



# Codingal



Grade 6

Hello ! Young Learners

# Get ready to fall in love with Math

Accredited by



Excellent by



Backed by





# About Codingal

Codingal offers online math classes for K-12 students, where kids and teens learn math concepts through live, interactive sessions with expert instructors. Our mission is to build the world's best and most loved online math learning platform for kids and teens, blending traditional teaching with innovative techniques and tools.

All our instructors have strong backgrounds in math and engineering, and they are rigorously vetted and trained. Each student receives a personalized learning path with individual attention in 1:1 private classes. Students learn math through real-life applications, hands-on problem-solving, and interactive activities that make learning fun and exciting.

Kids find Codingal's math classes highly engaging and inspiring. They have rated teachers at 4.9 out of 5. Curriculum content is rated at 4.8 out of 5.

Codingal is on a mission to inspire kids to fall in love with math and provide the right education that empowers them to solve real-world problems, think critically, and build a strong foundation for the future as innovators, engineers, scientists, and entrepreneurs.





# Key Learning

## **Integers & Rational Numbers**

Understand integers, their representation on number lines, and real-world applications like temperature and elevation. Explore absolute value, rational numbers, and integer operations, including addition, subtraction, multiplication, and division.

## **Fractions, Decimals & Percentages**

Convert between fractions, decimals, and percentages to solve problems involving discounts, interest rates, and probability. Represent rational numbers, including positive and negative fractions and decimals, on number lines.

## **Ratios & Proportional Relationships**

Apply ratios and proportional relationships in real-world contexts, including scaling, unit rates, and equivalent ratios. Solve problems using proportional reasoning in various practical applications.

## **Algebraic Expressions & Equations**

Simplify and evaluate algebraic expressions using properties of operations. Solve one-step and two-step equations, applying algebraic reasoning to simplify expressions and solve real-world problems.

## **Geometry & Measurement**

Understand geometric properties of angles, lines, and shapes. Calculate area, perimeter, surface area, and volume of 2D and 3D shapes. Apply formulas to measure circles, composite figures, and symmetrical objects in real-world scenarios.

## **Probability & Data**

Explore theoretical and experimental probability, conducting experiments and analyzing outcomes. Use probability models to solve real-world problems, compare probabilities, and make predictions based on data analysis.



# Math Curriculum (Grade 6)

Topics	Module	Lesson Titles
<b>01. Number System</b> 	<b>Introduction to Integers and their Representation</b>	Understanding Integers
		Representing Integers on a Number Line
	<b>Absolute Value</b>	Exploring Absolute Value
		Reading, Writing, and Comparing Positive and Negative Rational Numbers
	<b>Operations with Integers</b>	Adding and Subtracting Integers
		Multiplying and Dividing Integers
		Addition, Subtraction, Multiplication, and Division of Integers
		Reinforcing Integers
		<b>Test - The Math Carnival</b>
	<b>Rational Numbers</b>	Understanding Rational Numbers
		Fractions to Decimals
		Integers in Real-Life Problems
		Rational Numbers in Real Life
		<b>Test - The Mountain Expedition</b>
	<b>Introduction to Percentages</b>	Introduction to Percentages
		Converting Decimals to Percentages
		Converting Percentages to Decimals
		Finding the Percentage of a Number
		Finding What Percent One Number is of Another
		Finding the Whole from a Given Percent
Percentage Increase and Decrease		
Review and Application of Percentages		
Converting Between Fractions, Decimals, and Percentages		
<b>Test - The Space Mission Challenge</b>		

