

Table of Contents Grade 3 Math

Geometry	3
Essential Skill: Recognize the shared attributes of quadrilaterals.	3
Essential Skill: Identify polygons including pentagon, hexagon and octagon.	3
Essential Skill: Determine whether shapes are congruent or similar.	4
Essential Skill: Identify three-dimensional geometric shapes: cube, sphere, cone, rectangular prism, and cylinder.	4
Measurement and Data	
Essential Skill: Tell and write time to the nearest minute and measure time intervals in minutes.	5
Essential Skill: Draw a picture graph to represent a data set with several categories.	6
Essential Skill: Recognize area as an attribute of plane figures and understand concepts of area measurement.	6
Essential Skill: Solve real world and mathematical problems involving perimeters of polygons.	7
Number and Operations in Base Ten	7
Essential Skill: Use place value understanding to round whole numbers to the nearest 10 or 100.	7
Essential Skill: Compare numbers using symbols greater than, less than or equal to.	8
Essential Skill: Multiply by 1 and by 0.	3
Number and Operations - Fractions	ę
Essential Skill: Identify the numerator and denominator of a fraction.	9
Essential Skill: Find equivalent fractions (e.g. 1/2 = 2/4).	10
Essential Skill: Divide fractions with the same denominator into equal units (e.g. $3/4 = 1/4 + 1/4 + 1/4$).	10
Operations and Algebraic Thinking	11
Essential Skill: Interpret whole-number quotients of whole numbers.	11
Essential Skill: Change addition problems into multiplication problems (e.g. 4 + 4 + 4 = 3 x 4).	11

Brain POP_{Jr.}

Essential Skill: Complete fact families using the inverse relationship of addition and subtraction.	12
Essential Skill: Identify the divisor, dividend, quotient and remainder in a division problem.	12
Essential Skill: Apply properties of operations, including addition, subtraction, multiplication, and division.	13
Essential Skill: Solve word problems using the four operations.	14



Geometry

Essential Skill: Recognize the shared attributes of quadrilaterals.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about quadrilaterals?	Quadrilaterals Movie Discover how quadrilaterals are alike and how they differ. Explore squares, rectangles, trapezoids, and more!	Activity Follow the key to color the robot.	Quiz What did you learn about quadrilaterals?	<u>Polygons</u>

Essential Skill: Identify polygons including pentagon, hexagon and octagon.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about polygons?	Polygons Movie Explore different polygons, from quadrilaterals to nonagons!	Make a Concept Map Identify at least three different polygons and a detail or two about	Quiz What did you learn about polygons?	Plane Shapes



	each. Include a picture of each polygon.	

Essential Skill: Determine whether shapes are congruent or similar.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about congruent and similar shapes?	Congruent and Similar Shapes Movie Discover how congruent and similar shapes are alike and different.	Compare the Shapes Compare shapes and identify each pair as congruent, incongruent, or similar and why.	Quiz What did you learn about congruent and similar shape?	Slides, Turns, and Flips

Essential Skill: Identify three-dimensional geometric shapes: cube, sphere, cone, rectangular prism, and cylinder.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz	Solid Shapes Movie Explore cubes, cones,	Make a Concept Map	Quiz What did you learn	Plane Shapes



What do you know and other three-dimensional shapes.	Identify at least three different solid shapes, a detail about each, and a picture of it.	about solid shapes?	
--	--	---------------------	--

Measurement and Data

Essential Skill: Tell and write time to the nearest minute and measure time intervals in minutes.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about reading time to the minute?	Time to the Minute Movie Learn how to read the hour and minute hands on a clock.	Make a Concept Map Add three or more clock images to a map, and identify the time to the minute on each.	Quiz What did you learn about time to the minute?	Time to the Hour Time to the Quarter and Half Hour



Essential Skill: Draw a picture graph to represent a data set with several categories.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about pictographs?	Pictographs Movie Learn to read and create pictographs to organize and share data.	Make a Pictograph Make a pictograph using data from Moby's survey.	Quiz What did you learn about using pictographs to represent data?	Tally Charts and Bar Graphs

Essential Skill: Recognize area as an attribute of plane figures and understand concepts of area measurement.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about calculating area?	Area Movie How do you calculate area? Watch the movie to find out!	Compare and Share Compare the area of two rugs and write about it.	Quiz What did you learn about area and how to measure it?	Plane Shapes



Essential Skill: Solve real world and mathematical problems involving perimeters of polygons.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about calculating perimeter?	Perimeter Movie How do you calculate perimeter? Watch the movie to find out!	Activity Calculate the perimeter of different size gardens.	Quiz What did you learn about perimeter and how to measure it?	<u>Polygons</u>

