## 4th Grade

## Fourth-graders reading at higher levels

Fourth-graders' reading comprehension skills have risen compared to 15 years ago. As shown in figure 1, the average score of 221 in 2007 was higher than in any of the previous assessment years. Fourth-graders in 2007 scored 2 points higher than in 2005 and 4 points higher than in 1992.

Figure 1. Trend in fourth-grade NAEP reading average scores


* Significantly different ( $p<.05$ ) from 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2007 Reading Assessments.

## Gains in reading contexts

Although not shown here, gains were also made in each of the two reading contexts assessed at grade 4. The score in reading for literary experience increased from 219 in 1992 to 223 in 2007. The score in reading for information increased from 214 in 1992 to 219 in 2007.

## Improvement for lower- and middle-performing students

Figure 2. Trend in fourth-grade NAEP reading percentile scores


Higher reading scores were seen particularly among lower- and middle-performing students (at the 10 th, 25 th, and 50 th percentiles). The score at each of these percentiles was higher in 2007 than in all previous assessments (figure 2). While the score in 2007 for students at the 75th percentile was higher than in both 2005 and 1992, the score for students at the 90th percentile showed no significant change in comparison to 2005 but was higher than in 1992.

* Significantly different ( $p<.05$ ) from 2007.

The performance increases were reflected in higher percentages of students performing at or above the Basic level and the Proficient level.

The percentage of fourth-graders performing at or above Basic increased from 62 percent in 1992 to 67 percent in 2007 (figure 3). The percentage at or above Proficient increased from 29 to 33 percent over the same period.

Figure 3. Trend in fourth-grade NAEP reading achievement-level performance


* Significantly different ( $p<.05$ ) from 2007. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2007 Reading Assessments.

\% at Advanced
\% at or above Proficient \% at or above Basic

[^0] not permitted

Accommodations permitted

## Most racial/ethnic groups show improvement

Figure 4. Trend in fourth-grade NAEP reading average scores, by race/ethnicity


Reading performance improved for four of the five racial/ ethnic groups over the last 15 years. White, Black, Hispanic, and Asian/Pacific Islander students all showed higher average reading scores in comparison to 2005 and 1992 (figure 4). Since 1992, Black and Asian/Pacific Islander students made greater gains (increases of 11 and 16 points, respectively) than White students (a gain of 6 points ${ }^{1}$ ).

There was no significant change in the average reading score for American Indian/Alaska Native students compared to all previous assessment years for which data were available.
${ }^{1}$ The score-point gain is based on the difference of the unrounded scores as opposed to the rounded scores shown in the figure.

## ACHIEVEMENT-LEVEL RESULTS...

Information is available on achievement-level results for racial/ethnic groups and other reporting categories at http://nationsreportcard.gov/reading_2007/data.asp.

* Significantly different ( $p<.05$ ) from 2007.

NOTE: Sample sizes were insufficient to permit reliable estimates for American Indian/Alaska Native fourth-graders in 1992 and 1998. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 19922007 Reading Assessments.

## White - Black score gap narrows

The increase in the score for Black fourth-graders contributed to the narrowing of the score gap with their White peers. While there was a 27-point gap between White and Black students in 2007, the gap was smaller than in all previous assessments (figure 5).

The 26-point score gap between White and Hispanic students in 2007 was not significantly different from the gaps in 2005 or 1992.

Figure 5. Trend in fourth-grade NAEP reading average scores and score gaps, by selected racial/ethnic groups



* Significantly different ( $p<.05$ ) from 2007.

NOTE: Black includes African American, and Hispanic includes Latino. Race categories exclude Hispanic origin. Score gaps are calculated based on differences between unrounded average scores.

Table 3. Percentage of students assessed in fourth-grade NAEP reading, by race/ethnicity: Various years, 1992-2007

| Race/ethnicity | 1992 | 1994 | 1998 | 2000 | 2002 | 2003 | 2005 | 2007 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | $73^{*}$ | $72^{*}$ | $66^{*}$ | $63^{*}$ | $61^{*}$ | $60^{*}$ | 59 | 58 |
| Black | 17 | 17 | 15 | 17 | $17^{*}$ | 17 | 16 | 16 |
| Hispanic | $7^{*}$ | $7^{*}$ | $14^{*}$ | $14^{*}$ | $16^{*}$ | $17^{*}$ | 18 | 19 |
| Asian/Pacific <br> Islander | $2^{*}$ | $3^{*}$ | 4 | 4 | $4^{*}$ | $4^{*}$ | 5 | 5 |
| American Indian/ <br> Alaska Native | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

In each assessment year, NAEP collects information on student demographics. As shown in table 3, there have been no significant changes since 2005 in the percentages of students in any of the five racial/ethnic groups. In comparison to 1992, the percentage of White students in the population has declined, while the percentages of Hispanic and Asian/Pacific Islander students have increased.

NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because results are not shown for the "unclassified" race/ethnicity category.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2007 Reading Assessments.

## Females outperform males

The overall improvement in reading at grade 4 was seen in the performance of both male and female students. Reading scores were higher in 2007 than in all previous assessment years for both groups (figure 6).

In 2007, female fourth-graders scored higher on average in reading than their male counterparts. The 7-point score gap between the two groups was not significantly different from the gaps in 2005 or in 1992.

Figure 6. Trend in fourth-grade NAEP reading average scores and score gaps, by gender


* Significantly different ( $p<.05$ ) from 2007.

NOTE: Score gaps are calculated based on differences between unrounded average scores.

Table 4. Average scores in fourth-grade NAEP reading, by reading context and gender: 2007

| Gender | Reading for literary experience | Reading for information |
| :--- | :---: | :---: |
| Male | $219^{*}$ | $216^{*}$ |
| Female | 227 | 221 |

* Significantly different ( $p<.05$ ) from female students in 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2007 Reading Assessments.

Average reading scores remained higher for female students than for male students when results were examined by each context for reading. Female students scored 8 points higher in reading for literary experience and 5 points higher in reading for information (table 4).

## Public school students score lower than private school students

Ninety percent of fourth-graders attended public schools in 2007, and 10 percent attended private schools. The average reading score for fourth-graders in public schools (220) was lower than for students in private schools overall (234) and lower than for students in Catholic schools specifically (232).
Sample sizes for private schools as a whole were not always large enough to produce reliable estimates of student performance in some of the previous assessments,
limiting the comparisons that can be made in performance over time (see the section on School and Student Participation Rates in the Technical Notes for more information). Trend results for public and Catholic school students, and for private school students in those years in which sample sizes were sufficient, are available at: http:// nationsreportcard.gov/reading_ 2007/r0038.asp.

## Both higher- and lower-income level students make gains

A student's eligibility for free or reduced-price school lunch is used as an indicator of socioeconomic status; students from low-income families are typically eligible (eligibility criteria are described in the Technical Notes), while students from higher-income families typically are not.

Students who were not eligible continued to score higher on average
than students who were eligible for free or reduced-price lunch; however, average reading scores were higher in 2007 than in 2005 for all three groups (figure 7). When comparing the performance of the two eligible groups in 2007, those students eligible for reduced-price lunch scored higher on average than students eligible for free lunch.

Figure 7. Trend in fourth-grade NAEP reading average scores, by eligibility for free or reduced-price school lunch


Table 5. Percentage of students assessed in fourth-grade NAEP reading, by eligibility for free or reduced-price school lunch: 2003, 2005, and 2007

| Eligibility status | 2003 | 2005 | 2007 |
| :--- | :---: | :---: | :---: |
| Eligible for free lunch | $32^{*}$ | 34 | 35 |
| Eligible for reduced-price lunch | $8^{*}$ | $7^{*}$ | 6 |
| Not eligible | $50^{*}$ | $50^{*}$ | 52 |
| Information not available | $10^{*}$ | $8^{*}$ | 7 |

More than one-third of fourth-graders assessed were eligible for free lunch in 2007 (table 5).

Changes in these percentages may reflect not only a shift in the population but also changes in the National School Lunch Program and improvements in data quality. See the Technical Notes for more information.

## State Performance at Grade 4

State results for public school students make it possible to compare each state's performance to other states and to the nation. All 50 states and 2 jurisdictions (i.e., the District of Columbia and Department of Defense schools) participated in the 2007 reading assessment. These 52 states and jurisdictions are all referred to as "states" in the following summary of state results. All states also participated in 2005, and 42 participated in the 1992 assessment, allowing for comparisons over time.

