

## Game 6: The AI Detective

*This is your...*

# Detective Assistant Notebook (DAN)

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## INVESTIGATION - LEVEL 1 - ALGORITHMIC ADVENTURES

### *The Labyrinth of Intelligence*

*At the beginning we need to test what you know about Artificial Intelligence to make sure you know why you are here.*

#### **LI\_CH1 (1) - WARM-UP QUESTIONS (big group)**

MANDATORY - max. 5 bonus "participation" points

Here is A set of example warm-up questions about AI. We need to test what you know. This is an oral group task, so participation is required.

1. *What exactly is artificial intelligence (AI)?*
  2. *How do machines learn in AI?*
  3. *What are some real-life examples of AI applications that we encounter in our daily lives?*
  4. *How do AI systems make decisions or predictions?*
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#### **LI\_CH1 (2) - WARM-UP QUESTIONS (individual)**

MANDATORY - max. 10 MACHINE POINTS.

Here is A set of 10 questions about AI to warm up. We need to test what you know. This is an individual initial challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can follow [this link](#) and submit your answers on Google Forms.

Circle the correct answer.

1. **What is Artificial Intelligence (AI)?**
  - o A. Machines that are controlled by humans
  - o B. The study of natural intelligence in animals
  - o C. The simulation of human intelligence by computers
  - o D. An advanced type of hardware
2. **Which of the following is a common application of AI in everyday life?**
  - o A. Calculating simple math problems
  - o B. Playing music from a cassette player
  - o C. Personal assistants like Siri and Alexa
  - o D. Browsing the internet using a mouse

3. **What is the term used to describe a machine's ability to perform tasks that typically require human intelligence?**
  - A. Automation
  - B. Robotics
  - C. Artificial Intelligence
  - D. Programming
4. **Which of the following is NOT a feature of AI?**
  - A. Learning from experience
  - B. Recognizing patterns
  - C. Automatically repairing computers
  - D. Decision making
5. **Which field of AI involves machines learning from data without being explicitly programmed?**
  - A. Software Engineering
  - B. Machine Learning
  - C. Network Security
  - D. Human Resources
6. **Which technology uses AI to understand and respond to human language?**
  - A. Virtual Reality
  - B. Natural Language Processing (NLP)
  - C. Blockchain
  - D. Quantum Computing
7. **Which type of AI is designed to perform specific tasks, such as recognizing speech or playing chess?**
  - A. General AI
  - B. Narrow AI
  - C. Universal AI
  - D. Complete AI
8. **What is the name of the AI technique that involves simulating the way the human brain works using networks of artificial neurons?**
  - A. Data Mining
  - B. Neural Networks
  - C. Computer Networking
  - D. Cloud Computing
9. **Which of these is an example of an AI-driven technology that can create realistic images or videos from scratch?**
  - A. Spreadsheets
  - B. Deepfakes
  - C. Web Browsers
  - D. Email Clients

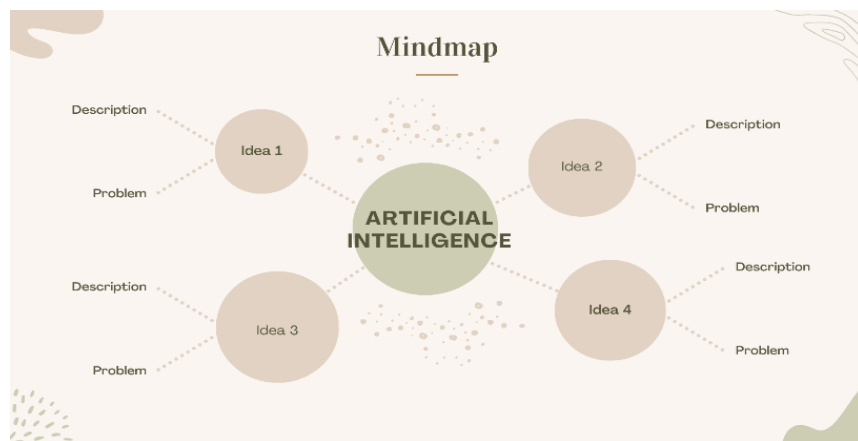
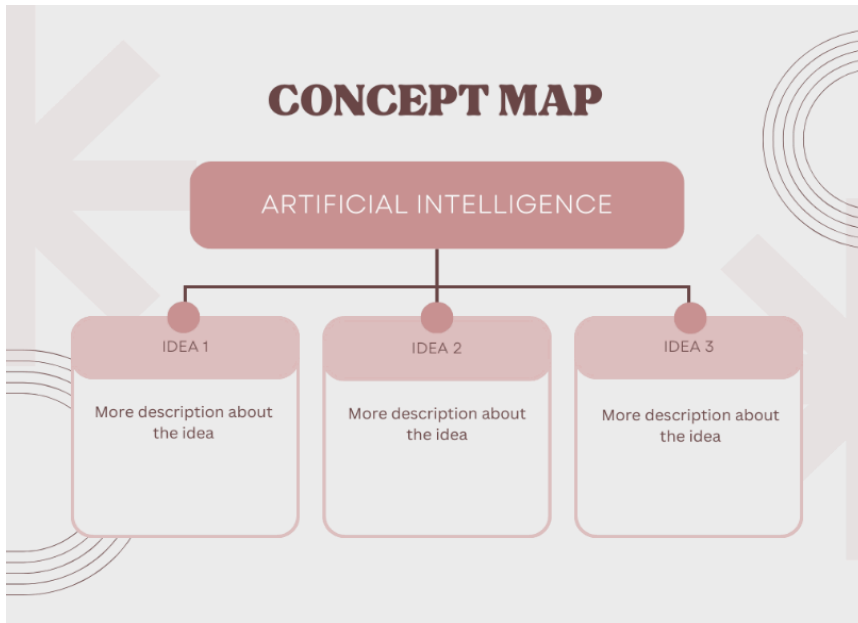
10. **What is a common use of AI in online shopping?**

