

MATHEMATICS - 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: NUMBERS UP TO 100 000

This episode develops the conceptual understanding of the students about whole numbers by visualizing numbers up to 100 000 with emphasis on numbers 10 001–100 000. The place value and value of a digit is also discussed in this episode.

June 14 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm
June 16 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
June 21 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: ROUNDING OFF NUMBERS

This episode teaches how to round-off numbers to the nearest thousands and ten thousands.

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

Learning Competency: COMPARING AND ORDERING NUMBERS

This episode discusses how to compare and order numbers. It shows how to compare numbers up to 100 000 using relation symbols and how to order numbers up to 100 000 in increasing or decreasing order.

June 30 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
July 5 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: UNDERSTANDING MULTIPLICATION

This episode demonstrates techniques and properties of multiplication. It discusses several shortcuts in multiplication. It explains how shortcuts help multiplying mentally 2-digit by 1-to 2-digit numbers with products up to 200 and explains the strategies used.

July 7 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
July 12 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: MULTIPLYING BY TWO- TO THREE-DIGIT NUMBERS

This episode shows the steps in multiplying numbers up to 3-digit numbers by up to 2-digit numbers without or with regrouping.

July 14 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
July 19 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: SOLVING WORD PROBLEMS INVOLVING MULTIPLICATION, ADDITION, AND SUBTRACTION

This episode teaches how to solve multiplication routine and non-routine problems involving multiplication of whole numbers including money using appropriate problem solving strategies and tools. This episode also teaches how to solve multi-step routine and non-routine problems involving multiplication and addition or subtraction using appropriate problem solving strategies and tools.

July 21 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
July 26 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: UNDERSTANDING DIVISION

This episode demonstrates techniques and properties of division. Practical uses and applications of division are also shown. It teaches how to divide 3- to 4-digit numbers by 1-to 2-digit numbers without and with remainder

July 28 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 2 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: ESTIMATING QUOTIENTS

This episode shows how to estimate the quotient of 3- to 4-digit dividends by 1- to 2-digit divisors with reasonable results.

Aug 4 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 9 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: ORDER OF OPERATIONS

This episode presents and explains Multiplication, Division, Addition, Subtraction (MDAS) correctly. It also teaches how to perform a series of two or more operations

Aug 11 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 16 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 18 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: PRIME AND COMPOSITE NUMBERS

This episode presents prime and composite numbers. This episode also shows how to differentiate prime from composite numbers

Aug 23 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 25 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
Aug 30 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: GREATEST COMMON FACTOR

This episode discussed how to find the common factors and the greatest common factor (GCF) of two numbers using the following methods: listing, prime factorization, and continuous division. This episode also presents real-life problems involving the GCF of 2 given numbers.

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

Learning Competency: LEAST COMMON MULTIPLE

This episode instructs how to find the least common multiple of two or more numbers using the following methods: listing, prime factorization, and continuous division. This episode also presents real-life problems involving the LCM of 2 given numbers.

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

Learning Competency: UNDERSTANDING FRACTIONS

This episode introduces the concept of fractions. This episode also identifies proper fractions, improper fractions, and mixed numbers. The process of changing improper fractions to mixed numbers and vice versa are also discussed.

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

Learning Competency: ADDING AND SUBTRACTING SIMILAR FRACTIONS

This episode visualizes, performs, and solves problems involving addition and subtraction of similar fractions.

Sept 22 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm
Sept 27 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: ADDING AND SUBTRACTING DISSIMILAR FRACTIONS

This episode visualizes, performs, and solves problems involving addition and subtraction of dissimilar fractions.

Sept 29 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm

Oct 4 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: VISUALIZING DECIMALS

This episode visualizes decimal numbers using models like blocks, grids, number lines and money to show the relationship to fractions.

Oct 6 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm

Oct 11 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: UNDERSTANDING DECIMALS

This episode introduces the concept of decimals. It shows the importance of properly reading and writing decimal numbers through hundredths. It also teaches the place value and the value of a digit of a given decimal number through hundredths.

Oct 13 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm

Oct 18 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Learning Competency: COMPARING, ORDERING, AND ROUNDING OFF DECIMALS

This episode discusses how to compare and order decimal numbers. This episode also covers rounding decimal numbers to the nearest whole number and tenth.

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

Oct 25 (Tues) 10:00am – 10:20am
1:20pm – 1:40pm

Oct 27 (Thurs) 10:00am – 10:20am
1:20pm – 1:40pm