Table 47.-Children's mean reading, mathematics, and general knowledge performance in kindergarten and first grade, by child and family characteristics: Fall 1998, spring 1999, fall 1999, and spring 2000

| Child and family characteristics | General knowledge performance ${ }^{1}$ |  |  |  | Reading overall performance ${ }^{1}$ |  |  |  | Reading, percent reading sight words ${ }^{1}$ |  |  |  | Mathematics, overall performance ${ }^{1}$ |  |  |  | Mathematics, percent with addition and subtraction skills ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kindergarten |  | 1st grade |  | Kindergarten |  | 1st grade |  | Kindergarten |  | 1st grade |  | Kindergarten |  | 1st grade |  | Kindergarten |  | 1st grade |  |
|  | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring | Fall | Spring |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Total ........................ | Student performance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 22.7 | 27.7 | 30.9 | 35.5 | 22.9 | 33.0 | 38.7 | 55.7 | 2.7 | 13.6 | 25.8 | 78.3 | 19.8 | 28.0 | 33.0 | 43.8 | 4.4 | 17.5 | 35.0 | 74.0 |
| Sex <br> Male $\qquad$ <br> Female $\qquad$ | 23.0 22.4 | 28.1 27.4 | 31.3 30.4 | 35.9 35.1 | 22.5 23.4 | 32.0 34.1 | 37.7 39.7 | $\begin{aligned} & 54.5 \\ & 56.9 \end{aligned}$ | 2.8 2.6 | 11.9 15.3 | 23.3 28.3 | 74.9 81.8 | 20.1 19.6 | 28.2 27.7 | 33.5 33.0 | 44.1 43.5 | 4.4 3.0 | 18.4 16.7 | 35.9 33.0 | 73.8 73.6 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic .. <br> Black, non-Hispanic .. | 17.5 | 30.0 22.4 | 33.1 25.9 | 37.5 30.7 | 24.2 20.3 | 34.8 29.7 | 40.4 34.6 | 57.9 50.4 | 3.2 0.8 | 15.9 7.9 | 29.3 16.7 | 83.3 67.1 | 21.3 16.7 | 29.7 23.9 | 35.2 28.8 | 45.7 39.2 | 4.9 0.8 | 21.9 7.2 | 40.8 20.0 | 79.7 58.8 |
| Hispanic ................... | 19.6 | 25.2 | 28.0 | 33.2 | 20.6 | 30.6 | 36.1 | 52.7 | 1.7 | 9.7 | 20.0 | 71.5 | 17.5 | 25.5 | 30.9 | 41.7 | 1.7 | 11.7 | 25.9 | 67.5 |
| Asian/Pacific Islander | 19.9 | 25.0 | 28.0 | 32.5 | 27.0 | 37.3 | 43.5 | 59.3 | 10.6 | 28.0 | 39.0 | 82.0 | 21.2 | 28.8 | 35.0 | 43.1 | 6.9 | 23.7 | 40.0 | 70.0 |
| Parent education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 16.3 | 21.9 | 24.9 | 29.8 | 17.4 | 26.7 | 30.7 | 46.2 | ${ }^{(3)}$ | 2.9 | 7.7 | 57.0 | 14.5 | 21.7 | 26.4 | 37.8 | ${ }^{(3)}$ | 3.6 | 13.7 | 53.9 |
| High school ............... | 19.9 | 24.6 | 27.6 | 32.6 | 20.1 | 30.0 | 34.8 | 52.0 | 1.3 | 7.3 | 16.0 | 70.0 | 17.3 | 24.8 | 30.1 | 40.5 | 1.2 | 9.8 | 23.4 | 63.3 |
| Some college ............ | 22.4 | 27.6 | 30.9 | 36.0 | 22.3 | 32.5 | 38.2 | 55.2 | 1.7 | 11.2 | 24.2 | 80.0 | 19.3 | 27.6 | 32.9 | 43.7 | 2.3 | 14.6 | 31.7 | 74.7 |
| Bachelor's or higher .. | 26.7 | 31.9 | 34.9 | 39.2 | 27.3 | 38.1 | 44.1 | 61.8 | 5.4 | 23.9 | 39.8 | 89.0 | 23.8 | 32.3 | 38.0 | 48.0 | 8.2 | 30.4 | 51.4 | 84.9 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest 20 percent ..... | 16.6 | 21.6 | 24.4 | 29.4 | 17.5 | 26.7 | 30.9 | 46.1 | ${ }^{(3)}$ | 4.0 | 8.1 | 55.9 | 14.7 | 21.8 | 26.4 | 37.2 | ${ }^{(3)}$ | 4.4 | 14.2 | 51.6 |
| Middle 60 percent ...... | 22.4 | 27.6 | 30.7 | 36.0 | 22.5 | 32.8 | 38.3 | 55.6 | 1.8 | 11.6 | 24.3 | 79.9 | 19.5 | 27.7 | 33.0 | 43.7 | 2.5 | 15.4 | 32.6 | 74.3 |
| Highest 20 percent .... | 27.8 | 32.7 | 35.9 | 39.9 | 28.2 | 39.2 | 45.2 | 62.5 | 6.8 | 26.5 | 42.6 | 89.7 | 24.6 | 33.1 | 38.9 | 48.6 | 9.6 | 32.9 | 54.4 | 87.0 |