## Scores increase since 2005 in one-third of states

The map on the right highlights the 18 states that showed an increase in their overall average reading score from 2005 to 2007 (figure 8). Of these 18 states, scores also increased for White students in 6 states, Black students in 8 states, and Hispanic students in 2 states. Scores increased for all three racial/ethnic student groups in New Jersey.
In no state did scores decline since 2005 for public school students overall or for any of the racial/ethnic student groups.

When making state comparisons, it is important to remember that performance results may be affected by differences in demographic makeup and exclusion and
accommodation rates for students with disabilities and English language learners. Differences in performance could be affected if exclusion rates are comparatively
high or vary widely over time. See appendix tables A-3 through A-5 for state exclusion and accommodation rates.

Figure 8. Changes in fourth-grade NAEP reading average scores between 2005 and 2007


[^1]
## Scores higher than in 1992 for 25 states

Of the 42 states that participated in both the 1992 and 2007 assessments, 25 showed increases in average scores, and 1 state showed a decrease (figure 9). Twenty-one of the 25 states with score increases also showed increased percentages of students performing at or above Basic and at or above Proficient. These and other state results for grade 4 are provided in figure 10, tables 6 and 7, and appendix tables A-7 through A-13.

Figure 9. Changes in fourth-grade NAEP reading average scores between 1992 and 2007


Department of Defense Education Activity (overseas and domestic schools).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 2007 Reading Assessments.

## States' progress varies by context for reading

All of the texts used to measure reading comprehension at grade 4 are classified within the framework dimension of context for reading: reading for literary experience and reading for information. Reading for literary experience is measured with fictional texts that include stories and folktales. Reading for information is measured with articles from children's magazines or from textbooks.

Nationally, students improved their performance overall and in both reading contexts from 2005 to 2007. States' overall performance was not always consistent with their performance in each reading context. Some states improved overall and in both reading contexts. Others did not improve in their overall performance, but did improve in one of the reading contexts. Even states that experienced an overall decline in reading performance may not have declined in both reading contexts.

When compared to 2005...
... 6 of the 18 states that posted overall gains also showed gains in both reading contexts. They were Alabama, the District of Columbia, Florida, Iowa, Massachusetts, and New Jersey. Twelve states showed gains in either reading for information or reading for literary experience but not both.
... 9 of the 34 states that showed no significant change in overall performance showed gains in reading for information. None of these 34 states improved in reading for literary experience.

Figure 10. Average scores and achievement-level results in NAEP reading for fourth-grade public school students, by state: 2007

${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: The shaded bars are graphed using unrounded numbers. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.

Table 6. Average scores in NAEP reading for fourth-grade public school students, by state: Various years, 1992-2007

