Forward Planning Tool

This tool can be used to provide just-in-time corequisite support to students by connecting prerequisite standards or concepts—with known unfinished learning—to future grade-level standards. It can be used in conjunction with the **Forward Planning | Standards Snapshot Tool.**

Planning to address unfinished learning that occurred in: Grade Level/Course and Concept 4th grade Measurement and Data

Guiding Questions:
1. To *what* future work is the specific concept/standard connected?
2. *How* will the concept/standard be connected?

2020–2021 Identified Unfinished Learning: 4th Grade Measurement and Data Standards	2021–2022 5th Grade Connected Standards	2022–2023 6th Grade Connected Standards	2023–2024 7th Grade Connected Standards	Not an essential prerequisite
Measurement conversions and word problems, including involving decimals and fractions 4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two- column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... 4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Connect to 5th grade measurement conversion problems (5.MD.A.1) and standards related to operations with fractions (5.NF.B.2, 5.NF.B.3, 5.NF.B.5, 5.NF.B.6)			

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Area and Perimeter Formulas 4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor	Connections can be made to finding the area of a rectangle with fractional side lengths (5.NF.B.4b) and volume (5.MD.C.5)			
Line plots with fractional measurement data 4.MD.B.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	Connect to line plots with fractional measurements (5.MD.B.2) and addition and subtraction of fractions (5.NF.A.1)			
Angles 4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement 4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. 4.MD.C.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	Connect the definition of an angle from 4.MD.C.5 to describing attributes of categories and sub-categories of two-dimensional figures (5.G.B.3)		Connect angle measurement in 4.MD.C.5 and 4.MD.C.6 to drawing geometric shapes (including using a protractor) with given conditions (7.G.A.2). Connect 4.MD.C.7 to using facts about different types of angles in multi-step problems to find an unknown angle (7.G.B.5).	