Field agent
Student Workbook
answer key



Name_____

Field Agent Pre/Post Knowledge Check

Name: _____ **Date:** _____

1. What does AI learn from?



A. Guesses
B. Data and information
C. Computers
D. Electricity

2. What might happen if an AI learns from incomplete data?

A. It will always be correct.
B. It will stop working.
C. It will learn faster.
D. It will make mistakes or unfair decisions.

3. True or False: The first output from an AI system is always correct.

A. True
B. False

4. True or False: AI can be trained by many examples so it can learn patterns.

A. True
B. False

5. True or False: Humans need to check AI outputs to make sure they are accurate and fair.

A. True
B. False

Field Agent Vocabulary Preview

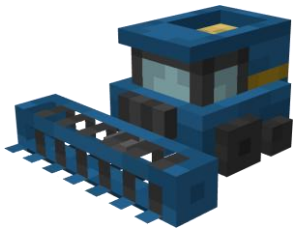
Name: _____ **Date:** _____

Vocabulary Preview: Circle Q, H, or T in the first column to rate what you know about each word. Then explain it in your own words. Responses will vary.

Q — I have seen this word, but I have questions. H — I have heard this word, but I do not know it well yet. T — I know this word well enough to teach it to someone else.

My Rating	Word	Meaning	In my own words
Key Vocabulary			
Q H T	1. Artificial Intelligence (AI)	Technology that uses data and computational methods to identify patterns and produce outputs.	Responses will vary.
Q H T	2. Data	Information, such as words, numbers, images, measurements, or examples.	
Q H T	3. Debug	Find and fix a problem in a computer program or system.	
Q H T	4. Input	Information or instructions supplied to a system.	

Q H T	5. Output	A result produced by a system.	
Q H T	6. Train	Develop an AI model using data and examples so it can identify patterns.	
Q H T	7. Test	Check how consistently, accurately, safely, and fairly a system performs in different situations.	
Additional Vocabulary			
Q H T	8. Model	A computational system developed to identify patterns and produce particular types of output.	
Q H T	9. Predict	Produce an estimate based on patterns in data.	
Q H T	10. Prompt	An instruction or request given to an AI system.	



Field Agent Vocabulary Practice 1

Name: _____ **Date:** _____

Vocabulary Practice 1: Picture the Meaning

Choose one vocabulary word. Draw a picture that shows what the word means. Include details that would help someone else understand the concept.

My drawing:

Success Criteria

Look for evidence that the student:

- Shows an understanding of the vocabulary word through their drawing.
- Includes relevant details that help communicate the meaning of the concept.
- Explains a detail from the drawing and connects it to the vocabulary word.



Explain one detail from your drawing:

Field Agent Vocabulary Practice 2

Name: _____ **Date:** _____

Vocabulary Practice 2: Write It. Discuss It



A friend says, “AI always knows the right answer!”

Step 1: Write: Draft a short paragraph that responds to your friend.

- Explain what AI needs to do a good job.
- Use at least three vocabulary words and underline each one.

My draft:

Success Criteria

Look for evidence that the student:

- Explains what AI needs to produce a useful output, such as relevant data and human input or review.
- Responds to the idea that AI always knows the right answer using their own reasoning.
- Uses at least three vocabulary words in ways that show understanding of the concepts.

Step 2: Discuss: Share your response with a partner. Then, have your own conversation about why good data and people are important when using AI. Challenge yourself to use additional vocabulary words when you talk!

Success Criteria

Look for evidence that the students:

- Discusses why data and people are important when working with AI systems.
- Uses vocabulary words to communicate their ideas during the conversation.

Field Agent Exit Ticket: Option 1

Name: _____ **Date:** _____

Essential Question: *How can the information that people provide an AI system affect the results? What can happen when important information is missing?*

In the space below, answer the essential questions based on what you just learned.

Success Criteria

Look for evidence that the student:

- Explains how the information people provide can affect an AI system's results.
- Describes what can happen when important information is missing.
- Connects their response to what they learned through an example, detail, or explanation.

