

# SCO INTERNATIONAL OLYMPIAD

## GRADE 3 AI OLYMPIAD SYLLABUS

A comprehensive syllabus guide for schools, teachers, parents, and students

**Designed from Grade 3 Artificial Intelligence syllabus pathways and aligned**

**with SCO's platform flow for guided preparation, practice, reporting, and future-ready academic growth.**

- age-fit AI learning guidance for Grade 3 / primary-level learners globally
- chapter-wise pathways across AI concepts, rules, data, patterns, games, safety, block coding, and projects
- preparation roadmap, classroom implementation ideas, and future-benefit framing for AI literacy

Maths	English	Science	Mental Ability	Finance Knowledge
AI	Entrepreneurship	GK	Coding	Life Skills

## CHAPTER-WISE QUICK VIEW

No.	Chapter	Core Idea	Learning Outcome Snapshot	Skill Built
1	<b>What is Artificial Intelligence</b>	Smart systems that learn from data and help people	Recognize AI as a helpful technology used in everyday tools	AI awareness
2	<b>Artificial Intelligence vs. Rules (Not Artificial Intelligence)</b>	Difference between fixed instructions and learning systems	Separate rule-based tools from AI-enabled tools using simple examples	Classification
3	<b>Data &amp; Pattern Recognition</b>	Using examples, similarities, and repeated patterns	Identify patterns in pictures, sounds, words, and numbers	Data thinking
4	<b>Artificial Intelligence in Games &amp; Learning</b>	Adaptive hints, feedback, and personalized practice	Explain how games and learning apps respond to progress	Application thinking
5	<b>Machines vs Humans in AI</b>	What machines do well and what humans do better	Compare speed, memory, emotions, creativity, and responsibility	Human-centred thinking
6	<b>Safe and Responsible AI</b>	Privacy, kindness, honesty, and safe use	Use AI tools with care, respect, and adult guidance	Digital citizenship
7	<b>Matching Games &amp; Block Coding</b>	Events, conditions, loops, and matching logic	Read and design simple logic blocks for games	Computational thinking
8	<b>AI based Project Bank</b>	Small projects that connect AI ideas to real life	Create a simple project plan using problem, data, rule, output, and reflection	Project design

## DETAILED CHAPTER NOTES AND LEARNING OUTCOMES

01

### What is Artificial Intelligence

Artificial Intelligence | Class 3rd

<b>Chapter Note</b>	This chapter introduces AI as a technology that helps computers and machines perform smart tasks such as recognizing speech, giving suggestions, identifying images, and answering simple questions.
<b>Learning Outcomes</b>	<ul style="list-style-type: none"><li>• State the meaning of Artificial Intelligence in simple words.</li><li>• Identify AI tools used in homes, schools, phones, vehicles, and learning apps.</li><li>• Explain that AI supports human work but does not replace human kindness, judgement, or responsibility.</li></ul>
<b>Classroom / Home Practice</b>	Students can list smart tools seen at home or school and mark which ones give suggestions, listen, recognize, or learn from examples.
<b>Assessment Focus</b>	Definition of AI, identification of AI examples, and ability to explain AI as helpful technology.

02

### Artificial Intelligence vs. Rules (Not Artificial Intelligence)

Artificial Intelligence | Class 3rd

<b>Chapter Note</b>	This chapter helps learners understand that not every computer program is AI. Some tools follow fixed rules, while AI-based tools can learn from patterns and improve their responses.
<b>Learning Outcomes</b>	<ul style="list-style-type: none"><li>• Differentiate between fixed-rule machines and AI-enabled systems.</li><li>• Classify examples such as calculator, alarm, robot vacuum, and voice assistant.</li><li>• Understand that AI usually uses data, patterns, and feedback.</li></ul>
<b>Classroom / Home Practice</b>	Teachers can show a simple rule such as “if traffic light is red, stop” and compare it with a smart map that suggests a route using live traffic information.
<b>Assessment Focus</b>	Sorting examples into AI, rule-based, and non-digital categories with clear reasoning.