|  | Standard errors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total .......................... | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.3 | 0.8 | 1.3 | 1.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.8 | 1.1 | 1.2 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male .................... | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.5 | 1.0 | 1.6 | 1.6 | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 1.0 | 1.3 | 1.6 |
| Female ..................... | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 1.0 | 1.4 | 1.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 1.2 | 1.2 |
| Race/ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White, non-Hispanic .. | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 1.0 | 1.4 | 1.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.9 | 1.3 | 1.3 |
| Black, non-Hispanic ... | 0.3 | 0.4 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.6 | 0.3 | 1.3 | 1.8 | 2.1 | 0.3 | 0.4 | 0.4 | 0.5 | 0.2 | 0.9 | 1.2 | 2.0 |
| Hispanic ................. | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.5 | 1.1 | 2.4 | 3.0 | 0.4 | 0.5 | 0.6 | 0.6 | 0.4 | 1.1 | 1.7 | 2.5 |
| Asian/Pacific Islander | 1.0 | 0.9 | 1.1 | 1.0 | 1.6 | 1.9 | 2.1 | 2.1 | 2.9 | 4.8 | 5.6 | 5.0 | 1.0 | 1.5 | 1.5 | 1.4 | 2.6 | 4.3 | 5.2 | 5.5 |
| Parent education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than high school | 0.4 | 0.6 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.1 | 0.0 | 1.0 | 1.5 | 3.1 | 0.4 | 0.5 | 0.7 | 1.0 | 0.0 | 0.6 | 2.3 | 3.9 |
| High school ............... | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.7 | 1.2 | 1.8 | 2.1 | 0.4 | 0.4 | 0.5 | 0.6 | 0.3 | 1.0 | 1.9 | 2.3 |
| Some college ............ | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.4 | 0.8 | 1.6 | 1.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.9 | 1.2 | 1.3 |
| Bachelor's or higher .. | 0.3 | 0.3 | 0.3 | 0.2 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 1.6 | 2.0 | 1.1 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 1.4 | 1.5 | 1.2 |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest 20 percent ..... | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.3 | 1.0 | 1.4 | 2.3 | 0.3 | 0.5 | 0.5 | 0.7 | 0.2 | 0.6 | 1.5 | 2.4 |
| Middle 60 percent ...... | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.3 | 0.8 | 1.4 | 1.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.8 | 1.1 | 1.3 |
| Highest 20 percent .... | 0.4 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 0.7 | 0.7 | 1.0 | 2.0 | 2.3 | 1.3 | 0.4 | 0.5 | 0.5 | 0.4 | 1.0 | 1.8 | 1.8 | 1.3 |
| 1 Performance estimates are mean scale scores. Scale scores range as follows: General knowledge, 0-51; Reading,$0-92$; and Mathematics, $0-64$. |  |  |  |  |  |  |  |  |  | children were assessed in English in all four rounds of data collection. First grade estimates include children promoted to first grade on time and also include the scores of the small percentage of children (i.e., 5 percent) who repeated |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Student was assumed to have mastered a particular skill if at least three of the four items in the subject cluster kindergarten in 1999-2000 were answered correctly. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Less than .05 percent |  |  |  |  |  |  |  |  | SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, First Grade, Restricted-Use Files. (This table was prepared September 2001.) |  |  |  |  |  |  |  |  |  |  |  |

