

MATHEMATICS – Grade 4

MATHDALI

Knowledge Channel's Mathdali Show is its contribution to K to 12's aim of providing mastery of concepts and skills in Mathematics leading to better Math learning outcomes. The series revolves around the story of Kuya Robi (played by Robi Domingo), a Math enthusiast, who helps Igi Boy, Vic, Joj, and Jai in their quests for learning Math. Each episode illustrates a Math concept through real-life situations which aims to positively change how to learn Math, develop conceptual understanding, critical thinking, and problem solving, allowing the students to learn in new ways, and make the learning experience both interesting and exciting. The episodes are anchored to positive norms espoused in the Math Mindset book of Jo Boaler, the importance of number talks in Making Number Talks Matter of Cathy Humphreys and Ruth Parker, and key math strategies and classroom approaches in What's Math Got To Do With It? by Jo Boaler.

Medium: Filipino

Learning Competency:

PARALLEL, INTERSECTING, AND PERPENDICULAR LINES

This episode discusses how describe, illustrate, and draw parallel, intersecting, and perpendicular lines. It also discusses how identify parallel, intersecting, and perpendicular lines in real-life situations.

Nov 8(Tues)	10:00–10:20 am
Nov 8(Tues)	1:20–1:40 pm
Nov 8(Tues)	5:00–5:20 pm
Nov 10(Thurs)	10:00–10:20 am
Nov 10(Thurs)	1:20–1:40 pm
Nov 10(Thurs)	5:00–5:20 pm
Nov 15(Tues)	10:00–10:20 am
Nov 15(Tues)	1:20–1:40 pm
Nov 15(Tues)	5:00–5:20 pm

Learning Competency:

ANGLES

This episode teaches how describe and illustrate different angles (right, acute, and obtuse) using models.

Nov 17(Thurs)	10:00–10:20 am
Nov 17(Thurs)	1:20–1:40 pm
Nov 17(Thurs)	5:00–5:20 pm
Nov 22(Tues)	10:00–10:20 am
Nov 22(Tues)	1:20–1:40 pm
Nov 22(Tues)	5:00–5:20 pm

Learning Competency:**TRIANGLES**

This episode develops conceptual understanding on the properties of triangles using concrete objects or models. This episode identifies and describes triangles according to sides and angles.

Nov 24(Thurs)	10:00–10:20 am
Nov 24(Thurs)	1:20–1:40 pm
Nov 24(Thurs)	5:00–5:20 pm
Nov 29(Tues)	10:00–10:20 am
Nov 29(Tues)	1:20–1:40 pm
Nov 29(Tues)	5:00–5:20 pm

Learning Competency:**QUADRILATERALS**

This episode describes the different properties of quadrilaterals using concrete objects or models. It also identifies and describes the different kinds of quadrilaterals: square, rectangle, parallelogram, trapezoid, and rhombus.

Dec 1(Thurs)	10:00–10:20 am
Dec 1(Thurs)	1:20–1:40 pm
Dec 1(Thurs)	5:00–5:20 pm
Dec 6(Tues)	10:00–10:20 am
Dec 6(Tues)	1:20–1:40 pm
Dec 6(Tues)	5:00–5:20 pm

Learning Competency:**NUMBER PATTERNS**

This episode determines the missing term(s) in a sequence of numbers (e.g. odd numbers, even numbers, multiples of a number, factors of a number, etc.)

Dec 8(Thurs)	10:00–10:20 am
Dec 8(Thurs)	1:20–1:40 pm
Dec 8(Thurs)	5:00–5:20 pm
Dec 13(Tues)	10:00–10:20 am
Dec 13(Tues)	1:20–1:40 pm
Dec 13(Tues)	5:00–5:20 pm

Learning Competency:**NUMBER EQUATIONS**

This episode teaches how to find the missing number in an equation involving properties of operations.

Dec 15(Thurs)	10:00–10:20 am
Dec 15(Thurs)	1:20–1:40 pm

Dec 15(Thurs) 5:00–5:20 pm
Dec 20(Tues) 10:00–10:20 am
Dec 20(Tues) 1:20–1:40 pm
Dec 20(Tues) 5:00–5:20 pm

Learning Competency:

TELLING TIME AND ELAPSED TIME

This episode finds the elapsed time in minutes and seconds, estimates the duration of time in minutes, and solves problems involving elapsed time.

Dec 22(Thurs) 10:00–10:20 am
Dec 22(Thurs) 1:20–1:40 pm
Dec 22(Thurs) 5:00–5:20 pm
Jan 3(Tues) 10:00–10:20 am
Jan 3(Tues) 1:20–1:40 pm
Jan 3(Tues) 5:00–5:20 pm

Learning Competency:

PERIMETER OF A POLYGON

This episode discusses how to find the perimeter of triangles, squares, rectangles, parallelograms, and trapezoids. It also solves the problems in real-life situations involving perimeter of squares and rectangles, triangles, parallelograms, and trapezoids.

Jan 5(Thurs) 10:00–10:20 am
Jan 5(Thurs) 1:20–1:40 pm
Jan 5(Thurs) 5:00–5:20 pm
Jan 10(Tues) 10:00–10:20 am
Jan 10(Tues) 1:20–1:40 pm
Jan 10(Tues) 5:00–5:20 pm

Learning Competency:

CONVERSION OF MEASUREMENT

This episode teaches how to convert sq. cm to sq. m and vice versa.