| State/jurisdiction | Accommodations not permitted |  |  | Accommodations permitted |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1994 | 1998 | 1998 | 2002 | 2003 | 2005 | 2007 |
| Nation (public) ${ }^{1}$ | 215* | 212* | 215* | $213 *$ | 217* | 216* | 217* | 220 |
| Alabama | 207* | 208* | 211* | 211* | 207* | 207* | 208* | 216 |
| Alaska | - | - | - | - | - | 212 | 211* | 214 |
| Arizona | 209 | 206 | 207 | 206 | 205 | 209 | 207 | 210 |
| Arkansas | 211* | 209* | 209* | 209* | 213* | 214 | 217 | 217 |
| California | 202* | 197* | 202 | 202* | 206 | 206 | 207 | 209 |
| Colorado | 217* | 213* | 222 | 220 | - | 224 | 224 | 224 |
| Connecticut | 222* | 222* | 232 | 230 | 229 | 228 | 226 | 227 |
| Delaware | 213* | 206* | 212* | 207* | 224 | 224 | 226 | 225 |
| Florida | 208* | 205* | 207* | 206* | 214* | 218* | 219* | 224 |
| Georgia | 212* | 207* | 210* | 209* | 215* | 214* | 214* | 219 |
| Hawaii | 203* | 201* | 200* | 200* | 208* | 208* | 210* | 213 |
| Idaho | 219* | - | - | - | 220* | 218* | 222 | 223 |
| Illinois | - | - | - | - | - | 216 | 216 | 219 |
| Indiana | 221 | 220 | - | - | 222 | 220 | 218* | 222 |
| lowa | 225 | 223 | 223 | 220* | 223 | 223 | 221* | 225 |
| Kansas | - | - | 222 | 221 | 222 | 220* | $220 *$ | 225 |
| Kentucky | 213* | 212* | 218* | 218* | 219* | 219 | 220 | 222 |
| Louisiana | 204 | 197* | 204 | 200* | 207 | 205 | 209 | 207 |
| Maine | 227 | 228 | 225 | 225 | 225 | 224 | 225 | 226 |
| Maryland | 211* | 210* | 215* | 212* | 217* | 219* | 220* | 225 |
| Massachusetts | 226* | 223* | 225* | $223 *$ | 234 | 228* | 231* | 236 |
| Michigan | 216* | - | 217 | 216* | 219 | 219 | 218 | 220 |
| Minnesota | 221* | 218* | 222 | 219* | 225 | 223 | 225 | 225 |
| Mississippi | 199* | 202* | 204 | 203* | 203* | 205 | 204* | 208 |
| Missouri | 220 | 217* | 216* | 216* | 220 | 222 | 221 | 221 |
| Montana | - | 222* | 226 | 225 | 224 | 223* | 225 | 227 |
| Nebraska | 221 | 220 | - | - | 222 | 221 | 221 | 223 |
| Nevada | - | - | 208 | 206* | 209 | 207* | 207* | 211 |
| New Hampshire | 228 | 223* | 226* | 226 | - | 228 | 227 | 229 |
| New Jersey | 223* | 219* | - | - | - | 225* | 223* | 231 |
| New Mexico | 211 | 205* | 206* | 205* | 208* | 203* | 207* | 212 |
| New York | 215* | 212* | 216* | 215* | 222 | 222 | 223 | 224 |
| North Carolina | 212* | 214* | 217 | 213* | 222* | 221* | 217 | 218 |
| North Dakota | 226 | 225 | - | - | 224* | 222* | 225 | 226 |
| Ohio | 217* | - | - | - | 222 | 222* | 223 | 226 |
| Oklahoma | 220* | - | 220 | 219 | 213* | 214* | 214 | 217 |
| Oregon | - | - | 214 | 212 | $220 *$ | 218 | 217 | 215 |
| Pennsylvania | 221* | 215* | - | - | 221* | 219* | 223* | 226 |
| Rhode Island | 217 | 220 | 218 | 218 | 220 | 216 | 216 | 219 |
| South Carolina | 210* | 203* | 210 | 209* | 214 | 215 | 213 | 214 |
| South Dakota | - | - | - | - | - | 222 | 222 | 223 |
| Tennessee | 212 | 213 | 212 | 212* | 214 | 212 | 214 | 216 |
| Texas | 213* | 212* | 217 | 214* | 217 | 215* | 219 | 220 |
| Utah | 220 | 217* | 215* | 216* | 222 | 219 | 221 | 221 |
| Vermont | - | - | - | - | 227 | 226 | 227 | 228 |
| Virginia | 221* | 213* | 218* | 217* | 225 | 223* | 226 | 227 |
| Washington | - | 213* | 217* | 218* | 224 | 221 | 223 | 224 |
| West Virginia | 216 | 213 | 216 | 216 | 219* | 219* | 215 | 215 |
| Wisconsin | 224 | 224 | 224 | 222 | - | 221 | 221 | 223 |
| Wyoming | 223 | 221* | 219* | 218* | 221* | 222* | 223* | 225 |
| Other jurisdictions |  |  |  |  |  |  |  |  |
| District of Columbia | 188* | 179* | 182* | 179* | 191* | 188* | 191* | 197 |
| DoDEA ${ }^{2}$ | - | - | 222* | 220* | 224* | 224* | 226* | 229 |

[^2]Table 7. Percentage of fourth-grade public school students and average scores in NAEP reading, by selected student groups and state: 2007

|  |  |  | Race/ethnicity |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |

See notes at end of table.

