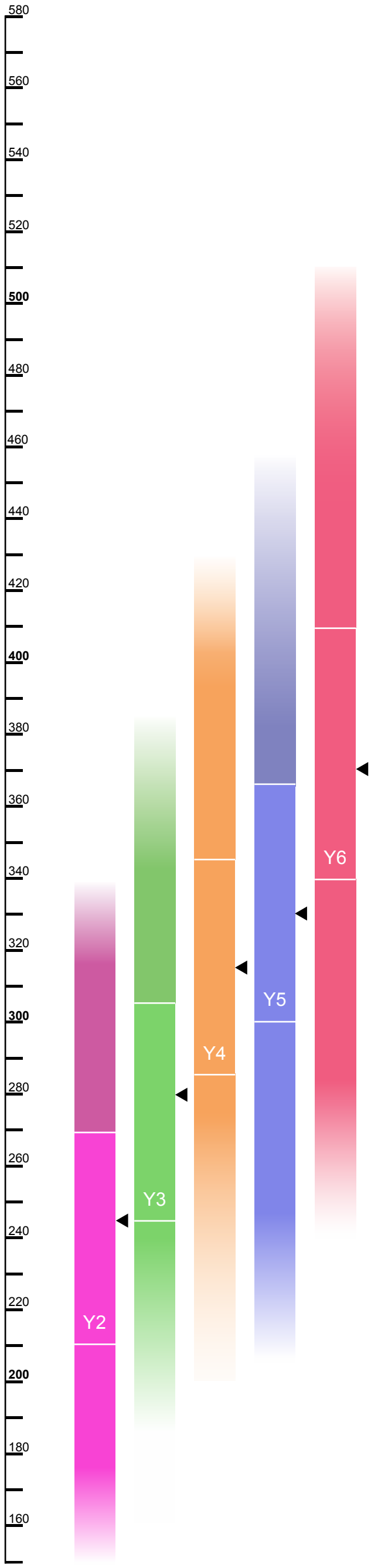
Measurement and Geometry Learning Progressions

Descriptor	
490 - 585	Uses geometric properties to calculate area, volume and angles. Calculates the length of an arc and the perimeter of a sector of a circle. Applies Pythagoras's theorem.
450 - 490	Uses formulae to calculate areas of different types of triangles and rectangles. Locates positions on a Cartesian plane and calculate angles of rotation. Calculates pairs of angles to confirm the angle types.
420 - 450	Converts units of measure into decimals and fractions. Calculates areas of polygons. Applies 'ratio' and 'rotation' to identify a shape.
390 - 420	Calculates time in range of contexts. Uses formulae to calculate area and volume. Interprets scales to draw plans and maps. Calculates the size of the base angles in an isosceles triangle.
360 - 390	Records, estimates and compares times. Converts different units of measure into equivalent forms. Calculates the sum of the internal angles within a triangle or quadrilateral.
330 - 360	Understands how to calculate and convert key times. Measures length, mass and volume and calculate heights, areas and perimeters of basic shapes. Measures all angle types.
300 - 330	Uses an analog clock and a calendar to determine duration of time. Calculates areas and perimeters of basic shapes. Converts between formal units of measure. Identifies various views of shapes.
220 - 300	Reads time on digital and analog clocks and converts between units of time. Uses informal units of measure to compare and order objects. Follows compass directions and locates map positions.
170 - 220	Reads time on a digital clock and understands concepts of days, weeks, months and seasons. Informally measures lengths, areas, masses or capacities of objects. Creates common shapes and constructs a cube's skeleton.

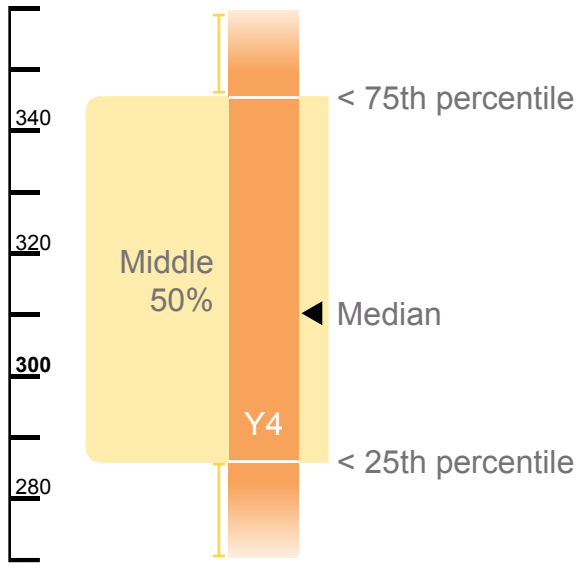


Interpreting the Display

A summary of the Brightpath Learning Progressions

300 - 330

Uses an analog clock and a calendar to determine duration of time. Calculates areas and perimeters of basic shapes. Converts between formal units of measure. Identifies various views of shapes.