 **Math Curriculum (Grade 6)**

Topics	Module	Lesson Titles
<p><b>02. Ratios and Proportional Relationships</b></p> 	<p>Understanding ratios, unit rates, proportional reasoning</p>	Understanding Ratios
		Equivalent Ratios
		Introduction to Unit Rates
		Solving Real-World Ratio Problems
		Proportional Relationships
		Scaling Quantities
<p><b>03. Expressions and Equations</b></p> 	<p>Expressions and Variables</p>	Writing Numerical Expressions
		Introduction to Variables and Expressions
		Evaluating Expressions
		Understanding Algebraic Expressions
		Distributive Property in Expressions
		<b>Test - The Junior Palentologist</b>
	<p>Equations</p>	Solving Simple Equations
		Solving Multi-step Equations
		Solving Real-world Equations
		Simplifying Expressions
		Simplifying Algebraic Expressions
		Solving Complex Equations
<p><b>04. Geometry</b></p> 	<p>Basic Geometrical Shapes</p>	Introduction to Geometrical Shapes
		Types of Angles
		Introduction to Geometrical Shapes
		Types of Angles
		Exploring Line Segments and Rays



# Math Curriculum (Grade 6)

Topics	Module	Lesson Titles
		Introduction to Measuring Angles
		Complementary and Supplementary Angles
		Vertical Opposite and Adjacent Angles
		<b>Test - The Picnic Planner</b>
	<b>Polygons</b>	Types of Triangles
		Types of Quadrilaterals
	<b>Perimeter and Area</b>	Perimeter of Regular Polygons
		Area of Rectangles and Squares
		Perimeter and Area of Compound Shapes
	<b>Circles</b>	Introduction to Circles
		Circumference of a Circle
		<b>Test - The Party Planner</b>
	<b>Symmetry</b>	Introduction to Symmetry
		Reflection Symmetry
		Symmetry and Transformations
		Area of Rectangles and Triangles
		Surface Area of Rectangular Prisms
		Volume of Rectangular Prisms
		Volume and Surface Area of Prisms
		Exploring Nets of 3D Shapes
Analyzing 3D Shapes		
Plotting Points on the Coordinate Plane		
Drawing Polygons and Finding Side Lengths		
<b>Test - The Time Travel</b>		

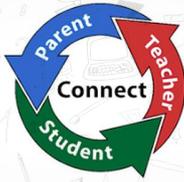


# Math Curriculum (Grade 6)

Topics	Module	Lesson Titles
<p><b>05. Statistics and Probability</b></p> 	<p><b>Data</b></p>	Organizing Data and Analyzing Data Sets
		Creating and Interpreting Box Plots
		Measures of Center (Mean, Median, Mode) Part-1
		Measures of Center (Mean, Median, Mode) Part-2
		Measures of Spread (Range, IQR)
		Comparing Data Sets
		<b>Test - The Rainbow Data Explorer</b>
	<p><b>Probability</b></p>	Introduction to Probability
		Experimental Probability
		Probability of Simple Events
		Real-world Probability Problems
		<b>Test - The Time Travel</b>



# Top 10 benefits of learning at Codingal



## 1. Regular PTM

Great opportunity for parents and teachers to open two-way communication and to share insights and information for the holistic development of a child.



## 2. Regular doubt session

After every module solve all your queries in this personalized session. The toughest problems addressed – concepts revised and doubts cleared!



## 3. Engaging Quizzes & Worksheets

After each class, students get a quiz and worksheets to reinforce learning. These engaging, gamified exercises ensure their understanding is checked and make practice exciting.



## 4. Global Curriculum Expertise

Codingal offers courses tailored to major international and national curricula, including US Common Core (USCC), Australian Curriculum, IB, British Curriculum, IGCSE, CBSE, ICSE, and more. Our expert teachers specialize in these curricula.



## 5. Course Customization

Whether before starting or anytime during your child's learning journey, you can get a personalized course tailored to align with their school curriculum, exams, Olympiad preparation, or competition needs.



# Top 10 benefits of learning at Codingal



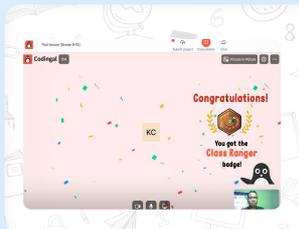
## 6. Live personalized classes

Understand concepts faster with personal attention from teachers. Learn coding from highly qualified teachers trained to make learning effective and impactful.



## 7. Lifetime Access to Class Recordings & Notes

Forgot what was taught in the last class? No worries. Watch the recorded class video anytime to refresh your memory. Get lifetime access to our exclusive learning content including interactive worksheets, videos, and other resources.



