	0.4	0.5	2.5

The following groups are not included in this report: 1) 1st Year LEP students.

\* SLE (Student Learning Expectation) is expressed as "S.CS.SLE", where  
S = Strand  
CS = Content Standard  
SLE = Student Learning Expectation

## PERFORMANCE LEVELS FOR THE 2008 *BIOLOGY END-OF-COURSE EXAMINATION*

### DEFINITIONS OF PERFORMANCE LEVELS

The general performance levels preamble for the ACTAAP states that the students must demonstrate their ability to be successful and productive citizens. Student performance is categorized into four levels of performance for the *Biology End-of-Course Examination*: Advanced, Proficient, Basic, and Below Basic. The general definitions of the performance levels are as follows:

#### **Advanced**

Biology students performing at the advanced level display a comprehensive understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. These students are able to design and conduct scientific investigations which answer biological questions about real-world situations. In addition, these students are able to apply complex reasoning skills to make logical predictions and draw well-formulated conclusions.

#### **Proficient**

Biology students performing at the proficient level demonstrate a solid understanding of biological concepts, including the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. In addition, these students are able to design and conduct scientific investigations, analyze data, and apply scientific principles to solve real-world, biological problems.

#### **Basic**

Biology students performing at the basic level display knowledge of biological concepts, including some understanding of the role of chemistry and cells in life processes, genetics, evolution, the diversity of life, and the ecological and behavioral relationships among organisms. These students partially demonstrate the ability to apply this knowledge. They are able to conduct basic level scientific investigations, but demonstrate a need for additional assistance to reach the proficient level.

#### **Below Basic**

Below Basic students fail to show sufficient mastery of geometric skills to attain the basic level.



# ACTAAP

ARKANSAS COMPREHENSIVE TESTING, ASSESSMENT, AND ACCOUNTABILITY PROGRAM

DEVELOPED FOR THE ARKANSAS DEPARTMENT OF EDUCATION, LITTLE ROCK, AR 72201

QAI04196 RIG AR0804/AR0806