

# QUANTILE FRAMEWORK FOR MATHEMATICS

# Help your child explore and understand mathematics!

With the Quantile Framework, you have a scientific approach to help your child succeed with math.

For more information on how Quantile measures can support your child's learning, visit Quantiles.com.

# WHAT IS THE QUANTILE FRAMEWORK?

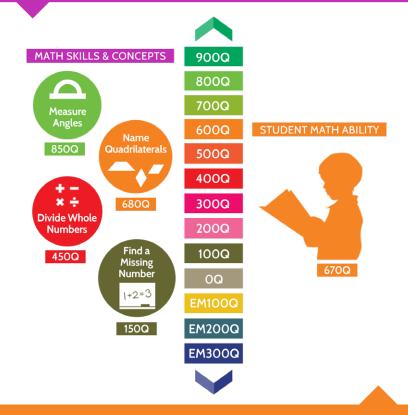
The Quantile® Framework for Mathematics uses the same scale to measure both the math skill level of your child and the difficulty of the math materials they encounter. The Quantile Framework reports your child's mathematical ability, as well as the difficulty of math material, as Quantile® measures.

# QUANTILE MEASURES FOR MATERIALS

The Quantile Framework has defined over 500 mathematics skills and concepts. Each of these concepts has a Quantile measure. Each measure shows how difficult one skill is in relation to the others.

Quantile measures range from below OQ to above 1400Q and span the skills and concepts taught in kindergarten through high school. The higher the Quantile measure, the more difficult the material.

By identifying which mathematics concepts are present in math materials, we know how difficult those materials are.



#### QUANTILE MEASURES FOR STUDENTS

A child's Quantile measure indicates the progress made in learning math content and what new math content they may be ready to learn next.

For optimal growth, a child should practice mathematics within a Quantile range of 50 Quantile measures above and 50 Quantile measures below their Quantile measure.

To see how your child's math ability compares to other students at the same grade level, visit Quantiles.com/parents/grade-ranges.

# Free Tools & Resources



#### **MATH@HOME**

The free "Math@Home" website provides family-friendly activities to support your child's mathematics learning.

Visit mah.quantiles.com



#### **SUMMER MATH CHALLENGE**

The Summer Math Challenge is a math skills program that helps your child retain the math skills learned during the school year.

Visit quantiles.com/summer-math



# QUANTILE GROWTH PLANNER™

The Quantile Growth Planner helps you chart your child's mathematics growth and determine their readiness for the math required in college and the workplace.

Visit quantiles.com/parents/growth-planner

# **HOW TO USE QUANTILE MEASURES**

# Step 1



#### FIND YOUR CHILD'S QUANTILE MEASURE.

If you don't know your child's Quantile measure, ask their teacher. Many state assessments and math programs report math ability as a Quantile measure. To see a complete list, visit metametricsinc.com/quantile-partner-products/students.



# Step 2

# FIND MATH SKILLS AND CONCEPTS TO HELP YOUR CHILD.



There are over 500 math skills and concepts that have been scientifically measured using the Quantile Framework. Matching a student's math ability to the difficulty of math material helps to ensure the "just right" level of challenge.



# Step 3

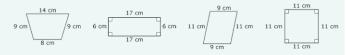
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# PRACTICE MATH THAT SUPPORTS YOUR CHILD.

Let's say your child has a Quantile measure of 680Q and is learning about quadrilaterals. You can find...

#### ...TASKS AT THEIR LEVEL (680Q)

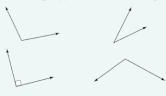
Which quadrilateral is a rectangle and a rhombus?



# **OR...**

#### ...EASIER TASKS (530Q)

Which angle appears to be an acute angle?



## ...HARDER TASKS (1000Q)

Polygon KLMNP is concave.

Which segment, with endpoints on the interior of the polygon, shows that KLMNP is concave?



# Step 4

### MONITOR GROWTH.



Quantile measures allow you to track growth year to year. To be ready for the math requirements of college and career, research says that high school graduates should engage in mathematics around 1350Q.