SECTION 1 — Curriculum Overview

Hong Kong Homeschool Primary School AI Curriculum
Level 1: Ages 6–10 — No-Coding AI Curriculum

Theme:
AI Awareness & Everyday Understanding

Curriculum Goals
Students will learn to:

- Understand what AI is
- Recognize AI in daily life
- Identify patterns and simple decision rules
- Use AI tools safely and responsibly
- Build early critical thinking about technology
- Explain how AI helps people
- Understand that AI can make mistakes
- Begin ethical thinking about fairness and privacy

Curriculum Structure
- 5 Units
- 13 weeks total
- 1 capstone project
- Worksheets for every lesson
- Reading comprehension activities
- Games and hands-on activities
- Assessment tools

Session 2 - TEACHER / PARENT GUIDE

For Hong Kong Homeschool Educators

Hong Kong Homeschool Primary School AI Curriculum (Level 1: Ages 6–10)

1. Purpose of This Guide

This guide supports Hong Kong homeschool educators in teaching the Level 1 AI curriculum.

It provides:

• Teaching strategies
• Safety guidelines
• Tips for supporting young learners
• Cultural and local context
• Guidance for using AI responsibly
• Suggestions for adapting lessons for different ages

This guide ensures that any parent or educator — even without technical knowledge — can confidently teach AI literacy.

2. AI Education in the Hong Kong Context

Hong Kong students grow up surrounded by technology:

• Smartphones
• MTR Octopus systems
• Smart home devices
• AI-powered apps (translation, maps, learning tools)
• School platforms using AI recommendations

This curriculum helps children understand:

• What AI is
• How AI works
• How to use AI safely
• How AI affects daily life in Hong Kong
• How to think critically about technology

The curriculum aligns with Hong Kong's emphasis on:

• Digital literacy
• Bilingual learning
• STEM education
• Responsible technology use

3. Teaching Philosophy

This curriculum is built on four principles:

1. Simple Concepts → Deep Understanding
Children learn through stories, examples, and hands-on activities.

2. No Coding Required
AI literacy comes first. Coding can come later.

3. Learning Through Play
Games, drawing, storytelling, and roleplay make AI concepts accessible.

4. Human-Centered AI
Children learn that AI is a tool — humans stay in control.

4. Understanding How Young Children Learn AI

Children ages 6–10 learn best when:

• Concepts are concrete
• Lessons are short
• Activities are hands-on
• Ideas connect to real life
• They can ask questions freely
• They feel safe to explore

AI can feel abstract, so this curriculum uses:

• Patterns
• Pictures
• Stories
• Games
• Real-life examples
• Simple decision rules

These help children understand AI without needing technical skills.

5. AI Safety Guidelines for Children

AI safety is essential.

Teach children to:

Never share personal information with AI
Examples:
• Full name
• Address
• School name
• Phone number

Always ask an adult before using AI tools
Especially tools involving:
• Photos
• Voice
• Online accounts

Understand that AI can make mistakes
Children should learn to check AI answers.

Use AI for learning, not replacing thinking
AI is a helper, not a shortcut.

Be kind and respectful when using AI
Even though AI is not a person, respectful language builds good habits.

6. How to Use This Curriculum
Each unit includes:

• Teacher script
• Reading comprehension
• Vocabulary
• Worksheets
• Games
• Extension tasks
• Answer keys

Suggested Weekly Structure

• Day 1: Reading + discussion
• Day 2: Worksheet + vocabulary
• Day 3: Game or hands-on activity
• Day 4: Extension task or creative project
• Day 5: Review + reflection

Time Needed

• 20–40 minutes per lesson
• 2–3 lessons per week

7. Supporting Different Learners
For younger learners (6–7):

• Use more pictures
• Shorten reading passages
• Do worksheets orally
• Use more games

For older learners (8–10):

• Encourage longer writing
• Add extra examples
• Let them explore AI tools with supervision
• Add simple research tasks

For bilingual learners (English + Cantonese):

• Translate key vocabulary
• Allow answers in either language
• Use translation AI as a teaching tool (with adult supervision)

8. Encouraging Critical Thinking

Ask questions like:

• "Why do you think AI made that mistake?"
• "Should AI decide this?"
• "How do you know this answer is correct?"
• "What would happen if AI learned from wrong examples?"

These questions help children think deeply about technology.

9. Tips for Homeschool Parents

Create a safe learning environment
Children should feel comfortable asking questions.

Use real-life examples
Hong Kong is full of AI examples:
• MTR system
• Google Maps
• YouTube recommendations
• Smart home devices

Let children explore
AI is more fun when children can try things themselves.

Keep discussions open
Ask: "What do you think AI should or shouldn't do?"

Celebrate creativity
AI drawing, storytelling, and robot design help children express ideas.

10. Recommended AI Tools (Safe for Kids, With Adult Supervision)

These tools are optional and require adult guidance:

• Google Teachable Machine (no coding)
• AI drawing tools (child-safe mode recommended)
• Translation apps
• Voice assistants (with privacy settings enabled)

Important:
Always supervise children when using online tools.