Table 7. Percentage of fourth-grade public school students and average scores in NAEP reading, by selected student groups and state: 2007-Continued

| State/jurisdiction | Eligibility for free/reduced-price school lunch |  |  |  | Gender |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eligible |  | Not eligible |  | Male |  | Female |  |
|  | Percentage of students | $\begin{array}{r} \text { Average } \\ \text { scale score } \end{array}$ | Percentage of students | Average scale score | Percentage of students | Average scale score | Percentage of students | $\begin{array}{r} \text { Average } \\ \text { scale score } \end{array}$ |
| Nation (public) | 45 | 205 | 54 | 232 | 50 | 216 | 50 | 223 |
| Alabama | 55 | 203 | 45 | 232 | 51 | 213 | 49 | 219 |
| Alaska | 42 | 197 | 58 | 227 | 51 | 210 | 49 | 219 |
| Arizona | 51 | 196 | 46 | 224 | 52 | 206 | 48 | 214 |
| Arkansas | 56 | 205 | 44 | 232 | 50 | 213 | 50 | 221 |
| California | 53 | 195 | 44 | 225 | 51 | 204 | 49 | 213 |
| Colorado | 38 | 206 | 62 | 235 | 51 | 221 | 49 | 226 |
| Connecticut | 30 | 201 | 70 | 239 | 51 | 224 | 49 | 231 |
| Delaware | 38 | 214 | 61 | 232 | 50 | 222 | 50 | 228 |
| Florida | 49 | 213 | 50 | 234 | 51 | 220 | 49 | 227 |
| Georgia | 50 | 207 | 49 | 231 | 49 | 216 | 51 | 222 |
| Hawaii | 42 | 203 | 58 | 221 | 51 | 208 | 49 | 219 |
| Idaho | 43 | 212 | 56 | 232 | 51 | 221 | 49 | 226 |
| Illinois | 44 | 204 | 56 | 232 | 51 | 217 | 49 | 222 |
| Indiana | 40 | 209 | 59 | 231 | 50 | 219 | 50 | 224 |
| lowa | 32 | 212 | 68 | 231 | 50 | 222 | 50 | 228 |
| Kansas | 40 | 212 | 60 | 233 | 49 | 221 | 51 | 228 |
| Kentucky | 52 | 212 | 48 | 234 | 49 | 219 | 51 | 226 |
| Louisiana | 69 | 200 | 31 | 225 | 51 | 203 | 49 | 212 |
| Maine | 36 | 213 | 64 | 233 | 51 | 223 | 49 | 228 |
| Maryland | 33 | 207 | 67 | 234 | 50 | 221 | 50 | 228 |
| Massachusetts | 26 | 214 | 73 | 243 | 50 | 233 | 50 | 238 |
| Michigan | 36 | 204 | 64 | 229 | 50 | 216 | 50 | 224 |
| Minnesota | 28 | 206 | 72 | 233 | 50 | 223 | 50 | 227 |
| Mississippi | 69 | 200 | 29 | 225 | 50 | 204 | 50 | 212 |
| Missouri | 42 | 208 | 57 | 230 | 51 | 216 | 49 | 225 |
| Montana | 37 | 215 | 60 | 234 | 51 | 225 | 49 | 228 |
| Nebraska | 39 | 208 | 61 | 232 | 51 | 221 | 49 | 225 |
| Nevada | 42 | 197 | 55 | 222 | 50 | 208 | 50 | 214 |
| New Hampshire | 18 | 212 | 80 | 233 | 50 | 226 | 50 | 232 |
| New Jersey | 27 | 210 | 71 | 238 | 51 | 228 | 49 | 234 |
| New Mexico | 65 | 203 | 35 | 228 | 49 | 210 | 51 | 213 |
| New York | 47 | 209 | 52 | 237 | 49 | 220 | 51 | 227 |
| North Carolina | 47 | 205 | 51 | 229 | 50 | 214 | 50 | 222 |
| North Dakota | 31 | 215 | 69 | 231 | 51 | 224 | 49 | 229 |
| Ohio | 36 | 211 | 64 | 234 | 51 | 223 | 49 | 228 |
| Oklahoma | 54 | 209 | 46 | 227 | 50 | 214 | 50 | 220 |
| Oregon | 44 | 200 | 54 | 228 | 51 | 212 | 49 | 218 |
| Pennsylvania | 35 | 207 | 65 | 237 | 50 | 223 | 50 | 230 |
| Rhode Island | 40 | 202 | 60 | 230 | 51 | 215 | 49 | 223 |
| South Carolina | 52 | 201 | 48 | 228 | 53 | 210 | 47 | 218 |
| South Dakota | 36 | 209 | 64 | 231 | 51 | 220 | 49 | 227 |
| Tennessee | 48 | 202 | 52 | 229 | 50 | 213 | 50 | 219 |
| Texas | 54 | 209 | 44 | 232 | 50 | 217 | 50 | 223 |
| Utah | 36 | 208 | 63 | 229 | 50 | 217 | 50 | 225 |
| Vermont | 31 | 212 | 69 | 235 | 51 | 225 | 49 | 232 |
| Virginia | 29 | 213 | 71 | 233 | 50 | 224 | 50 | 230 |
| Washington | 38 | 210 | 58 | 234 | 51 | 221 | 49 | 227 |
| West Virginia | 52 | 206 | 48 | 225 | 52 | 211 | 48 | 220 |
| Wisconsin | 32 | 205 | 67 | 232 | 51 | 222 | 49 | 224 |
| Wyoming | 34 | 214 | 65 | 231 | 50 | 222 | 50 | 228 |
| Other jurisdictions |  |  |  |  |  |  |  |  |
| District of Columbia | 66 | 188 | 34 | 216 | 48 | 194 | 52 | 200 |
| DoDEA ${ }^{1}$ | \# | $\ddagger$ | \# | $\ddagger$ | 50 | 226 | 50 | 233 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Results are not shown for students whose race/ethnicity was "unclassified" and for students whose eligibility for free/reduced-price school lunch was not available.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007
Reading Assessment.

