

# WVGSA Grade 5 Mathematics Blueprint



## Mathematics Item Blueprint

Table 1. Grade 5 Mathematics Blueprint by Domain and Cluster

Domain	Cluster	Min Items	Max Items
<b>Operations and Algebraic Thinking (OAT)</b>	Operations and Algebraic Thinking (Total)	8	11
<b>OAT</b>	Write and interpret numerical expressions.	0	8
<b>OAT</b>	Analyze patterns and relationships.	0	4
<b>Number and Operations in Base Ten (NBT) &amp; Fractions (NF)</b>	Number and Operations in Base Ten & Fractions (Total)	14	17
<b>NBT &amp; NF</b>	Understand the place value system.	0	5
<b>NBT &amp; NF</b>	Perform operations with multi-digit- whole numbers and with decimals to hundredths.	0	5
<b>NBT &amp; NF</b>	Use equivalent fractions as a strategy to add and subtract fractions.	0	4
<b>NBT &amp; NF</b>	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	0	6
<b>Measurement, Data, and Geometry (MD &amp; G)</b>	Measurement, Data, and Geometry (Total)	9	11
<b>MD &amp; G</b>	Convert like measurement units within a given measurement system.	0	2
<b>MD &amp; G</b>	Represent and interpret data.	0	2
<b>MD &amp; G</b>	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	1	5
<b>MD &amp; G</b>	Graph points on the coordinate plane to solve real-world- and mathematical problems.	0	2
<b>MD &amp; G</b>	Classify two-dimensional- figures into categories based on their properties.	0	2

## Depth of Knowledge (DOK) Ranges

Table 2. DOK Item Distribution

<b>DOK Level</b>	<b>Min Items</b>	<b>Max Items</b>
<b>DOK 1</b>	5	9
<b>DOK 2</b>	17	22
<b>DOK 3</b>	5	9

## Mathematical Habits of Mind (MHM) Subscores

Table 3. MHM Item Distribution

<b>MHM Category</b>	<b>Min Items</b>	<b>Max Items</b>
<b>Modeling and Problem Solving</b>	8	12
<b>Use Mathematical Reasoning</b>	8	12