- o A. Managing customer service calls
- o B. Predicting future product trends
- o C. Recommending products based on past purchases
- o D. Printing receipts

**LI\_CH 2 (1) – MIND MAP ON AI (1)**

MANDATORY - max. 5 bonus "engagement" points for finishing on time. You have 10 min.

Follow your teacher's instructions and draw a neural network (concept/mind map) in the space provided below and explain in your own words what Artificial Intelligence is for you. You know detectives love mind maps! You can use these templates as inspiration:



Draw your mind map here:



What is Artificial Intelligence for you?



## **L1\_CH 2 (2) – VIDEO ON MACHINE LEARNING AND QUESTIONNAIRE**

MANDATORY – **max. 10 MACHINE POINTS.**

Here is A set of 10 questions about the video on Machine Learning you have just watched. This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following [this link](#).

Circle the correct answer.

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  - D. Printing receipts

**L1\_CH 3 – CROSSWORD PUZZLE ON AI**

MANDATORY – max. 15 “MACHINE” POINTS. You have 5 min.

You will solve a crossword puzzle containing 15 words with concepts from the AI world. (15 MACHINE points – 1 words account for 1 machine point). Will you be able to find all words in only 5 minutes? *When the time is up (5 min.) you will need to stop searching. Add your points in your DAN record sheet.*



