

Florida Project Learning Tree Sunshine State Standards linkages for grades PreK-2, 3-5, 6-8, and 9-12: HOW BIG IS YOUR TREE? (#67; pp. 239-243 in old edition *PreK-8 Activity Guide*; pp. 284-287 new edition)

Subject Area: Mathematics

Strand: Measurement

Standard 1: The student measures quantities in the real world and uses the measures to solve problems.

- **Grades PreK-2** – Benchmark: uses standard customary and metric (centimeter, inch) and nonstandard units, such as links or blocks, in measuring real quantities. [MA.B.1.1.2]
- **Grades 3-5** – Benchmark: solves real-world problems involving length, weight, perimeter, area, capacity, volume, time, temperature, and angles. [MA.B.1.2.2]
- **Grades 6-8** – Benchmark: understands and describes how the change of a figure in such dimensions as length, width, height, or radius affects its other measurements such as perimeter, area, surface area, and volume. [MA.B.1.3.3]
- **Grades 9-12** – Benchmark: relates the concepts of measurement to similarity and proportionality in real-world situations. [MA.B.1.4.3]

Standard 2: The student compares, contrasts, and converts within systems of measurement (both standard/nonstandard and metric/customary).

- **Grades PreK-2** – Benchmark: uses direct (measured) and indirect (not measured) comparisons to order objects according to some measurable characteristics (length, weight). [MA.B.2.1.1]
- **Grades 3-5** – Benchmark: uses direct (measured) and indirect (not measured) measures to calculate and compare measurable characteristics. [MA.B.2.2.1]
- **Grades 6-8** – Benchmark: uses direct (measured) and indirect (not measured) measures to compare a given characteristic in either metric or customary units. [MA.B.2.3.1]
- **Grades 9-12** – Benchmark: selects and uses direct (measured) or indirect (not measured) methods of measurement as appropriate. [MA.B.2.4.1]

Standard 3: The student estimates measurements in real-world problem situations.

- **Grades PreK-2:** No applicable benchmark
- **Grades 3-5** – Benchmark: solves real-world problems involving estimates of measurements, including length, time, weight, temperature, money, perimeter, area, and volume. [MA.B.3.2.1]
- **Grades 6-8:** No applicable benchmark
- **Grades 9-12** – Benchmark: solves real-world and mathematical problems involving estimates of measurements, including length, time, weight/mass,

temperature, money, perimeter, area, and volume, and estimates the effects of measurement errors on calculations. [MA.B.3.4.1]

Standard 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations.

- **Grades PreK-2:** No applicable benchmark
- **Grades 3-5 – Benchmark:** selects and uses appropriate instruments and technology, including scales, rulers, thermometers, measuring cups, protractors, and gauges, to measure in real-world situations. [MA.B.4.2.2.]
- **Grades 6-8 – Benchmark:** selects and uses appropriate instruments, technology, and techniques to measure quantities in order to achieve specified degrees of accuracy in a problem situation. [MA.B.4.3.2]
- **Grades 9-12 – Benchmark:** selects and uses appropriate instruments, technology, and techniques to measure quantities in order to achieve specified degrees of accuracy in a problem situation. [MA.B.4.4.2]

Subject Area: Science

Strand: The Nature of Matter

Standard 1: The student understands that all matter has observable, measurable properties.

- **Grades PreK-2:** No applicable benchmark
- **Grades 3-5 – Benchmark:** determines that the properties of materials (e.g., density and volume) can be compared and measured (e.g., using rulers, balances, and thermometers). [SC.A.1.2.1]
- **Grades 6-8 and Grades 9-12:** No applicable benchmarks

Strand: The Nature of Science

Standard 1: The student uses the scientific processes and habits of mind to solve problems.

- **Grades PreK-2 – Benchmark:** uses the senses, tools, and instruments to obtain information from his or her surroundings. [SC.H.1.1.5]
- **Grades 3-5, Grades 6-8, and Grades 9-12:** No applicable benchmarks