## Assessment Content at Grade 4

The content of the assessment varied by grade to reflect the reading skills appropriate for each grade level, with differing proportions of assessment questions devoted to each of the contexts for reading. At grade 4, assessment questions were divided between two of the contexts for reading: reading for literary experience and reading for information, with a slightly higher proportion of assessment questions devoted to reading for literary experience. The 2007 fourth-grade reading assessment included a total of 10 reading passages and 100 questions.

## Reading Achievement Levels at Grade 4

The following descriptions are abbreviated versions of the full achievement-level descriptions for grade 4 reading. The cut score depicting the lowest score representative of that level is noted in parentheses.

Basic (208): Fourth-grade students performing at the Basic level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth-graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.

Proficient (238): Fourth-grade students performing at the Proficient level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas
in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connections between the text and what the student infers should be clear.

Advanced (268): Fourth-grade students performing at the Advanced level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge texts critically and, in general, give thorough answers that indicate careful thought.

## What Fourth-Graders Know and Can Do in Reading

The item map below is useful for understanding performance at different levels on the scale. The scale scores on the left represent the average scores for students who were likely to get the items correct or complete. The lower-boundary scores at each achievement level are noted in boxes. The descriptions of selected assessment questions are listed in the right column and indicate what students needed to do to answer the question successfully. For
example, the map on this page shows that fourth-graders performing near the middle of the Basic range (students with an average score of 220) were likely to be able to recognize the meaning of specialized vocabulary from context. Students performing near the lower end of the Proficient range (with an average score of 239) were likely to be able to identify a character's problem and describe how it was solved.

GRADE 4 NAEP READING ITEM MAP

|  | Scale score | Question description |
| :---: | :---: | :---: |
|  | 500 |  |
|  | $\sim$ |  |
|  | 347 | Integrate text ideas to provide and explain their application |
|  | 326 | Evaluate titles and support judgment about them |
| ® | 324 | Provide text-based inference and support with story details |
| \% | 302 | Explain causal relation between character's action and story outcome |
| $\frac{3}{8}$ | 290 | Read across text to provide a sequence of specific information |
|  | 290 | Describe change in story character and explain cause |
|  | 284 | Use dialogue or action to provide inference about character trait |
|  | 277 | Recognize author's purpose for including information |
|  | 268 | Provide causal relation between text ideas |
|  | 268 |  |
|  | 265 | Connect relevant text ideas to provide an explanation |
|  | 264 | Extend text information to provide an opinion |
| \% | 257 | Recognize the main purpose of an article |
| U000 | 250 | Use local story context to recognize meaning of a word (shown on page 24) |
| \% | 242 | Retrieve relevant information to fit description |
|  | 239 | Identify character's problem and describe how it was solved |
|  | 238 | Recognize the main message of a story |
|  | 238 |  |
|  | 237 | Use story details to infer and describe character's feelings |
|  | 236 | Use character trait to make a comparison |
|  | 231 | Recognize fact supported by text information |
| \% | 226 | Recognize paraphrase of explicitly stated supporting example |
|  | 220 | Recognize meaning of specialized vocabulary from context |
|  | 216 | Recognize support for interpretation of character |
|  | 209 | Recognize literal information from text |
|  | 208 |  |
|  | 205 | Make simple inference to recognize relationship of picture to text |
|  | 203 | Recognize the main topic of an article |
|  | 200 | Provide text-based explanation of character's importance to story |
|  | 193 | Recognize character's motivation for central story action |
|  | 189 | Recognize important lesson based on story theme |
|  | 158 | Use explicitly stated information to provide character motivation (shown on page 25) |
|  | ${ }_{0}$ |  |