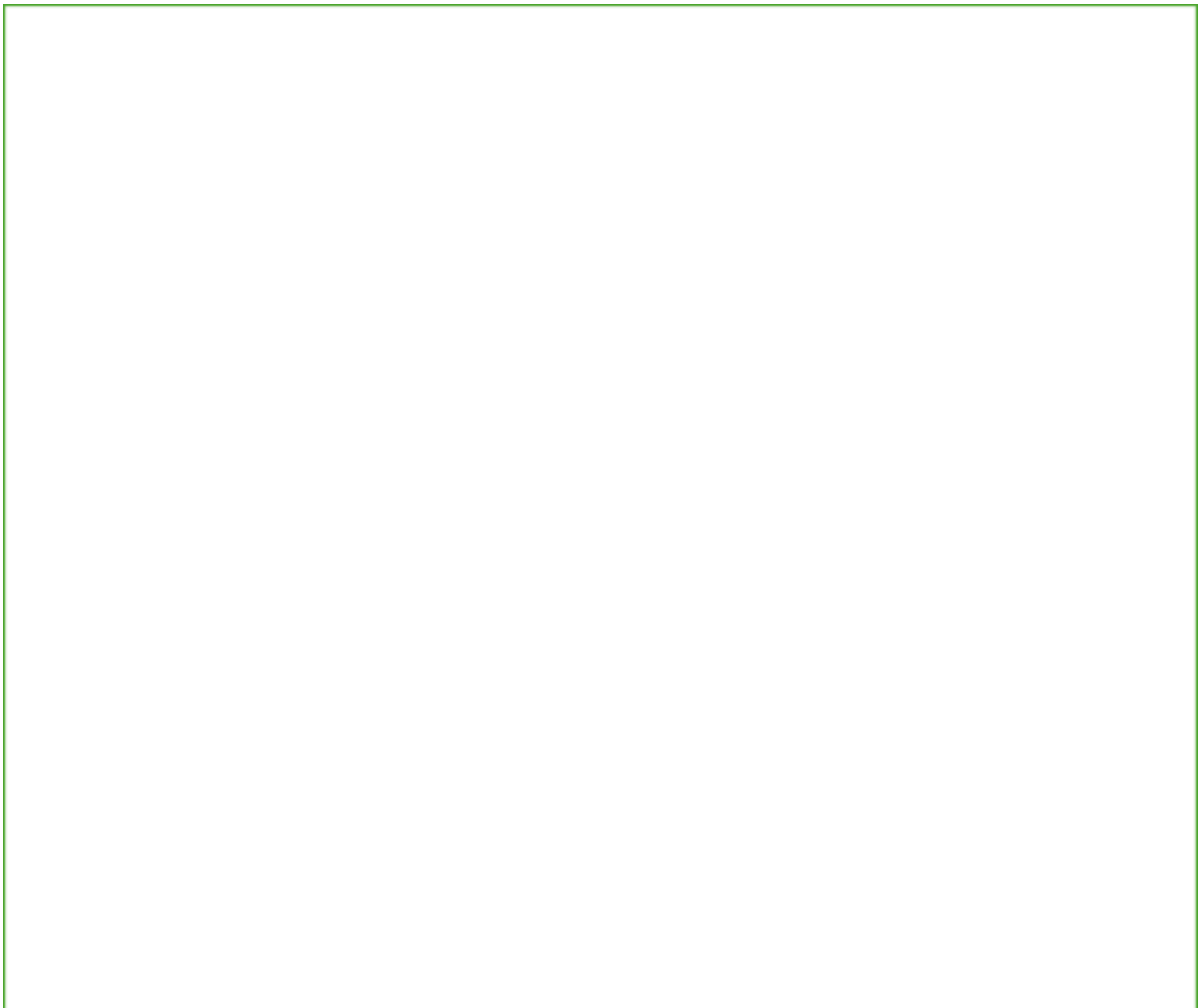
#### L1\_CH 4 – ANALYSE YOUR FINDINGS – MIND MAP ON AI (2)

ADDITIONAL/OPTIONAL – max. 5 MACHINE “creativity” POINTS. Homework.

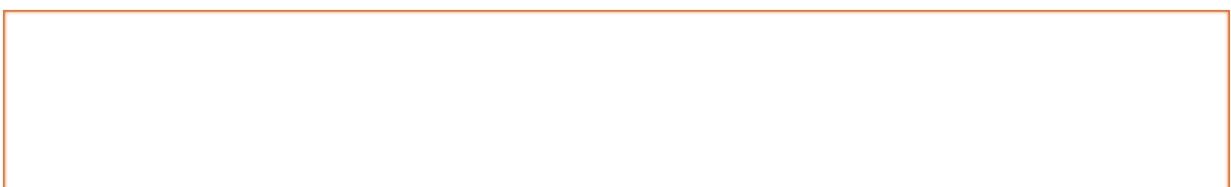
**Mind map on AI (2):** Redo your drawing with key ideas from the video(s), the quiz and the crossword and modify and/or complete your previous definition.

Finally, you need to hand out your drawings and definitions to your teacher, the detective, so she/he continues with the investigation. The detective will add 5 MACHINE “creativity” points for the best (most creative, most accurate) neural networks related to AI so far.

Draw your new mind map here:



What is Artificial Intelligence for you?





## L1\_CH 5 – BE SMART, BE ARTIFICIAL

MANDATORY – max. 25 MACHINE POINTS + 5 bonus “collaboration” points. You have 20 min.

*Although AI may be something difficult to understand, it can undoubtedly perform tasks that we thought only human brains could. What are these tasks? What can AI do to resemble so much our brain processes? And, more importantly... what CAN'T AI do?*

Now you will engage in a few lateral thinking games (5) to understand mental processes typical of the human brain that AIs try to imitate with apparently good results [to be done in small groups]. Participants will read the riddles individually and try to find the correct solution in small groups.

Each group member can get a maximum of 25 MACHINE points + 5 bonus “collaboration” points.