11. Assessment Guidance

Use the following to evaluate learning:

Worksheets
Check for understanding of key ideas.

Discussions
Listen for correct use of vocabulary.

Games
Observe how children apply concepts.

Capstone Project
Look for creativity, clarity, and understanding of AI.

Reflection Questions
Ask: "What did you learn about AI today?"

12. Preparing for the Capstone Project

Before starting the final project:

• Review Units 1–5
• Discuss real problems AI can solve
• Show examples of helpful robots
• Encourage imagination
• Remind children that humans stay in control

13. Encouraging Healthy Attitudes Toward AI

Teach children to:

• Be curious
• Be responsible
• Be safe
• Be thoughtful
• Be creative

AI is a tool — and children should feel empowered, not intimidated.

14. Final Message to Hong Kong Homeschool Educators

You do not need to be a technology expert to teach AI.

Your guidance, encouragement, and conversations with your child are far more important than technical knowledge.

This curriculum is designed to help you:

• Build confidence
• Teach essential digital literacy
• Support creativity
• Prepare your child for the future

You are giving your child a powerful gift:
the ability to understand and use AI wisely, safely, and creatively.

Session 3 Teaching Materials

🔲 Lesson 1.1 — What Is a Machine?

Teacher Script (Step-by-Step)

1. Warm-up (5 minutes)
"Look around the room. What objects help us do work? These are called machines. Some machines follow simple rules. Some machines can learn — these are called AI."

2. Direct Teaching (10 minutes)
Show pictures of machines (fan, toaster, robot vacuum, smart speaker).
Ask:
• "Which ones follow simple rules?"
• "Which ones seem to learn or make decisions?"

3. Guided Practice (10 minutes)
Explain:
• A machine helps people do work.
• AI is a machine that learns from examples.
• Not all machines are AI.

4. Independent Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing Discussion (5 minutes)
Ask: "Why do you think people make AI machines?"

Student Reading (Short & Age-Appropriate)

A machine is something that helps people do work.
Some machines follow simple rules, like a fan or a toaster.
Some machines can learn from examples — these are called AI machines.

Worksheet

A. Circle the machines that can learn:
• Washing machine
• Smart speaker
• Bicycle
• Translation app
• Calculator
• Robot vacuum

B. Short Questions
1. What is a machine?
2. What makes an AI machine different?

C. Application Question

Name one AI machine you have seen at home or in school.

Learning Game — "Machine Hunt"

Students walk around the home and list:

• 3 machines

• 1 AI machine

Extension Task

Draw a machine that cannot learn and a machine that can learn. Label each one.

Answer Key

A. Circling: Smart speaker, Translation app, Robot vacuum

B1: A machine helps people do work.

B2: AI machines can learn from examples.

C: Answers vary.

🟦 Lesson 1.2 — AI or Not AI?

Teacher Script

1. Warm-up (5 minutes)

Show two pictures: a toaster and Google Maps.

Ask: "Which one learns? Why?"

2. Direct Teaching (10 minutes)

Explain:

• AI machines make decisions by learning from examples.

• Non-AI machines follow fixed rules.

3. Guided Practice (10 minutes)

Sort picture cards together.

4. Worksheet (10 minutes)

Students complete the worksheet below.

5. Closing (5 minutes)

Ask: "Why is it important to know what AI can and cannot do?"

Student Reading

AI machines can make decisions by learning from examples.

Non-AI machines follow fixed rules and cannot learn.

Worksheet

A. Match the item to the correct group:

Items:

• Google Maps

• Toaster

• YouTube recommendations

• Pencil sharpener

Groups:

• AI

• Not AI

B. Close-Ended Questions
1. AI can learn from:
A. Examples
B. Sleeping
C. Guessing
2. A toaster is:
A. AI
B. Not AI

C. Open-Ended Question
Why do you think AI is helpful?

Learning Game — "AI or Not AI?" Sorting Race
Students race to sort 20 picture cards into:
• AI
• Not AI

Extension Task
Interview a family member:
"Which AI tools do you use every day?"
Write down 3 answers.

Answer Key
A:
• Google Maps → AI
• Toaster → Not AI
• YouTube recommendations → AI
• Pencil sharpener → Not AI
B1: A
B2: B
C: Answers vary.

UNIT 2 — HOW AI LEARNS (3 WEEKS)

🔳 Lesson 2.1 — Patterns Everywhere

Teacher Script
- 1. Warm-up (5 minutes)
- Show a simple pattern (🔵 🟢 🔵 🟢 🔵). Ask: "What comes next?" "How do you know?" Explain: "AI learns by finding patterns. Patterns help AI make decisions."
- 2. Direct Teaching (10 minutes)
- Teach what a pattern is: something that repeats or follows a rule. Show examples: colour patterns, shape patterns, daily routines.
- 3. Guided Practice (10 minutes)
- Students complete pattern sequences together.
- 4. Independent Worksheet (10 minutes)
- Students complete the worksheet below.
- 5. Closing (5 minutes)
- Ask: "Where do you see patterns in your life?"

Student Reading

AI learns by finding patterns. A pattern is something that repeats or follows a rule. When AI sees many examples, it learns the pattern and makes predictions.

