Appendix table 1-1

First-time kindergartners demonstrating specific mathematics skills and knowledge, by child and family characteristics: Fall 1998 and spring 1999

(Percent)

| Child and family characteristic | Number and shape | | | Relative size | | | Ordinality and sequence | | | Add and subtract | | | Multiply and divide | | |
|--|------------------|--------|--------|---------------|--------|--------|-------------------------|--------|--------|------------------|--------|--------|---------------------|--------|--------|
| | Fall | Spring | Change | Fall | Spring | Change | Fall | Spring | Change | Fall | Spring | Change | Fall | Spring | Change |
| All students | 93 | 99 | 6 | 57 | 87 | 30 | 21 | 56 | 36 | 4 | 18 | 14 | _ | 2 | 2 |
| Sex | | | | | | | | | | | | | | | |
| Male | 92 | 99 | 6 | 55 | 86 | 31 | 22 | 56 | 34 | 4 | 19 | 14 | 1 | 3 | 2 |
| Female | 94 | 99 | 5 | 58 | 87 | 30 | 20 | 57 | 37 | 3 | 17 | 14 | _ | 2 | 1 |
| Race/ethnicity | | | | | | | | | | | | | | | |
| White, non-Hispanic | 96 | 99 | 4 | 64 | 91 | 27 | 26 | 64 | 38 | 5 | 22 | 17 | _ | 3 | 3 |
| Black, non-Hispanic | 89 | 98 | 9 | 41 | 76 | 35 | 9 | 37 | 28 | 1 | 8 | 7 | _ | _ | _ |
| Asian/Pacific Islander | 97 | 100 | 3 | 68 | 92 | 24 | 32 | 68 | 36 | 9 | 28 | 19 | 1 | 6 | 5 |
| Hispanic | 90 | 99 | 9 | 43 | 81 | 38 | 12 | 46 | 33 | 2 | 12 | 10 | _ | 1 | 1 |
| Other | 88 | 99 | 11 | 45 | 81 | 37 | 13 | 45 | 32 | 2 | 11 | 9 | _ | 1 | 1 |
| Mother's education | | | | | | | | | | | | | | | |
| <high school<="" td=""><td>83</td><td>97</td><td>14</td><td>31</td><td>72</td><td>41</td><td>6</td><td>32</td><td>26</td><td>1</td><td>6</td><td>6</td><td>_</td><td>1</td><td>1</td></high> | 83 | 97 | 14 | 31 | 72 | 41 | 6 | 32 | 26 | 1 | 6 | 6 | _ | 1 | 1 |
| High school diploma | 91 | 99 | 8 | 48 | 83 | 35 | 14 | 49 | 35 | 2 | 13 | 11 | _ | 1 | 1 |
| Some college ^a | 95 | 99 | 4 | 59 | 89 | 30 | 21 | 59 | 38 | 3 | 18 | 14 | _ | 2 | 2 |
| Bachelor's or higher degree | 99 | 100 | 1 | 76 | 95 | 19 | 38 | 75 | 37 | 9 | 31 | 23 | 1 | 5 | 4 |
| Family risk factors ^b | | | | | | | | | | | | | | | |
| 0 | 96 | 99 | 4 | 65 | 91 | 26 | 27 | 64 | 37 | 5 | 22 | 17 | _ | 3 | 3 |
| 1 | 91 | 99 | 8 | 47 | 82 | 35 | 14 | 48 | 34 | 2 | 13 | 11 | _ | 1 | 1 |
| ≥2 | 84 | 97 | 14 | 33 | 72 | 39 | 7 | 32 | 25 | 1 | 6 | 5 | _ | _ | _ |

^{— = &}lt;0.5%

NOTES: Estimates based on first-time kindergartners assessed in English in both fall and spring (approximately 19% of Asian children and approximately 30% of Hispanic children not included in these estimates). Change calculated on unrounded numbers.

SOURCES: J. West, K. Denton, and L. Reaney, *The Kindergarten Year*, National Center for Education Statistics (NCES) 2001-023, table 4 (2000); and data from U.S. Department of Education, NCES, Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS-K), fall 1998 and spring 1999.

Science and Engineering Indicators 2006

^aIncludes vocational and technical education.

Index consists of family having received welfare assistance, non-English primary home language, single-parent family, and maternal education less than high school diploma or equivalent credential (e.g., General Educational Development certificate).