[^3]
## Sample Reading Passage

The short story below is an example of what a fourth-grader might read for literary experience. The story centers around one main character and how her actions over the course of a single day bring about a change in her situation. The two sample questions that follow were based on this reading passage.

## DISHPAN DUCKS

## By Margaret Springer

## Illustrated by Don Dyen

Rosa walked home from school slowly. The rows of apartment buildings and the streets full of cars looked all the same. And it was cold.

Rosa missed her country. She had begun to learn some English, but she did not know what to say or what to do when other kids were around. They were friendly, but Rosa felt safer being alone.


Behind Rosa's brick apartment building was a special place, a small creek where Rosa always stopped after school. There were ducks there, and she could speak to them in her language. The ducks seemed to understand.

Every afternoon Rosa sat on a concrete slab above the creek and watched the ducks until Mama came home from work.

Rosa did not feed them. She knew that most "people food" was not right for ducks. But she watched them swim and feed and walk up to her, quacking. Once they even walked over Rosa's tummy as she lay with her feet stretched out on the bumpy grass. They like me, Rosa said to herself.

One day after school, the ducks were not in the water. They did not waddle toward Rosa, even though she stayed very still. Something was wrong.

Gently, Rosa tiptoed to where the ducks were huddled. "Are you sick?" she whispered. They looked different. They looked greasy.

Then Rosa noticed the creek. An oily film covered it, making patches of color on the water's surface. She looked closely at the ducks. Their feathers were stuck together. They could not swim. They could not fly.

I must get help, said Rosa to herself. But how? I don't know anyone. Mama told me not to speak to strangers. Besides, I don't know how to ask in English.

Rosa had an idea. She rushed back to the street, walked to the traffic light, then raced around the corner and back to the school yard.

Rosa was in luck. Boys and girls were still there, practicing baseball with the gym teacher. Rosa had never played baseball in this country.
"Please! Come!" said Rosa, breathless, "Ducks!"
"Hello, Rosa," said the teacher. "What's the trouble?"
"Ducks!" said Rosa again. It was one of the few English words she was sure of. "Come.

## Please. Ducks!"

She pointed in the direction of the creek. The kids were staring at her, but she didn't care.
"Ducks!" she said again, her eyes pleading.
The teacher said something in English to his team. They looked at Rosa and taked all at once Then the teacher smiled. "OK, Rosa," he said. "Show us." They all grabbed their jackets and their baseball mitts and bats, and followed Rosa to the creek.

Pretty soon there were more people at Rosa's creek than she had ever seen there before. First the police came with their squad cars and sirens. Then came the firefighters with their big trucks and Humane Society workers in their vans.

People came out from the apartment building with dishpans and towels and liquid dish detergent. Rosa did not understand all the talk, but she knew what was happening.

The ducks were too weak to fly or run away. She and the other kids rounded them up and held m in the dishpans while the Humane Society people worked. Four washes for each duck with mild detergent, and four rinses with clear water. It reminded Rosa of doing the wash.

After a while someone brought a blow-dryer. Rosa laughed as the ducks were blown fluffy-dry. After one, they were packed carefully into cages in the Humane Society vans. oils in their feathers, so they can keep themselves warm and swim properly. A big factory ness! You spilled four hundred gallons of diesel fuel into the storm sewers last night. What a mess! You got to these ducks just in time, young lady."

Rosa did not know what the man was saying, but she saw how everyone smiled at her, and she felt proud.

By the time Rosa's mama came home, the cars and the vans and the people were gone. Rosa was in her special place by the creek. But she was not alone. She was playing baseball with three friends. Rosa was good at baseball. She was getting better at English, too.
"Home run!" she shouted, laughing, after she slugged the ball almost to the parking lot. Rosa was happy. And the dishpan ducks were safe.
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## Sample Question About Vocabulary in Context

This sample question asked fourth-graders to use their understanding of a part of the story to identify the meaning of a word. The meaning of the word is related to a major event in the story. This question was classified under the reading aspect, developing interpretation.