# 03

## Data & Pattern Recognition

Artificial Intelligence | Class 3rd

### Chapter Note

This chapter builds the foundation for AI learning by showing how data can be pictures, numbers, words, sounds, or actions. Learners discover how patterns help AI make predictions or give answers.

### Learning Outcomes

- Recognize data as information used by computers.
- Find patterns in shapes, colors, numbers, sounds, and pictures.
- Explain how repeated examples help AI recognize objects or make suggestions.

### Classroom / Home Practice

Students can complete pattern games, match animal images with sounds, identify repeated number sequences, and discuss how a computer might learn from many examples.

### Assessment Focus

Pattern completion, object matching, sequence reasoning, and data-observation vocabulary.

# 04

## Artificial Intelligence in Games & Learning

Artificial Intelligence | Class 3rd

### Chapter Note

This chapter connects AI to educational games, adaptive quizzes, hints, voice tools, matching games, and learning apps that respond to student progress.

### Learning Outcomes

- Describe how AI can provide hints, feedback, or difficulty changes in a game.
- Recognize AI use in language apps, quiz platforms, spelling games, and math practice tools.
- Explain that good AI learning tools should support, not discourage, learners.

### Classroom / Home Practice

Students can compare a fixed worksheet with an adaptive quiz and explain which tool changes based on answers.

### Assessment Focus

Understanding of feedback, personalization, adaptive difficulty, and AI-supported learning.

# 05

## Learn Machines vs Humans in Artificial Intelligence

Artificial Intelligence | Class 3rd

### Chapter Note

This chapter helps students compare machine strengths with human strengths. Machines are fast at repetition, memory, and calculation, while humans bring feelings, imagination, values, and empathy.

### Learning Outcomes

- Identify tasks machines do well, such as repeated calculations and storing large data.
- Identify human strengths such as emotions, creativity, care, judgement, and teamwork.
- Use balanced language: AI helps humans, but humans remain responsible.

### Classroom / Home Practice

Create a two-column chart: "Machines are good at..." and "Humans are good at...", then discuss one teamwork example.

### Assessment Focus

Comparison questions, scenario reasoning, and responsible human-AI teamwork.

## 06

**Safe and Responsible AI**

Artificial Intelligence | Class 3rd

<b>Chapter Note</b>	This chapter introduces safe AI use through privacy, kindness, honesty, fairness, adult guidance, and respectful digital behaviour.
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Understand that personal information should not be shared with online tools without guidance.</li> <li>• Use polite and respectful language with digital tools and classmates.</li> <li>• Recognize that AI answers should be checked by humans and not copied blindly.</li> </ul>
<b>Classroom / Home Practice</b>	Students can discuss safe choices: asking an adult before using a new app, not sharing private details, and checking information before trusting it.
<b>Assessment Focus</b>	Safety rules, privacy awareness, kindness in digital spaces, and responsible use decisions.

## 07

**Matching Games & Block Coding**

Artificial Intelligence | Class 3rd

<b>Chapter Note</b>	This chapter introduces the logic behind simple block-based games: events, conditions, loops, variables, scoring, and matching rules.
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Recognize common block-coding ideas such as start, move, repeat, if-then, touch, score, and broadcast.</li> <li>• Read a simple block-code sequence and predict what will happen.</li> <li>• Design the logic for a matching game using conditions and events.</li> </ul>
<b>Classroom / Home Practice</b>	Students can build a paper-card matching game first, then write its block-code logic using “when clicked”, “if match”, and “change score” ideas.
<b>Assessment Focus</b>	Sequencing, condition-based reasoning, matching logic, and basic computational thinking.

## 08

**AI based Project Bank**

Artificial Intelligence | Class 3rd

<b>Chapter Note</b>	This chapter gives a project pathway where students choose a small problem, collect examples, identify patterns, design rules, and explain how an AI-inspired tool could help.
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Create a simple project plan with problem, input data, pattern, output, safety rule, and reflection.</li> <li>• Choose age-fit project ideas such as smart classroom helper, animal-sound matcher, healthy habit reminder, or waste-sorting game.</li> <li>• Present a project clearly using drawings, labels, and short explanations.</li> </ul>
<b>Classroom / Home Practice</b>	Schools can organize a mini AI project showcase where learners present one small project idea and explain what data the tool uses and how it stays safe.