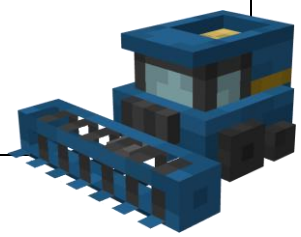


Field Agent Exit Ticket: Option 2

Name: _____ **Date:** _____

Reflect on your learning experience. Complete the sentences.

AI learns by... Answers will vary. Look for evidence that the student reflects on key learning such as AI systems learn by high-quality, fair data and examples, and human oversight.
One mistake an AI might make is... Answers will vary; some possible answers include: • Building a fence at the wrong height • Putting the animals in the wrong areas • Harvesting the crops at the wrong time • Producing the wrong result
Humans should always check AI outputs because... Answers will vary. Look for evidence that the student reflects on key learning such as AI systems will produce the wrong results; a human should always observe and check outputs.



Field Agent | Exit Ticket: Option 3

Name: _____ **Date:** _____

A farmer trains AI to build fences for different sized animals but only shows examples of small fences for rabbits.

What problem might happen when the AI tries to build a fence for a horse (or a larger animal)?	How could the farmer improve the AI's training?
The fence will be too small for the horse.	Students should identify that the AI lacks enough examples and needs additional data representing larger animals and taller fences.



Field Agent Exit Ticket: Option 4

Name: _____ **Date:** _____

Write input, output, or human check based on each statement.

Statement	Input, Output, or Human Check?
Teaching AI which crops are ready to harvest.	Input
The AI chooses which crops to harvest.	Output
A person reviews what the AI does and fixes mistakes.	Human Check
Showing the AI examples of different animal gates	Input

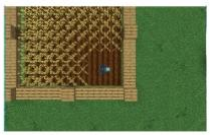


Field Agent Exit Ticket: Option 5

Name: _____ **Date:** _____

Choose your favorite activity from the game. In each row, use words or a sketch to show what happened during that part of the AI training process.





My favorite activity:
1. Training Data What examples or information did people give the AI? Why were they useful? Answers will vary; possible responses may include: Correct examples of barn gates. Examples of the appropriate fence heights for the animals. Examples of when crops are ready to be harvested (based on the colors / stages of growth).
2. What the AI Learned What pattern, rule, or skill did the AI learn from the data? Answers will vary; possible responses may include: AI learns patterns for placing barn gates. AI learns that different animals have different height requirements to contain the animals. The AI learns to recognize the optimal harvest timing for the crops.
3. Result and Human Check What did the AI produce or decide? How did or could a person check or improve it? Answers will vary; possible responses may include: The AI helps complete the barn gates correctly for the specific animals. The AI builds the correct fence for the animal. The AI harvests crops at the right time.

AI Output Review Checklist

Use this checklist when reviewing something created by AI. Remember AI will make mistakes. Humans are responsible for checking AI output.

Before I accept an AI output, I ask:	
Is it accurate?	• Does this answer seem correct? • Does it match what I already know? • Can I check the information using another source, person, or example?
Is it complete?	• Did the AI answer the entire question? • Is any important information missing? • Would adding more examples or details improve the answer?
Is it fair?	• Does the answer seem fair to everyone? • Does it include different examples or perspectives? • Could the AI be making assumptions because of limited data?
Does it make sense?	• Is the answer clear and easy to understand? • Are there any confusing parts? • Does the solution help solve the problem?
Would I trust this?	• Am I confident that this output is useful? • Would I feel comfortable sharing it with others? • Have I checked it before using it?

AI Output Review Checklist continued...

Action Plan

If you find a problem with the AI output, you can:

- Check the facts.
- Provide better examples or data.
- Rewrite the prompt or instructions.
- Ask a teacher, expert, or trusted source for help.
- Correct the mistake yourself.

Final Decision

After reviewing the AI output, I think it:

- It is ready to use
- Needs some changes
- Is not accurate enough to use

AI Output Reminder: Do not accept AI outputs without checking. Question, improve with better data, and verify results.