Worksheet
- A. Find the pattern
- 1. 🟦 🟩 🟦 🟩 🟦 __
- 2. 🍎 🍎 🍌 🍎 🍎 🍌 __
- 3. 🐶 🐱 🐶 🐱 🐶 __
- B. Close-Ended Questions
- 1. A pattern is something that: A. Never repeats B. Repeats or follows a rule C. Is random
- 2. AI uses patterns to: A. Sleep B. Make predictions C. Eat food
- C. Open-Ended Question: Where do you see patterns in your home or school?
- D. Application Question: Explain how patterns help AI learn.

Learning Game

"Pattern Detective" — Students find colour, number, and sound patterns.

Extension Task

Create your own pattern using shapes, colours, stickers, or drawings. Challenge: Make a pattern with two rules.

Answer Key
- A1: 🟩
- A2: 🍌

- A3: 🐱
- B1: B
- B2: B
- C/D: Answers vary.

🟦 Lesson 2.2 — Rules and Decisions

Teacher Script

- 1. Warm-up (5 minutes)
- Ask: "What rules do you follow every day?" Explain: "AI also uses rules to make decisions."
- 2. Direct Teaching (10 minutes)
- Teach if–then rules. Examples: If the light is red → stop. If the picture looks like a cat → say "cat."
- 3. Guided Practice (10 minutes)
- Students create simple rules.
- 4. Worksheet (10 minutes)
- Students complete the worksheet below.
- 5. Closing (5 minutes)
- Ask: "Why are rules important for AI?"

Student Reading

AI can use simple rules to make decisions. A rule tells AI what to do in a situation — for example, an if–then rule helps AI choose the right action. But many AI systems also learn from patterns instead of only following fixed rules. Rules help AI make basic decisions, and patterns help AI learn from examples.

Worksheet

- A. Write a rule for each situation
- 1. If it is hot → _____
- 2. If you are hungry → _____
- 3. If the light is green → _____
- B. Close-Ended Questions
- 1. A rule helps AI: A. Dance B. Make decisions C. Sleep
- 2. "If it rains → bring umbrella" is an example of: A. A story B. A pattern C. An if–then rule
- C. Open-Ended Question: Why do you think AI needs rules?
- D. Application Question: Write one rule an AI robot could use to help at home.

Learning Game

"Robot Rules" — Students follow if–then commands.

Extension Task

Create a 3-step rule chain.

Answer Key
- B1: B
- B2: C
- Other answers vary.

Lesson 2.3 — Learning from Examples

Teacher Script
- 1. Warm-up (5 minutes)
- Show pictures of cats and dogs. Ask: "How do you know which is which?" Explain: "You learned from examples. AI learns the same way."
- 2. Direct Teaching (10 minutes)
- Explain: AI needs many examples; more examples → better learning; wrong examples → wrong learning.
- 3. Guided Practice (10 minutes)
- Sort pictures into "cat" and "not cat."
- 4. Worksheet (10 minutes)
- Students complete the worksheet below.
- 5. Closing (5 minutes)
- Ask: "Why does AI need lots of examples?"

Student Reading

AI learns by looking at many examples. If you show AI many pictures of cats, it learns what a cat looks like. If you show AI wrong examples, it may learn the wrong thing.

Worksheet
- A. Why does AI need many examples? (Short answer)
- B. Close-Ended Questions
- 1. AI learns by: A. Guessing B. Looking at examples C. Sleeping
- 2. If AI sees wrong examples, it may: A. Learn the wrong thing B. Become perfect C. Stop working
- C. Open-Ended Question: What would happen if you trained an AI with only dog pictures?
- D. Application Question: Think of something AI could learn. List 3 examples you would show it.

Learning Game

"Train the AI" — Students act as AI and classify pictures.

Extension Task

Create a mini dataset of 6 drawings.

Answer Key
- B1: B

- B2: A
- Other answers vary.

UNIT 3 — AI IN DAILY LIFE (3 WEEKS)

Concept: AI Tools Around Us

▨ Lesson 3.1 — Smart Home AI

Teacher Script

1. Warm-up (5 minutes)
Ask:
"What smart devices do you have at home? What can they do?"
Show examples:
• Smart speaker
• Robot vacuum
• Smart lights

2. Direct Teaching (10 minutes)
Explain:
"Smart home devices use AI to understand what we say, learn our habits, and help us with daily tasks."

3. Guided Practice (10 minutes)
Discuss:
• How does a robot vacuum know where to go?
• How does a smart speaker understand your voice?

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"How can smart home AI make life easier?"

Reading Comprehension

Smart home devices are machines that use AI to help people in their homes. A smart speaker can listen to your voice and answer questions. It can play music, tell you the weather, or set a timer. A robot vacuum can clean the floor by moving around the house. It learns where the walls and furniture are so it does not bump into things. Smart lights can turn on or off when you enter a room. They can even change colour.

These devices use AI to understand what people want. They learn from examples, like the sound of your voice or the shape of your room. Smart home AI makes life easier, but it is important to use it safely. We should not share private information with smart devices, and adults should help decide when to use them.