Distribution of Student Performance				
Median	75th percentile	25th percentile	Middle 50%	Bar Extensions
The middle score of all student's scores in the year level	Upper box boundary, indicates 75% of students have reached this score or lower	Lower box boundary, indicates 25% of students have reached this score or lower	50% of students in a given year level perform between the boundaries of the score recorded for 25th percentile and 75th percentile	The extension of the colour bars shows the spread of scores along the scale excluding outliers, i.e. uncommon individual scores very far away from the mean

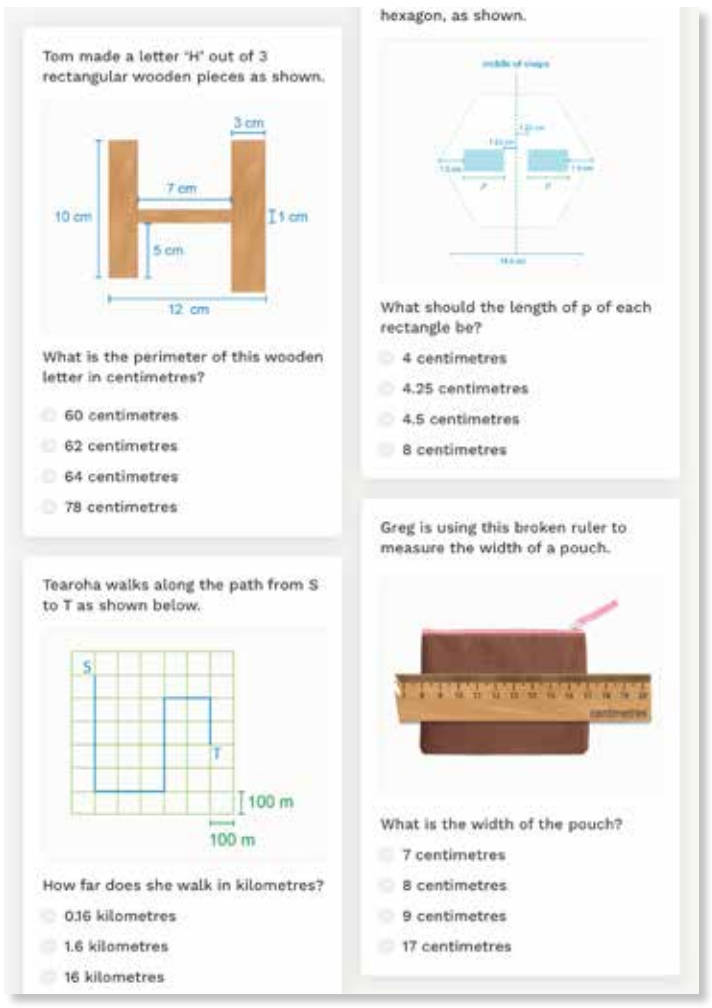
The student performance distributions were derived based on data collected in 2021 on the Measurement & Geometry Scale.

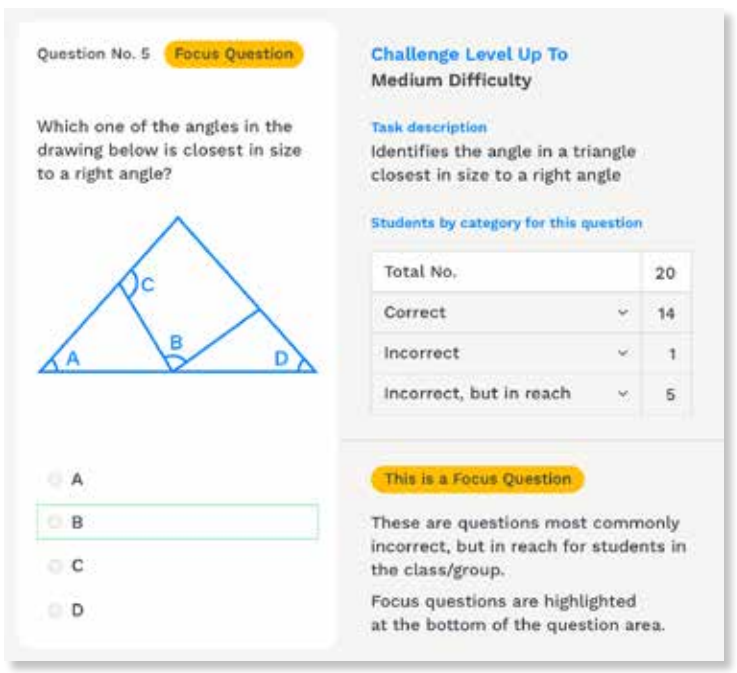
Number of assessments per year level				
Year 2	Year 3	Year 4	Year 5	Year 6
2,254	3,771	3,458	4,493	4,451

More about Brightpath

The Brightpath Mathematics online assessments are for Year Levels 2 to 9 and cover strand and combined levels. They have been designed so:

- teachers and students receive immediate feedback for their learning, where they are and what they need to focus on next,
- teachers can use assessments as the starting point for their lesson planning and teaching, and
- teachers can be supported in evaluating the success of their teaching intervention





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