<b>Assessment Focus</b>	Project planning, communication, ethical reflection, and explanation of AI-inspired design.
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## ASSESSMENT BLUEPRINT AND QUESTION DESIGN

Assessment Area	Suggested Weight	Question Style	Evidence of Learning
<b>AI concepts and examples</b>	15%	definition, identification, everyday examples	student can identify AI tools and explain what they do
<b>AI vs rule-based tools</b>	12%	classification, compare-and-choose	student can explain why a tool is AI or not AI
<b>Data and patterns</b>	18%	shape, color, number, picture, and sound patterns	student can complete and explain simple patterns
<b>Games and learning apps</b>	12%	scenario questions and adaptive learning examples	student can identify feedback and personalized support
<b>Machine vs human capability</b>	13%	comparison and reasoning	student can describe strengths and limits of machines and people
<b>Safe and responsible AI</b>	12%	safe-choice scenarios	student can choose privacy-friendly, kind, and truthful behaviour
<b>Block coding and matching games</b>	12%	sequence, event, condition, and score logic	student can read or design simple block-code ideas
<b>AI project thinking</b>	6%	project plan and reflection	student can describe input, pattern, output, and safety rule

## PREPARATION ROADMAP FOR STUDENTS, TEACHERS, AND SCHOOLS

Week 1	Week 2	Week 3	Week 4
<b>AI in daily life</b> Observe smart tools, make an AI/non-AI chart, learn key words.	<b>Data and patterns</b> Practice pattern games, sort objects, and discuss examples as data.	<b>Games and humans</b> Explore adaptive hints, compare machines and humans, discuss safety.	<b>Block coding project</b> Plan a matching game or simple AI-inspired project and present it.

## CLASS 3 AI PROJECT BANK

Project Idea	Input Data	Pattern / Rule	Output	Safety Reflection
<b>Animal Sound Matcher</b>	animal picture and sound	match picture with stored sound	correct animal name or sound	use friendly images and avoid scary sounds
<b>Smart Classroom Helper</b>	question asked by a student	match question type with help card	hint or reminder	do not collect private student details
<b>Healthy Habit Reminder</b>	daily habit choice	good habit / unsafe habit	kind reminder	avoid shaming or comparing students
<b>Waste Sorting Game</b>	picture of item	wet / dry / recyclable clue	correct bin suggestion	check local school waste rules
<b>Emotion Kindness Poster</b>	classroom situation	kind / unkind response	positive message	respect feelings and ask adults for help

## USE GUIDANCE FOR SCHOOLS AND TEACHERS

- Begin each chapter with a real-life observation, such as a voice assistant, map suggestion, learning app, or game hint.
- Use unplugged activities before digital practice so students understand logic, patterns, and safe choices without screen dependency.
- Encourage explanation-based answers. A correct option should be supported by a simple reason in the student's own words.
- Keep AI safety visible: privacy, kindness, fairness, adult guidance, and checking information should appear in classroom discussion.
- Use project presentations to assess communication, clarity, creativity, and responsible thinking, not only technical vocabulary.

## STUDENT CHECKLIST AND QUICK GLOSSARY

### Student Skill Checklist

- I can explain AI in simple words.
- I can tell whether a tool is AI or just follows fixed rules.
- I can find patterns in numbers, colors, pictures, and sounds.
- I can explain how a learning game gives hints or feedback.
- I can compare machine strengths and human strengths.
- I can follow safe and kind AI-use rules.
- I can design a simple block-coding or matching-game idea.
- I can present a small AI-inspired project plan.

### Quick Glossary

- Artificial Intelligence:** technology that helps computers do tasks that seem smart
- Data:** information such as words, numbers, pictures, sounds, or actions
- Pattern:** something that repeats or shows a recognizable order
- Rule-based Tool:** a tool that follows fixed instructions without learning
- Machine Learning:** a way for computers to improve using examples and data
- Block Coding:** programming with visual blocks instead of typed code
- Condition:** an if-then decision used in a program
- Responsible AI:** safe, fair, honest, and kind use of AI tools