Worksheet

A. Reading Questions

1. What can a smart speaker do?
2. How does a robot vacuum know where to go?
3. Why should we be careful with smart devices?

B. Close-Ended Questions

1. Smart lights can:
A. Cook food
B. Turn on when you enter a room
C. Do your homework
2. A robot vacuum uses AI to:
A. Learn the shape of your room
B. Fly
C. Make phone calls

C. Open-Ended Question
How could smart home AI help your family?

D. Application Question
Draw a room in your home.
Circle where a smart device could help.

Answer Key

A1: It can answer questions, play music, tell weather, etc.
A2: It learns the shape of the room.
A3: Because they collect information.
B1: B
B2: A

🔳 Lesson 3.2 — AI for Language (Translation Tools)

Teacher Script

1. Warm-up (5 minutes)
Ask:
"Have you ever used a translation app? What did it do?"

2. Direct Teaching (10 minutes)
Explain:
"AI can understand languages and help translate words. It learns from millions of examples."

3. Guided Practice (10 minutes)
Translate simple sentences together.

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"How can translation AI help people communicate?"

Reading Comprehension

AI can help people understand different languages. Translation apps use AI to read words, listen to speech, and change them into another language. This helps people talk to each other even if they do not speak the same language.

For example, if you type "Hello" into a translation app, it can show the word in Chinese, Spanish, or many other languages. Some apps can listen to your voice and translate it instantly. AI learns from millions of sentences so it can understand grammar, spelling, and meaning.

Translation AI is helpful when travelling, learning a new language, or talking to someone from another country. But sometimes AI makes mistakes, so it is important to check the translation with an adult.

Worksheet

A. Reading Questions
1. What does a translation app do?
2. How does AI learn languages?
3. Why should we check AI translations?

B. Close-Ended Questions
1. Translation AI can:
A. Change words into another language
B. Cook food
C. Drive a car
2. AI learns languages by:
A. Guessing
B. Looking at many sentences
C. Sleeping

C. Open-Ended Question
How could translation AI help you in school?

D. Application Task
Write a sentence in English.
Translate it into another language using a translation app.

Answer Key

A1: It changes words into another language.
A2: By learning from many sentences.

A3: Because AI can make mistakes.
B1: A
B2: B

🔳 Lesson 3.3 — AI in Photos & Videos

Teacher Script
1. Warm-up (5 minutes)
Show a photo filter (e.g., dog ears).
Ask: "How does the app know where your face is?"

2. Direct Teaching (10 minutes)
Explain:
"AI can detect faces, add filters, and improve photos."

3. Guided Practice (10 minutes)
Show examples of AI-enhanced photos.

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"What is one fun thing AI can do with photos?"

Reading Comprehension
AI is used in many photo and video apps. When you take a picture, AI can find your face and make the photo look better. It can brighten the picture, remove shadows, or make colours stronger. Some apps use AI to add fun filters, like dog ears, glasses, or cartoon effects.
AI can also help keep photos safe. It can blur faces in videos to protect privacy. It can detect if a photo is too dark and fix it automatically. AI learns from millions of pictures so it can understand shapes, faces, and objects.
Photo AI is helpful for taking better pictures, making creative art, and keeping people safe online. But it is important to remember that AI does not always get it right. Sometimes it may not detect a face correctly or may change the picture too much.

Worksheet
A. Reading Questions
1. What can AI do to improve photos?
2. How does AI learn to detect faces?
3. Why is photo privacy important?

B. Close-Ended Questions
1. AI can add:
A. Dog ears
B. Toast

C. Shoes
2. AI learns from:
A. Millions of pictures
B. Sleeping
C. Guessing

C. Open-Ended Question
What is your favourite AI photo feature and why?

D. Application Task
Circle the things AI can do in photos:
• Add dog ears
• Make toast
• Blur background
• Change colours

Answer Key
A1: Brighten, remove shadows, add filters, etc.
A2: By learning from many pictures.
A3: To keep personal information safe.
B1: A
B2: A
D: Dog ears, blur background, change colours

UNIT 4 — CREATIVITY WITH AI (3 WEEKS)
Concept: AI as a Creative Partner

🔷 Lesson 4.1 — AI for Drawing

Teacher Script
1. Warm-up (5 minutes)
Show a simple AI-generated drawing.
Ask:
"How do you think a computer made this picture?"

2. Direct Teaching (10 minutes)
Explain:
"AI can create pictures by learning from millions of images. It looks at shapes, colours, and patterns to make new drawings."

3. Guided Practice (10 minutes)
Use an AI drawing tool (with adult supervision).
Generate 2–3 pictures based on simple prompts.

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"What is one thing AI can draw that surprises you?"

Reading Comprehension

AI can help people create drawings and artwork. When you type a sentence into an AI drawing tool, the AI tries to understand what you want. It looks at many examples of pictures it has learned from. Then it creates a new picture that matches your idea.
For example, if you type "a cat wearing a hat," the AI will try to draw a cat and a hat together. It does not copy a picture. Instead, it creates something new using what it has learned. AI can draw animals, people, buildings, and even imaginary creatures.
AI drawing tools are helpful for artists, students, and anyone who wants to be creative. They can help you get ideas, make quick sketches, or create fun pictures. But AI does not always get things right. Sometimes the picture looks strange or has mistakes. This is because AI does not truly understand the world — it only learns from examples.