Even if you don't manage to find the solution, you should discuss in groups about the search for solutions. Points will be distributed like this:

- **5 Points: Solutions that are correct or similar to the one proposed.**
- **3 Points: Solutions that are partially correct but more straightforward.**
- **1 Point: Solutions that could make sense, even if they aren't perfect.**

Example riddles:

### 1) **The murderer**

*Following an anonymous tip-off, the police raid a house to arrest an alleged killer. They don't know what he looks like, but they know his name is John and that he is inside the house. The police find four people playing poker: one is a carpenter, one drives a truck, one works in a garage and the last one works at the fire station. Without any questions and without hesitation, they immediately arrest the one who works at the fire station. How were they sure that they arrested the right person?*

### 2) **The island of the blue eyes**

*On an island there are 100 inhabitants. All of them have either blue eyes or brown eyes. They all see the colour of the others, but not their own colour. They can't talk about it and there are no mirrors. But there is a law that says that if someone finds out that they have blue eyes, they have to leave the island at 8 o'clock in the morning. All the islanders have the same ability to reason and all are capable of impeccable logic.*

*One day, a person comes to visit the island and, while looking at all of them, says, without singling out anyone in particular: "How good to see at least one person with blue eyes after being at sea". What consequences did this comment bring to the inhabitants of the island?*

### 3) **A riddle in time**

*What occurs twice in every moment, once in every minute, but also never, ever in a hundred thousand years?*

#### **4) The Pirate Captain**

*You are a salty sea captain well known for your pirating skills! The seven seas have never witnessed one pirate take more treasure from than you, and you don't seem to stop with one treasure chest – you want more, more, more!*

*However, there is a problem... the sailor who normally counts your treasure chests is sick with the flu and you're the only one who can keep count! To get you back on the high seas to pillage more ships, you need to do your own inventory of the treasure you have so far.*

- In your first raid, you received 28 treasure chests.*
- In your second raid, you received 13 more chests, but eight of them were distributed to the crew for all their hard work.*
- After your fourth raid, you took in 21 more treasure chests but had to distribute five more to your crew.*
- Finally, on the fifth raid, you hauled in 37 treasure chests, but lost four on the way to the boat and 12 more when a few of your crew stole them on your way back home.*

*What colour are the captain's eyes?*

#### **5) The square**

*Divide this square into 7 smaller squares.*



### **LI\_CH 6 (1) – THE CONTEXT CLUES GAME. DECODING HUMAN SPEECH**

MANDATORY – **max. 10 "MACHINE" POINTS**. You have 10 min.

Here is A set of 10 questions helping students understand how context, tone, and familiarity with language nuances contribute to interpreting sarcasm, idiomatic expressions, and humour. Purpose: To showcase the human ability to understand context, sarcasm, and subtlety in language.

Participants read a series of sentences or short paragraphs filled with sarcasm, idiomatic expressions, or subtle humor, and then select the best interpretation or meaning behind the sentence from the multiple-choice options provided.

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following [this link](#).

Circle the correct answer.

1) **Sentence:**

*"Oh, great! Another meeting that could have been an email. Just what I needed to make my day even more exciting."*

**Question:** What does the speaker really mean?

- A) They are genuinely excited about the meeting.
- B) They are annoyed because they think the meeting is unnecessary.
- C) They believe the meeting is important and necessary.
- D) They are indifferent about the meeting.

2) **Sentence:**

*"After his fifth cup of coffee, he was as happy as a clam, ready to tackle anything that came his way."*

**Question:** What does the phrase "as happy as a clam" mean in this context?

- A) He was very content and cheerful.
- B) He felt sluggish and tired.
- C) He was nervous and anxious.
- D) He was feeling bored.

3) **Sentence:**

*"When asked if she had completed the 10-page report overnight, she smiled and said, 'Oh sure, I just whipped it up between Netflix episodes.'"*

**Question:** What is the implied meaning of her response?

- A) She easily finished the report while watching Netflix.
- B) She hasn't started the report yet and is being sarcastic.
- C) She finds the report very easy and quick to complete.
- D) She finished the report but found it difficult to do.

4) **Sentence:**

*"Wow, you're a real rocket scientist, aren't you?" said Jim after his friend tried to microwave a metal bowl.*

**Question:** What is Jim really saying to his friend?

- A) He thinks his friend is very intelligent.
- B) He thinks his friend made a smart decision.
- C) He is sarcastically calling his friend foolish for microwaving a metal bowl.
- D) He is genuinely impressed by his friend's actions.