Jan 12(Thurs) 10:00–10:20 am
Jan 12(Thurs) 1:20–1:40 pm
Jan 12(Thurs) 5:00–5:20 pm
Jan 17(Tues) 10:00–10:20 am
Jan 17(Tues) 1:20–1:40 pm
Jan 17(Tues) 5:00–5:20 pm
Jan 19(Thurs) 10:00–10:20 am
Jan 19(Thurs) 1:20–1:40 pm
Jan 19(Thurs) 5:00–5:20 pm

Learning Competency: AREA OF QUADRILATERALS

This episode teaches how to derive the formulas for the area of quadrilaterals (parallelograms, and trapezoids). It also finds the area of quadrilaterals (parallelograms, and trapezoids) using sq. cm and sq. m.

Jan 24(Tues)	10:00–10:20 am
Jan 24(Tues)	1:20–1:40 pm
Jan 24(Tues)	5:00–5:20 pm
Jan 26(Thurs)	10:00–10:20 am
Jan 26(Thurs)	1:20–1:40 pm
Jan 26(Thurs)	5:00–5:20 pm
Jan 31(Tues)	10:00–10:20 am
Jan 31(Tues)	1:20–1:40 pm
Jan 31(Tues)	5:00–5:20 pm

Learning Competency: AREA OF TRIANGLES

This episode demonstrates derivation of the formula for the area of a triangle. It also teaches how to find the area of a triangle.

Feb 2(Thurs)	10:00–10:20 am
Feb 2(Thurs)	1:20–1:40 pm
Feb 2(Thurs)	5:00–5:20 pm
Feb 7(Tues)	10:00–10:20 am
Feb 7(Tues)	1:20–1:40 pm
Feb 7(Tues)	5:00–5:20 pm

Learning Competency:**CREATING WORD PROBLEMS INVOLVING PERIMETER AND AREA**

This episode teaches how to create problems involving perimeter and area involving squares, rectangles, triangles, parallelograms, and trapezoids.

Feb 9(Thurs)	10:00–10:20 am
Feb 9(Thurs)	1:20–1:40 pm
Feb 9(Thurs)	5:00–5:20 pm
Feb 14(Tues)	10:00–10:20 am
Feb 14(Tues)	1:20–1:40 pm
Feb 14(Tues)	5:00–5:20 pm

Learning Competency:**VISUALIZING THE VOLUME**

This episode visualizes the volume of solid figures in different situations using nonstandard (e.g. marbles, etc.) and standard units.

Feb 16(Thurs)	10:00–10:20 am
Feb 16(Thurs)	1:20–1:40 pm
Feb 16(Thurs)	5:00–5:20 pm

Feb 21(Tues) 10:00–10:20 am
Feb 21(Tues) 1:20–1:40 pm
Feb 21(Tues) 5:00–5:20 pm

Learning Competency:

VOLUME OF A RECTANGULAR PRISM

This episode teaches how to derive the formula for the volume of rectangular prisms, solves routine and non-routine problems involving the volume of a rectangular prism, creates problems (with reasonable answers) involving volume of rectangular prism, and finds the volume of a rectangular prism using $cu. cm$ and $cu.$

Feb 23(Thurs) 10:00–10:20 am
Feb 23(Thurs) 1:20–1:40 pm
Feb 23(Thurs) 5:00–5:20 pm
Feb 28(Tues) 10:00–10:20 am
Feb 28(Tues) 1:20–1:40 pm
Feb 28(Tues) 5:00–5:20 pm

Learning Competency:

SINGLE BAR GRAPHS

This episode discusses how to organize data in tabular form and presents them in a single horizontal or vertical bar graph, interprets data presented in different kinds of bar graphs (vertical/horizontal) and solves problems using data presented in a single bar graph.

Mar 2(Thurs) 10:00–10:20 am
Mar 2(Thurs) 1:20–1:40 pm
Mar 2(Thurs) 5:00–5:20 pm
Mar 7(Tues) 10:00–10:20 am
Mar 7(Tues) 1:20–1:40 pm
Mar 7(Tues) 5:00–5:20 pm

Learning Competency:

DOUBLE BAR GRAPHS

This episode teaches how to organize data in tabular form and presents them in a double horizontal or vertical bar graph, interprets data presented in different kinds of bar graphs (vertical/horizontal), solves routine and non-routine problems using data presented in a double-bar graph, and draws inferences based on data presented in a double-bar graph.

Mar 9(Thurs) 10:00–10:20 am
Mar 9(Thurs) 1:20–1:40 pm
Mar 9(Thurs) 5:00–5:20 pm
Mar 14(Tues) 10:00–10:20 am
Mar 14(Tues) 1:20–1:40 pm
Mar 14(Tues) 5:00–5:20 pm

Learning Competency:**SIMPLE PROBABILITY EXPERIMENTS**

This episode discusses how to record favorable outcomes in a simple experiment (e.g. tossing a coin, spinning a wheel, etc.), expresses the outcome in a simple experiment in words, symbols, tables, or graphs, and explains the outcomes in an experiment.

Mar 16(Thurs)	10:00–10:20 am
Mar 16(Thurs)	1:20–1:40 pm
Mar 16(Thurs)	5:00–5:20 pm
Mar 21(Tues)	10:00–10:20 am
Mar 21(Tues)	1:20–1:40 pm
Mar 21(Tues)	5:00–5:20 pm

Learning Competency:**PROBLEMS INVOLVING SIMPLE PROBABILITY**

This episode solves problems involving a simple experiment.

Mar 23(Thurs)	10:00–10:20 am
Mar 23(Thurs)	1:20–1:40 pm
Mar 23(Thurs)	5:00–5:20 pm
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Mar 28(Tues)	5:00–5:20 pm