Worksheet

A. Reading Questions
1. How does AI know what to draw?
2. What happens when you type a prompt into an AI tool?
3. Why do AI drawings sometimes look strange?

B. Close-Ended Questions
1. AI creates pictures by:
A. Guessing randomly
B. Learning from many images
C. Sleeping

2. A prompt is:
A. A type of food
B. Words you give to AI
C. A kind of animal

C. Open-Ended Question
What would you ask an AI to draw for you? Why?

D. Application Task
Draw your favourite AI-generated picture OR draw what you wanted the AI to create.

Learning Game

"AI Art Challenge"

Teacher gives a silly prompt:

• "A robot eating noodles"

• "A flying banana"

• "A dinosaur wearing sunglasses"

Students draw what they think the AI would create.

Extension Task

Write 3 creative prompts for an AI drawing tool.

Answer Key

A1: It learns from many pictures.

A2: It creates a picture based on your words.

A3: Because AI does not truly understand the world.

B1: B

B2: B

🟦 Lesson 4.2 — AI for Storytelling

Teacher Script

1. Warm-up (5 minutes)

Ask:

"What makes a good story? Characters? Setting? Problem?"

2. Direct Teaching (10 minutes)

Explain:

"AI can help write stories. It reads your ideas and continues the story."

3. Guided Practice (10 minutes)

Give AI a simple prompt:

"Once there was a tiny robot who wanted to learn to dance."

Read the AI's continuation.

4. Worksheet (10 minutes)

Students complete the worksheet below.

5. Closing (5 minutes)

Ask:

"Why should we check AI's writing?"

Reading Comprehension

AI can help people write stories. When you give AI an idea, it tries to continue the story in a way that makes sense. AI has read many books, articles, and stories, so it knows how sentences usually sound. It uses this knowledge to write new sentences.

For example, if you write, "A little robot wanted to explore space," the AI might continue the story by describing the robot's spaceship or the planets it visits. AI can help you think of new ideas, create characters, or fix spelling mistakes.

However, AI does not always understand the story the way humans do. Sometimes it writes things that do not make sense or repeats the same idea. This is why it is important for students to read the AI's writing carefully and make changes when needed. AI is a helper, but the student is the real author.

Worksheet

A. Reading Questions
1. How does AI help with storytelling?
2. Why does AI sometimes make mistakes in stories?
3. Who is the real author of the story?

B. Close-Ended Questions
1. AI writes stories by:
A. Reading your mind
B. Using what it learned from many texts
C. Copying one book

2. Students should check AI writing because:
A. AI is always perfect
B. AI sometimes writes things that don't make sense
C. AI refuses to write

C. Open-Ended Question
How would you use AI to help you write a story?

D. Application Task
Write 2–3 sentences of a story.
Ask AI to continue it.
Compare your writing with the AI's writing.

Learning Game

"Story Relay"
Students take turns adding one sentence to a story.
Teacher adds an "AI sentence" in between.
Students guess which sentence was written by AI.

Extension Task

Rewrite the AI's story to make it better.

Answer Key

A1: It continues the story based on your idea.
A2: Because AI does not fully understand the story.
A3: The student is the real author.
B1: B
B2: B

▨ Lesson 4.3 — AI for Music

Teacher Script

1. Warm-up (5 minutes)
Ask:
"What sounds do you hear every day? Music? Beeps? Voices?"

2. Direct Teaching (10 minutes)
Explain:
"AI can create music by learning patterns in sound."

3. Guided Practice (10 minutes)
Use an AI music tool to generate a short melody.

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"How does AI help musicians?"

Reading Comprehension

AI can help people create music. Music is made of patterns, such as beats, rhythms, and melodies. AI learns these patterns by listening to many songs. Then it can create new music that sounds similar to what it has learned.

For example, if you ask AI to make a happy song, it might use fast beats and bright sounds. If you ask for a calm song, it might use slow rhythms and soft notes. AI can help musicians think of new ideas, write background music, or create sound effects for videos.

AI music tools are fun for students because they let you experiment with different sounds. You can change the speed, style, or instruments. But AI does not know what emotions you truly feel — it only guesses based on patterns. This is why human musicians are still very important.

Worksheet

A. Reading Questions

1. How does AI learn to make music?
2. What might AI do when asked to make a happy song?
3. Why are human musicians still important?

B. Close-Ended Questions

1. Music is made of:
A. Patterns
B. Food
C. Numbers only

2. AI guesses emotions based on:
A. Patterns
B. Magic
C. Random choices

C. Open-Ended Question
What kind of music would you ask AI to create?

D. Application Task
Describe the AI music you created:
• Was it fast or slow?
• Happy or calm?
• What instruments did it use?