## 8. Gamified learning

Codingal makes learning fun with gamification. Students can take quizzes or complete projects to earn points, badges, and rewards.



## 9. Thrilling competitions

Regular competitions are conducted to encourage students to showcase their skills and develop their ideas.



## 10. Learning Certificates

Show the world what you can do with a certificate for every amazing skill you master.



# Students love Codingal



**Mohau Motang**  
South Africa

“ Math was tough for me but now it has become easy and interesting because of Codingal.



**Mahira Khan**  
Sweden

“ My problem solving skills have improved drastically because of Codingal!



**Alika Persaud**  
South Africa

“ Because of Codingal Math, I have massive improvement in my grades!



**Zunaira Rizwan**  
Pakistan

“ Codingal has made me excellent in math



TrustScore **4.8** | **425** reviews



4.6 out of 5



5 out of 5



# Codingal empowers kids to become innovators of the future

## Why this curriculum?



Accredited by STEM.org

Rated 4.5 out of 5 by students and parents on Trustpilot

Based on BIDE (Broad, Inspiring, Deep and Efficient) model

Focus on STEAM (Science, Technology, Engineering, Arts, Math) subjects

Enhances cognitive, logical, and computational skills

Makes learning highly effective, interactive, and fun

## Foundation of Codingal's curriculum

### BLOOM

Bloom's Taxonomy is a standard guideline for K-12 content development, which includes 6 stages of learning: Remember, understand, apply, analyze, evaluate and create.

### BIDE

The BIDE (Broad, Inspiring, Deep and Efficient) model has been developed by Codingal in-house to ensure that our curriculum caters to the unique learning style of every child.

### STEAM

STEAM is an approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.



**"Math is the foundation of all sciences and a universal language. It's the key to unlocking solutions in business and innovation."**

**- Elon Musk**

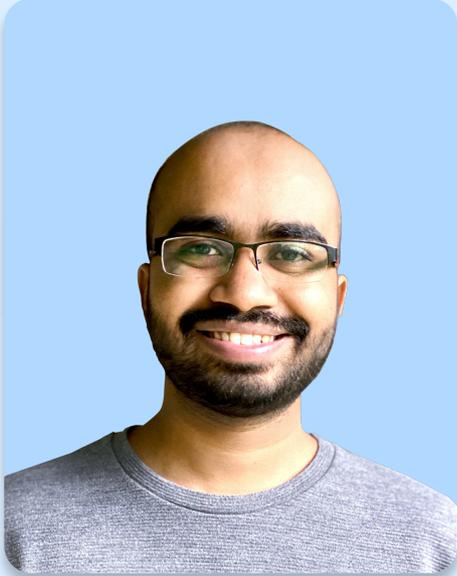


**"Pure mathematics is, in its way, the poetry of logical ideas"**

**- Albert Einstein**



## A note from Codingal Founders



Mathematics is the language of possibility, unlocking the door to a world of innovation discovery, and endless potential. Our teachers open the doors for kids to explore the potential and beauty of Math.

### Vivek Prakash

Co-founder & CEO  
B.Tech & M.Tech, IIT Roorkee

 [LinkedIn](#)



Mathematics is not only about numbers, equations, and algorithms; it is about understanding and exploring the patterns that shape our world.

### Satyam Baranwal

Co-founder & COO  
B.Tech, IIT Dhanbad

 [LinkedIn](#)



Make your kid's math journey fun and inspiring

Is your child ready for the future?

Visit [www.codingal.com](http://www.codingal.com)

Try a free lesson!

Thank You

Built by alumni of

Google amazon



IIT Roorkee



IIT Dhanbad

In partnership with



IIT Bombay



IIT Guwahati



Hewlett Packard  
Enterprise



BITS Pilani

Accredited by STEM.org



Backed by



Combinator



REBRIGHT  
PARTNERS

Got questions?  
Contact us  
anytime.

Send us a message



[support@codingal.com](mailto:support@codingal.com)