

WVGSA Grade 3 Mathematics Blueprint



Mathematics Item Blueprint

Table 1. Grade 3 Mathematics Blueprint by Domain and Cluster

Domain	Cluster	Min Items	Max Items
Operations and Algebraic Thinking (OAT)	Operations and Algebraic Thinking (Total)	10	13
OAT	Represent and solve problems involving multiplication and division.	0	5
OAT	Understand properties of multiplication and the relationship between multiplication and division.	0	4
OAT	Multiply and divide within 100.	0	2
OAT	Solve problems involving the four operations and identify and explain patterns in arithmetic.	0	4
Number and Operations in Base Ten (NBT) & Fractions (NF)	Number and Operations in Base Ten & Fractions (Total)	13	16
NBT & NF	Use place value understanding and properties of operations to perform multi-digit arithmetic.	7	10
NBT & NF	Develop understanding of fractions as numbers.	5	8
Measurement, Data, and Geometry (MD & G)	Measurement, Data, and Geometry (Total)	8	10
MD & G	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	0	3
MD & G	Represent and interpret data.	0	3
MD & G	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	0	3
MD & G	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	0	2
MD & G	Reason with shapes and their attributes.	0	3

Depth of Knowledge (DOK) Ranges

Table 2. DOK Item Distribution

DOK Level	Min Items	Max Items
DOK 1	5	9
DOK 2	17	22
DOK 3	5	9

Mathematical Habits of Mind (MHM) Subscores

Table 3. MHM Item Distribution

MHM Category	Min Items	Max Items
Modeling and Problem Solving	8	12
Use Mathematical Reasoning	8	12