Learning Game

"Guess the Mood"
Play 3 AI-generated music clips.
Students guess the mood:
• Happy
• Sad
• Calm
• Excited

Extension Task

Create a short dance or movement to match the AI music.

Answer Key

A1: By learning patterns in music.
A2: Use fast beats and bright sounds.
A3: Because humans understand real emotions.
B1: A
B2: A

UNIT 5 — AI SAFETY & ETHICS FOR KIDS (2 WEEKS)

Concept: Safe, Responsible AI Use

▨ Lesson 5.1 — Why AI Makes Mistakes

Teacher Script

1. Warm-up (5 minutes)
Ask:
"Have you ever seen AI get something wrong? Maybe a translation mistake? A wrong photo tag?"

2. Direct Teaching (10 minutes)
Explain:
"AI is smart, but not perfect. It learns from examples. If the examples are wrong or confusing, AI can make mistakes."

3. Guided Practice (10 minutes)
Show examples of AI mistakes (describe them verbally):
• A photo app calling a dog a cat
• A translation app giving a silly sentence
• A voice assistant misunderstanding a question

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"Why is it important for humans to check AI's work?"

Reading Comprehension

AI can do many amazing things, but it is not perfect. AI learns from examples, and sometimes the examples are not correct or not complete. When this happens, AI may learn the wrong pattern. For example, if an AI sees many pictures of white cats but only a few pictures of black cats, it might think that all cats must be white. This is not true, but the AI does not know that unless it sees more examples.

AI can also make mistakes because it does not understand the world the way humans do. Humans use feelings, common sense, and real-life experience to make decisions. AI does not have feelings or common sense. It only follows patterns it has learned. This means AI might misunderstand a picture, give a wrong answer, or say something that does not make sense.

Even when AI tries its best, it can still get confused. A voice assistant might hear the wrong word. A translation app might choose the wrong meaning. A photo app might think a shadow is a face. These mistakes happen because AI does not truly "know" anything — it only guesses based on what it has learned.

This is why humans must always check AI's work. AI is a helpful tool, but people must make the final decisions. When we understand why AI makes mistakes, we can use it more safely and responsibly.

Worksheet

A. Reading Questions

1. Why does AI sometimes learn the wrong pattern?

2. Why can AI misunderstand pictures or words?

3. Why must humans check AI's work?

B. Close-Ended Questions

1. AI learns from:
A. Feelings
B. Examples
C. Magic

2. AI makes mistakes because it does not have:
A. Common sense
B. Electricity
C. Colours

C. Open-Ended Question
Describe a time when you saw AI make a mistake.

D. Application Task
Draw a picture of something AI might confuse (e.g., a shadow that looks like a face).
Explain why AI might get it wrong.

Answer Key

A1: Because it learns from wrong or incomplete examples.

A2: Because it does not have common sense.

A3: To make sure the answer is correct.

B1: B

B2: A

🟦 Lesson 5.2 — Should AI Decide This?

Teacher Script

1. Warm-up (5 minutes)
Ask:
"What decisions do you make every day? What decisions should a computer make?"

2. Direct Teaching (10 minutes)
Explain:
"AI can help with some decisions, but humans must make important choices."

3. Guided Practice (10 minutes)
Discuss each example:
• Should AI choose your clothes?
• Should AI choose your bedtime?
• Should AI choose what video you watch?
• Should AI choose who gets a prize?

4. Worksheet (10 minutes)
Students complete the worksheet below.

5. Closing (5 minutes)
Ask:
"What decisions should only humans make?"

Reading Comprehension

AI can help people make decisions, but it should not make every decision. Some decisions are small and simple, like choosing a song to play or suggesting a video. AI can help with these because they are not very important, and people can easily change their choice if they do not like it.

However, some decisions are too important for AI to make. AI should not decide who gets a prize, who gets in trouble, or what time a child should go to bed. These decisions need human judgment. Humans understand feelings, fairness, and context. AI does not understand these things. It only follows patterns and rules.

AI also does not know what is best for each person. For example, AI might suggest a video that is not safe for children. It might choose clothes that are not right for the weather. It might recommend something that is not healthy. This is why adults must help children decide when to use AI and when to make their own choices.

AI is a tool, not a boss. It can give ideas, suggestions, and help, but humans must make the final decisions. When we use AI wisely, it can make life easier. But when we let AI make decisions it should not make, it can cause problems. Learning when to trust AI — and when not to — is an important skill for everyone.

Worksheet

A. Reading Questions

1. What kinds of decisions can AI help with?

2. Why should AI not make important decisions?

3. Why do humans need to make the final choice?

B. Close-Ended Questions

1. AI should choose:
A. Your bedtime
B. Your clothes for cold weather
C. A song to play

2. Humans understand:
A. Feelings and fairness
B. Only numbers
C. Nothing

C. Open-Ended Question
What is one decision you think AI should never make? Why?

D. Application Task
Circle YES or NO.

Answer Key

A1: Simple decisions like songs or videos.

A2: Because AI does not understand feelings or fairness.

A3: Because humans know what is best.

