



AI in our daily lives: true or false?

Explore everyday items students use and challenge them to identify which ones truly involve artificial intelligence (AI) and which do not. Students will gain an understanding of how AI enhances everyday objects' functionality, making daily tasks easier and more efficient.

Materials needed:

Two signs per student: one labeled “true” and the other labeled “false”

A selection of everyday objects (or images of them) such as a smart speaker, robot vacuum, smartwatch, etc.

Instructions:

Read out a statement, and ask students to raise the “true” sign if they think the statement is correct and the “false” sign if they think it is incorrect.

After students have raised their signs, reveal the correct answer and provide a brief explanation.

After all statements have been discussed, facilitate a class discussion on what students learned about the presence of AI in their daily lives. Ask students to share any new insights or surprising facts they discovered during the activity. Emphasize the importance of understanding AI's role in modern technology and its potential impact on society.

Statements:

1. Netflix uses AI to recommend movies and TV shows.

Answer: True

Explanation: Netflix uses AI algorithms and machine learning to analyze viewing habits and preferences to recommend movies and TV shows that users are likely to enjoy. Two of the ways Netflix does this is by using collaborative filtering, which recommends content based on the preferences of similar users, and content based filtering, which recommends content based on attributes of the content itself, like genre, director or actor.

2. Google Maps uses AI to indicate traffic and predict fastest routes.

Answer: True

Explanation: Google Maps uses AI to analyze real-time data from various sources, including user locations, traffic sensors, historical traffic data, and user reports to provide accurate traffic updates and route suggestions.

3. Fitness trackers, like Apple watches or Fitbits, use AI to count steps.

Answer: False

Explanation: Most fitness trackers use accelerometers and pre-programmed algorithms to count steps, not AI. However, some advanced models may use AI for more complex health monitoring.

4. Robotic vacuum cleaners, like a Roomba, use AI to clean floors.

Answer: False

Explanation: Many robotic vacuum cleaners use pre-programmed cleaning patterns and basic sensors. Only more advanced models use AI for mapping and navigation.

5. Smart speakers use AI to respond to voice commands like answering questions, playing music, or setting reminders.

Answer: True

Explanation: Smart speakers use AI to recognize and respond to voice commands. For example, voice activation and Wake Word detection like “Hey Siri” or “Alexa” use AI to activate the device. They can play music, control smart home devices, provide news updates, and answer questions.

6. Modern thermostats can use AI to control the temperature in your house.

Answer: True

Explanation: If you have a smart thermostat, like a Nest, for example, these devices use AI to learn a household’s temperature preferences and adjust the heating and cooling automatically. They can also be controlled remotely via a smartphone app.

7. Music streaming services like Spotify or Apple Music use AI to create personalized playlists.

Answer: True

Explanation: Much like Netflix or video streaming services, these technologies use AI to analyze listening habits and preferences to create personalized playlists and recommend new music to users.

8. Modern autocorrect and predictive text use AI.

Answer: True

Explanation: Today, autocorrect systems often use machine learning models trained on large datasets of text. These models can understand context, learn from user behaviour, and improve over time. Same with modern predictive text. Current predictive text systems often use deep learning models that can predict the next word or phrase based on the context of the entire sentence and user specific patterns. They continuously learn from user input to provide more accurate and personalized suggestions.

9. Image/photo filters use AI.

Answer: False

Explanation: Photo editing apps that apply filters or effects to images use fixed algorithms and don't involve any intelligent image recognition or enhancement. As technology advances, however, more photo editing tools are starting to add AI capabilities.

10. In video games, non-player characters use AI for their behaviours.

Answer: False

Explanation: Non-player characters in older video games follow scripted behaviours. These characters act based on fixed scripts and do not adapt or learn from player actions.

Questions for group discussion following the activity:

“Which AI-enhanced object did you find most interesting?”

“How do you think AI helps make these objects more useful?”

“Can you think of any other everyday objects that might use AI?”

“What do you think the future of AI in everyday objects might look like?”