

ARTIFICIAL 9—1 INTELLIGENCE

FOR FAMILIES

GRADES 9-12

What to expect:

High school students are engaging with Artificial Intelligence (AI) in more complex ways, including in school projects and online interactions, and through emerging technologies that impact everyday life. This guide will help you understand what they are learning about AI, its real-world implications, and how you can support responsible and informed use of AI tools.

Learning goals:

- **Understand AI Concepts** Recognize how AI systems work, including machine learning, data analysis, and automation.
- Ethical Considerations Explore the ethical concerns surrounding AI, including misinformation and data privacy.
- AI in Career Paths Discuss how AI is transforming different industries, from healthcare to entertainment and beyond.
- AI and Creativity Evaluate AI's role in creative fields such as art, music, and writing, and its limitations compared to human intelligence.
- AI and Decision-Making Understand how AI is used in areas like hiring, medical diagnoses, and law enforcement, and analyze the risks and benefits of such applications.

What to do at home:

- **Discuss AI's Role in Society** Talk about AI's impact on jobs, privacy, and personal decision-making.
- Encourage Responsible AI Use Teach students how to critically evaluate AI-generated content and fact-check information.
- Explore AI Tools Together Use AI-powered apps for learning, career exploration, and problem-solving.
- **Debate Ethical Issues** Have conversations about the fairness and transparency of AI-driven decisions in different fields.







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Fostering Curiosity

One example of AI innovation is self-driving cars. Companies like Tesla and Waymo use AI-powered algorithms to process vast amounts of data from sensors and cameras to navigate roads safely. Discuss with your child how these cars make decisions, the ethical considerations of AI in transportation, and potential future advancements.

High school students are capable of deeper inquiry into AI and its applications. Encourage exploration and critical thinking with questions like:

- How do companies use AI to personalize your online experience? Do you think this is beneficial or harmful?
- Can AI be truly creative, or does it just mimic human creativity?
- Should AI be used to make life-changing decisions, such as college admissions or court rulings?
- What steps can we take to ensure AI is used ethically and responsibly?

Fostering Communication

AI is reshaping communication, from chatbots to automated translations. Help your child analyze and discuss AI's role in human interaction by considering these questions:

- How do AI-powered chatbots and virtual assistants influence the way we communicate?
- Do you trust AI-generated news articles and social media content? Why or why not?
- How can AI be used responsibly to enhance learning and creativity?

Fostering Comprehension

Encourage students to think critically about AI by:

- Exploring how AI collects and processes data to make decisions.
- Identifying examples of AI in everyday life and evaluating their benefits and drawbacks.
- Using generative AI tools like ChatGPT or image generators to brainstorm ideas or solve problems collaboratively.
- Encouraging critical thinking by fact-checking and cross-referencing information obtained from AI tools
- Experimenting with AI models using platforms like <u>Google's Teachable Machine</u> or <u>OpenAI's ChatGPT</u> to see how AI generates responses and adapts to inputs.