B1: C

B2: A

Session 4 CAPSTONE PROJECT — "Design Your Own Helpful AI Robot"

A 1–2 week culminating project for ages 6–10

🤖 Teacher Script (Full Guidance)

1. Introduction (5 minutes)
Say:
"Throughout this course, we learned what AI is, how it works, and how it helps people. Now you will design your own AI robot that can help someone in real life."
Show examples (describe verbally):
• A robot that helps clean
• A robot that helps elderly people
• A robot that helps students learn
• A robot that helps protect the environment

2. Project Explanation (10 minutes)
Explain the project steps:
1. Imagine a helpful AI robot
2. Draw the robot
3. Label its parts
4. Explain what it does
5. Describe how it uses AI
6. Describe who it helps
7. Present the robot to family or classmates

3. Reading Comprehension (15 minutes)
Students read the passage below.

4. Planning (10 minutes)
Students brainstorm ideas using the worksheet.

5. Creating (20–40 minutes)
Students draw and label their robot.

6. Presenting (10–20 minutes)
Students share their robot design.

7. Reflection (5 minutes)

Ask:

"What is one thing you learned about AI from this project?"

📄 Reading Comprehension

AI robots can help people in many different ways. Some robots help clean homes by vacuuming the floor or washing windows. Other robots help doctors by carrying tools or reminding patients to take their medicine. There are even robots that help farmers by checking plants, watering crops, or finding insects that might hurt the plants.

AI robots learn from examples. A cleaning robot learns the shape of a room so it can move around without bumping into things. A medical robot learns the steps of a task so it can help doctors safely. A farming robot learns what healthy plants look like so it can find problems quickly.

AI robots are helpful because they can do jobs that are too hard, too boring, or too dangerous for people. For example, some robots explore deep oceans or travel into space. Others help firefighters by entering places that are too hot or smoky for humans.

Even though AI robots are smart, they still need humans. Humans decide what the robot should do, teach it with examples, and check its work. AI robots cannot understand feelings or make important decisions. They are tools that help people, not machines that replace people.

When you design your own AI robot, think about a real problem in the world. Who needs help? What job is difficult or dangerous? How could your robot make life easier or safer? Your robot should use AI to learn, make decisions, and help people in a responsible way.

🪟 Vocabulary

[Teacher may fill in key vocabulary words here.]

📄 Worksheet — Planning Your AI Robot

A. Reading Questions

1. What are some jobs AI robots can help with?

2. Why do AI robots need humans?

3. What should you think about when designing your robot?

B. Close-Ended Questions

1. AI robots learn from:
A. Examples
B. Magic
C. Guessing

2. Robots should be:
A. Dangerous
B. Helpful
C. Confusing

C. Open-Ended Questions

1. Who do you want your robot to help?

2. What problem will your robot solve?

3. How will your robot use AI to learn?

D. Application Task — Robot Design Plan

• My robot's name is: _____

• My robot helps: _____

• The problem it solves is: _____

• My robot uses AI to: _____

• My robot has these parts: _____

🎨 Robot Design Template (Drawing Page)

Instructions:
Draw your robot in the big box.
Label at least five parts.
Examples:
• Camera eyes
• Wheels
• Sensors
• Arms
• AI brain
• Speaker
• Tools

[Large blank drawing space]

Labels:

🗣️ Presentation Template

Students complete and read aloud:

"My robot is called _____.
It helps _____.
It solves the problem of _____.
It uses AI to _____.
One special thing about my robot is _____."

🎲 Learning Game — "Robot Roleplay"

Students pretend to be their AI robot.
Teacher gives commands:
• "Your robot helps clean — show how it moves."
• "Your robot helps people learn — show how it teaches."
• "Your robot helps the environment — show how it works."
This builds creativity and understanding of AI roles.

🏆 Extension Tasks

Choose one:

1. Write a short story
Write a story about a day in the life of your AI robot.

2. Build a model
Use LEGO, cardboard, or craft materials to build a 3D version of your robot.

3. Interview a family member
Ask:
"What kind of AI robot would help you the most?"
Write their answer.

🪢 Answer Key

A1: Cleaning, helping doctors, helping farmers, exploring dangerous places, etc.

A2: Because humans teach robots, check their work, and make important decisions.

A3: Who needs help, what problem exists, how AI can solve it.

B1: A

B2: B

Open-ended answers vary.

Session 5 Final ASSESSMENT

For Hong Kong Homeschool Primary School AI Curriculum (Level 1: Ages 6–10)

This assessment package includes:

• Learning outcomes checklist
• Unit quizzes (Units 1–5)
• Performance tasks
• Observation rubrics
• Student self-assessment
• Parent/teacher reflection forms
• Capstone project rubric
• End-of-course evaluation

All assessments use simple English, are child-friendly, and require no coding knowledge.

✸ 1. Learning Outcomes Checklist

Use this checklist throughout the course to track progress.