Number and Operations in Base Ten

Essential Skill: Use place value understanding to round whole numbers to the nearest 10 or 100.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz	Rounding Movie Discover how to round	Activity	Quiz What did you learn	<u>Place Value</u>



What do you know about rounding numbers to the nearest 10 or 100?	to the nearest 10 or 100.	Round each number to the nearest 10 or 100.	about rounding numbers the nearest 10 or 100?	
--	---------------------------	---	---	--

Essential Skill: Compare numbers using symbols greater than, less than or equal to.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about comparing numbers?	Comparing Numbers Movie Learn to compare numbers using the greater than, less than, and equal to symbols.	Activity Help Moby get up the ladder by comparing numbers.	Quiz What did you learn about rounding numbers the nearest 10 or 100?	Rounding

Essential Skill: Multiply by 1 and by 0.

Warm Up	Build Background	Think and Do	Assess	Explore More BrainPOP Jr Topics
Pre-Assessment: Easy	Multiplying by 0 or 1	Write About It	Quiz	Repeated Addition



Quiz	<u>Movie</u>	Solve the problem and	What did you learn	
What do you know	Explore multiplication	write about your	about rounding	
about multiplying by 0	equations using zero	strategy.	numbers the nearest	
or 1?	or one.		10 or 100?	

Number and Operations - Fractions

Essential Skill: Identify the numerator and denominator of a fraction.

Warm Up	Build Background	Think and Do	Assess	Explore More BrainPOP Jr Topics
Pre-Assessment: Easy Quiz What do you know about fractions?	More Fractions Movie Explore fractions, including the meaning	Draw About It Draw a picture and write a fraction to show how much of a	Quiz What did you learn about fractions?	Basic Parts of a Whole Equivalent Fractions
	of the numerator and denominator.	cake Moby ate.		



Essential Skill: Find equivalent fractions (e.g. 1/2 = 2/4).

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about equivalent fractions?	Equivalent Fractions Movie Discover equivalent fractions for one-half, one-fourth, and one-third.	Make a Concept Map Write the fraction one-half in the center. Identify at least three equivalent fractions.	Quiz What did you learn about equivalent fractions?	Basic Parts of a Whole

Essential Skill: Divide fractions with the same denominator into equal units (e.g. 3/4 = 1/4 + 1/4 + 1/4).

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about dividing a shape into equal parts?	Basic Parts of a Whole Movie Explore halves, thirds, and fourths.	Activity Color in each section of Moby with shapes that show fractions.	Quiz What did you learn about equal units of a whole shape?	Equivalent Fractions



Operations and Algebraic Thinking

Essential Skill: Interpret whole-number quotients of whole numbers.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about making equal groups as a way to divide?	Making Equal Groups Movie Learn to use arrays and make equal groups to help you divide.	Activity Use arrays to help solve story problems.	Quiz What did you learn about making equal groups?	<u>Arrays</u>

Essential Skill: Change addition problems into multiplication problems (e.g. $4 + 4 + 4 = 3 \times 4$).

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz How can repeated	Repeated Addition Movie Discover how to	Write About It Explain how to solve Moby's multiplication	Quiz What did you learn about using repeated	<u>Arrays</u>



addition help youmultiply by adding the solve multiplication problems?problem using repeated addition.addition to help you multiply?	nber over repeated addition. multiply?
--	--

Essential Skill: Complete fact families using the inverse relationship of addition and subtraction.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about fact families and how they can help you?	Addition and Subtraction Fact Families Movie Learn how fact families can help you add and subtract.	Activity Cut and paste triangles to create fact families.	Quiz What did you learn about addition and subtraction fact families?	<u>Making Ten</u>

Essential Skill: Identify the divisor, dividend, quotient and remainder in a division problem.

Warm Up Build Background	Think and Do	Assess	Explore More Topics
--------------------------	--------------	--------	------------------------



QuizRemainders MovieWhat do you know about division?Learn how to divide with remainders.		Quiz What did you learn about dividing with remainders?	Repeated Subtraction
--	--	---	-------------------------

Essential Skill: Apply properties of operations, including addition, subtraction, multiplication, and division.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about mathematical operations?	Choosing an Operation Movie Which operation should you use when? Watch the movie to find out!	Make a Concept Map Identify scenarios when you'd use each of the four operations.	Quiz What did you learn about when to use which operation?	Solving Word Problems



Essential Skill: Solve word problems using the four operations.

Warm Up	Build Background	Think and Do	Assess	Explore More Topics
Pre-Assessment: Easy Quiz What do you know about solving word problems?	Solving Word Problems Movie Learn how to solve word problems using operations.	Story Problem Activity Solve Moby's math problem and explain the steps you take.	Quiz What did you learn about solving word problems	Choosing an Operation