Fifty-two percent of fourth-graders selected the correct answer (choice B), demonstrating their understanding that the main character knows only a few English words and so uses her eyes to ask for help with the emergency. Of the incorrect answers, choices C and D , which are ordinary functions of the eyes, were selected by 41 percent of fourth-graders.

## Percentage of fourth-grade students in each response category in 2007

|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Choice A | Choice B | Choice C | Choice D | Omitted |
| 7 | 52 | 21 | 20 | 1 |
| NOTE: Detail may not sum to totals because of rounding. |  |  |  |  |

NOTE: Detail may not sum to totals because of rounding.

The table below shows the percentage of fourthgraders within each achievement level who answered the question correctly. For example, 76 percent of fourthgraders performing at the Proficient level understood the meaning of the word.

Percentage correct for fourth-grade students at each achievement level in 2007

| Overall | Below Basic | At Basic | At Proficient | At Advanced |
| ---: | ---: | ---: | ---: | ---: |
| 52 | 23 | 51 | 76 | 92 |

[^4] Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.

## What does the word "pleading" mean, as it is used in the sentence below? <br> "Ducks," she said again, her eyes pleading.

Looking
Blinking

## Sample Question About Character Motivation

This sample question asked students to demonstrate their understanding of the main character by providing the motivation for an action at a particular point in the story. In addition, students needed to support their answer with details from the story. This question was classified under the reading aspect, developing interpretation.

Student responses for this question were rated using the following three-level scoring guide:

Full comprehension-These responses use details from the story to explain why Rosa visits the ducks at the beginning of the story.

Partial or surface comprehension-These responses demonstrate a general understanding of why Rosa visits the ducks at the beginning of the story but do not support it with details from the story. Or, responses may provide a story detail related to Rosa visiting the ducks but are unrelated to why she visits them.

Little or no comprehension-These responses provide inappropriate information or personal opinions that are not related to why Rosa visits the ducks at the beginning of the story.

Missing responses were considered intentional omissions.

The first student response on the right was rated as "Full comprehension" because it provided both a reason why Rosa visits the ducks-"because she feels safer"-and supports it with details related to why she feels safer with the ducks. Fifty-four percent of fourth-graders provided a response rated as "Full comprehension." The second response was rated as "Partial" because it provides a story detail related to Rosa visiting the ducks at the beginning of the story. Thirty-four percent of fourthgraders provided a response rated as "Partial."

> Explain why Rosa visits the ducks at the beginning of the story. Use details from the story in your answer.

Response rated as "Full comprehension" Rosa goes because she feels safer
alone so she goes to the creek. She
feels better because she could
talk to the ducks in her language
and they understand her.

Response rated as "Partial comprehension" smon nutis. the deche geceve she fied then and hen mone wollin't be hace.

## Percentage of fourth-grade students in each response category in 2007

| $\begin{array}{r} \text { Full } \\ \text { comprehension } \end{array}$ | Partial or surface comprenension | $\begin{aligned} & \text { Little or no } \\ & \text { comprehension } \end{aligned}$ | Omited |
| :---: | :---: | :---: | :---: |
| 54 | 34 | 11 | 1 |

NOTE: Detail may not sum to totals because a small percentage of responses that did not address the assessment task are not shown.

The table below shows the percentage of fourth-graders within each achievement level whose answer to the question above was rated as "Full comprehension." For example, 56 percent of fourth-graders performing at the Basic level were able both to provide a reason and support it with details to demonstrate full comprehension.

## Percentage rated as "Full comprehension" for fourth-grade students at each achievement level in 2007

Overall
Below Basic
54


[^0]:    Accommodations

[^1]:    ${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 and 2007 Reading Assessments.

[^2]:    - Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.
    * Significantly different ( $p<.05$ ) from 2007 when only one jurisdiction or the nation is being examined.
    ${ }^{1}$ National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.
    ${ }^{2}$ Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data presented here were recalculated for comparability.
    NOTE: State-level data were not collected in 2000.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2007 Reading Assessments.

[^3]:    NOTE: Regular type denotes a constructed-response question. Italic type denotes a multiple-choice question. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. For constructedresponse questions, the question description represents students' performance rated as completely correct. Scale score ranges for reading achievement levels are referenced on the map. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.

[^4]:    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education