Understanding AI
• Can explain what a machine is
• Can identify AI vs. non-AI machines
• Can describe how AI learns from examples

Patterns & Decision Rules
• Can recognize simple patterns
• Can complete pattern sequences
• Can write simple if–then rules

AI in Daily Life
• Can identify AI tools at home or in Hong Kong
• Can explain how smart devices work
• Can describe how translation AI helps people

Creativity with AI
• Can describe how AI creates art, stories, or music
• Can compare human creativity vs. AI creativity

AI Safety & Ethics
• Understands that AI makes mistakes
• Knows humans must check AI's work
• Can explain which decisions AI should not make

Capstone Skills
• Can design a helpful AI robot
• Can explain how the robot uses AI
• Can present ideas clearly

📝 2. Unit Quizzes (Units 1–5)

⭐ Unit 1 Quiz — What Is AI?

A. Close-Ended Questions

A machine is something that:
A. Helps people do work
B. Sleeps
C. Eats food

AI can:
A. Learn from examples
B. Only follow simple rules
C. Do magic

A toaster is:
A. AI
B. Not AI

Google Maps is:
A. AI
B. Not AI

AI makes decisions by:
A. Guessing
B. Learning patterns
C. Sleeping

B. Short-Answer Questions

What is AI?

Name one AI tool you know.

How is AI different from a normal machine?

C. Application Question

Draw or describe one AI machine you have seen.

⭐ Unit 2 Quiz — How AI Makes Decisions

A. Close-Ended Questions

A pattern is something that:
A. Repeats
B. Never repeats
C. Is random

AI uses patterns to:
A. Predict
B. Sleep
C. Eat

An if–then rule is used to:
A. Make decisions
B. Make food
C. Make noise

AI learns from:
A. Examples
B. Magic
C. Dreams

If AI sees wrong examples, it may:
A. Learn the wrong thing
B. Become perfect
C. Stop working

B. Short-Answer Questions

What is a pattern?

Write one if–then rule.

Why does AI need many examples?

C. Application Question

Give an example of something AI could learn.

⭐ Unit 3 Quiz — AI in Daily Life

A. Close-Ended Questions

A smart speaker can:
A. Listen to your voice
B. Cook food
C. Drive a car

A translation app helps people:
A. Change languages
B. Change clothes
C. Change weather

AI in photos can:
A. Add filters

B. Make toast
C. Build houses

A robot vacuum learns:
A. The shape of your room
B. How to fly
C. How to swim

AI tools must be used:
A. Safely
B. Secretly
C. Randomly

B. Short-Answer Questions

Name one smart device.

How does translation AI help people?

Why should we be careful with smart devices?

C. Application Question

Describe one AI tool you use at home.

⭐ Unit 4 Quiz — Creativity with AI

A. Close-Ended Questions

AI creates pictures by:
A. Learning from images
B. Guessing
C. Sleeping

A prompt is:
A. Words you give to AI
B. A type of food
C. A robot part

AI music uses:
A. Patterns
B. Food
C. Weather

AI stories may have mistakes because AI:
A. Does not understand feelings
B. Is perfect
C. Reads your mind

AI helps people be:
A. Creative
B. Invisible
C. Silent

B. Short-Answer Questions

What is a prompt?

How does AI help with stories?

Why do AI drawings sometimes look strange?

C. Application Question

Describe a creative project you made with AI.

⭐ Unit 5 Quiz — AI Safety & Ethics

A. Close-Ended Questions

AI makes mistakes because it:
A. Lacks common sense
B. Is magic
C. Is perfect

Humans must:
A. Check AI's work
B. Let AI decide everything
C. Ignore AI

AI should decide:
A. What video to watch
B. Who gets a prize
C. Your bedtime

AI learns from:
A. Examples
B. Feelings
C. Dreams

AI should be used:
A. Safely
B. Secretly
C. Randomly

B. Short-Answer Questions

Why does AI need humans?

Why should AI not make important decisions?

Give one example of an AI mistake.

C. Application Question

Circle YES or NO for each:

📊 3. Performance Tasks

These tasks measure real understanding through action.

Task 1 — Pattern Detective
Student finds 3 patterns at home and explains each one.

Task 2 — AI Tool Explorer
Student identifies 3 AI tools used in Hong Kong and describes what each does.

Task 3 — AI Story Helper
Student writes a short story with AI assistance and explains what AI added.

Task 4 — AI Safety Poster
Student creates a poster showing 3 AI safety rules.

🧩 4. Observation Rubrics

A. Understanding AI Concepts

B. Creativity & Application

C. Safety & Ethics

🤖 5. Student Self-Assessment

Students circle one face for each statement:
🙂 I understand this well
😐 I understand some parts
🙁 I need more help

Statements:
• I can tell what AI is
• I can find patterns
• I can explain how AI learns
• I can use AI safely

• I can explain an AI mistake
• I can design a helpful robot

🤖 6. Parent/Teacher Reflection Form

Questions:
1. What did the student enjoy most?
2. What concepts were easiest?
3. What concepts were challenging?
4. How did the student show creativity?
5. How did the student show safe AI use?
6. What should we review next time?

🏆 7. Capstone Project Rubric

🎓 8. End-of-Course Evaluation

A. Student Reflection
• What did you learn about AI?
• What was your favourite activity?
• What is one thing you want to learn next?

B. Parent/Teacher Summary
• Strengths
• Areas for improvement
• Next steps in AI learning