

AI Spotting Worksheet

Can You Find the AI? • Student Activity Sheet • Ages 10 to 15

Instructions

AI is all around you, in your phone, your apps, your school, and your home. But can you spot it? Complete each section below to become an AI detective!

Part 1: Your Morning Routine

Think about your typical morning. For each activity, tick whether it uses AI and explain HOW.

Activity	Uses AI?	How does the AI work?
Waking up (smart alarm vs regular alarm?)	Yes / No	
Checking the weather app	Yes / No	
Scrolling social media / news	Yes / No	
Listening to music (Spotify / Apple Music)	Yes / No	
Getting directions to school (Google Maps / Waze)	Yes / No	
Using your phone's face unlock or fingerprint	Yes / No	
Sending messages (autocorrect / predictive text)	Yes / No	
Asking Siri / Alexa a question	Yes / No	

Part 2: Your School Day

How many AI systems are working during your school day? List every one you can think of.

In the Classroom (*Hints: Google Search, spell-check, learning apps, language translation, interactive whiteboards...*)

Communication (*Hints: Email spam filters, autocorrect, chatbots, translation tools...*)

Security & Admin (*Hints: CCTV analytics, attendance systems, fire detection, access control...*)

Library & Research (*Hints: Search engines, recommendation engines, plagiarism checkers...*)

Part 3: Entertainment & Free Time

For each platform, explain what the AI does behind the scenes:

YouTube: What decides which videos appear on your homepage?

TikTok: How does the For You page know what you like?

Netflix / Disney+: How does it recommend shows and create "Top Picks for You"?

Spotify / Apple Music: How does Discover Weekly or personalised playlists work?

Video Games: How do enemy characters adapt to your play style?

Instagram / Snapchat: How do face filters work? What decides your Explore page?

Part 4: AI or Not? Challenge

For each item below, decide: does it use AI? Circle your answer and explain your reasoning.

#	Item	AI / NOT	Your Reasoning
1	A calculator app on your phone	AI / NOT	
2	Siri answering "What's the weather?"	AI / NOT	
3	A microwave heating food	AI / NOT	
4	Google Translate	AI / NOT	
5	A digital clock	AI / NOT	
6	Spotify's Discover Weekly playlist	AI / NOT	
7	A smoke detector	AI / NOT	
8	Gmail's spam filter	AI / NOT	
9	A USB charging cable	AI / NOT	
10	Self-driving car features (Tesla, etc.)	AI / NOT	
11	A Nest thermostat	AI / NOT	
12	A television remote control	AI / NOT	
13	Grammarly checking your writing	AI / NOT	
14	Amazon's "People who bought this also bought"	AI / NOT	
15	A bicycle	AI / NOT	

Score: _____ / 15 correct

Part 5: How AI Sees You

AI systems build a profile of you based on your behaviour. For each question, think about what AI might learn about you:

1. Based on your YouTube watch history, what 3 topics would AI think you love?

Topic 1: _____ Topic 2: _____ Topic 3: _____

2. If AI looked at your search history for the last week, what would it learn about you?

3. Based on how you use your phone, what time does AI think you wake up and go to sleep?

Wake: _____ Sleep: _____

4. What kind of adverts does AI show you? What does this say about the profile it's built?

5. If AI could see your Spotify/music history, what mood would it think you're usually in?

Mood AI would predict: _____

Did you know? Companies like Google, Meta, and TikTok build detailed profiles of users including estimated age, gender, interests, location, income level, political views, and emotional state, often without users realising. Under UK law (Children's Code), companies must provide high privacy settings by default for under-18s.

Part 6: Bonus Challenge: AI Detective Mission

Complete as many of these missions as you can. Tick each one when done:

- Find an AI-generated image online and explain how you identified it as fake
- Ask a chatbot (like ChatGPT) a question and fact-check its answer using 2 other sources
- Check the privacy settings on one of your apps and list 3 permissions it has
- Count every AI interaction you have in one full day (keep a tally)
- Find an example of AI bias in the news and explain what happened
- Ask a parent or grandparent what technology they had at your age, and compare to AI today
- Try to “trick” a chatbot into giving wrong information. What did you learn?
- Find out how many cookies a website places on your browser (use browser tools)

Missions completed: _____ / 8

Most interesting thing I discovered:

Part 7: Reflection

1. How many AI interactions do you think you have in a typical day?

2. Which AI surprised you the most? (One you didn't realise was AI)

3. Is AI mostly helpful, mostly concerning, or both? Explain your thinking.

4. What's the difference between AI and a regular computer program?

5. If you could invent a new AI to help with something in your life, what would it do?

Teacher Answer Key: Part 4

Do not distribute to students.

1. A calculator app on your phone: **NOT AI: follows fixed mathematical rules**
2. Siri answering "What's the weather?": **AI: natural language processing + ML**
3. A microwave heating food: **NOT AI: simple timer and power control**
4. Google Translate: **AI: neural machine translation trained on billions of texts**
5. A digital clock: **NOT AI: simply displays time**
6. Spotify's Discover Weekly playlist: **AI: collaborative + content filtering algorithms**
7. A smoke detector: **NOT AI (usually): simple sensor detects particles**
8. Gmail's spam filter: **AI: ML model trained on millions of spam examples**
9. A USB charging cable: **NOT AI: simple electrical conductor**
10. Self-driving car features (Tesla, etc.): **AI: computer vision, sensor fusion, ML**
11. A Nest thermostat: **AI: learns your schedule and temperature preferences**
12. A television remote control: **NOT AI: sends infrared signals**
13. Grammarly checking your writing: **AI: NLP model analyses grammar, tone, clarity**
14. Amazon's "People who bought this also bought": **AI: collaborative filtering**
15. A bicycle: **NOT AI: mechanical device, no computing**