5) **Sentence:**

*"When she heard about the surprise party, she let the cat out of the bag, and now everyone knows."*

**Question:** What does "let the cat out of the bag" mean in this context?

- A) She accidentally revealed a secret.
- B) She took her pet cat outside.
- C) She stopped keeping secrets.
- D) She avoided telling anyone the secret.

6) **Sentence:**

*"Sure, because the best way to fix a computer is to hit it repeatedly. Said no tech expert ever."*

**Question:** What is the speaker implying?

- A) Hitting the computer is a good way to fix it.
- B) No one actually believes hitting a computer will fix it, and the speaker is being sarcastic.
- C) A tech expert advised hitting the computer.
- D) The computer is unfixable.

7) **Sentence:**

*"Oh, I just love it when my car won't start on a freezing morning. What a fantastic start to the day!"*

**Question:** What does the speaker mean by "fantastic start to the day"?

- A) They are genuinely happy about the situation.
- B) They are frustrated that their car won't start.
- C) They enjoy the challenge of fixing their car.
- D) They are excited about the day ahead.

8) **Sentence:**

*"He knew it was a risky move, but he decided to bite the bullet and tell his boss the truth."*

**Question:** What does "bite the bullet" mean in this context?

- A) Avoid confrontation.
- B) Take a brave or difficult step.
- C) Refuse to act.
- D) Postpone making a decision.

9) **Sentence:**

*"I'm not saying it was aliens, but it was aliens," he said with a grin after seeing strange lights in the sky.*

**Question:** What is the speaker implying?

- A) The lights were definitely caused by aliens.
- B) He is jokingly suggesting it could be aliens, but he doesn't really believe it.
- C) He has proof that aliens exist.
- D) He is unsure about the origin of the lights.

10) **Sentence:**

*"Oh, you broke another plate? Don't worry, we needed new ones anyway," she said with an exaggerated smile.*

**Question:** What is the speaker really saying?

- A) She genuinely doesn't mind that the plate was broken.
- B) She is sarcastically expressing her frustration about the broken plate.
- C) She is happy that the plate was broken.
- D) She thinks breaking plates is fun.

## LI\_CH 6 (2) – THE ADAPTABILITY ARENA. SURVIVAL SCENARIOS

MANDATORY – max. 20 “MACHINE” POINTS.

*Purpose: To demonstrate human flexibility and adaptability in unfamiliar situations.*

Participants are given a series of "survival scenarios" in varying environments (e.g., stranded in a desert, lost in a foreign city without money) and must come up with useful survival strategies or ways to thrive.

OPTION 2A) Here is A set of 10 “survival scenarios”. Are the strategies proposed good or bad strategies to survive? (**True/ False**).

Max. 20 “MACHINE” points – 1 per each correct True/False answer.

10 min.

### Scenario 1: Cave Exploration Accident

While exploring a cave system, you become separated from your group and your flashlight batteries are running low. You have a whistle, a small bottle of water, and a few snacks. How will you manage the situation?

- 1) **Try to find a source of dripping water in the cave to refill your bottle.** *True / False*
- 2) **Move deeper into the cave in hopes of finding another exit.** *True / False*

### Scenario 2: Avalanche Survival

You are skiing in a remote area when an avalanche strikes, burying you under the snow. You have only a small air pocket and your ski poles within reach. How will you survive until help arrives?

- 1) **Use your ski poles to dig upwards toward the surface.** *True / False*
- 2) **Spit or release small amounts of air to determine which way is up.** *True / False*

### Scenario 3: Flooded Plains

You are caught in a flash flood in a rural area, with only a rope, a waterproof bag, and a pocket knife. How will you find safety?

- 1) **Use the waterproof bag to store your essentials and try to swim to safety.** *True / False*
- 2) **Build a makeshift raft using debris and secure it with the rope.** *True / False*

### Scenario 4: Urban Disaster

You are in a city that has just experienced a major earthquake, and you are trapped in a building with only a flashlight, a whistle, and a bottle of water. How will you escape or survive until rescue?

- 1) **Use the whistle to signal rescuers and stay close to a safe structure or doorway.** *True / False*
- 2) **Search for an exit or a way to climb to higher ground where rescuers might see you.** *True / False*

### Scenario 5: Deserted Winter Cabin

You find yourself stranded in a remote winter cabin with no electricity, limited food, and a fireplace. A blizzard is approaching, and you need to ensure your survival.

- 1) **Melt snow on the fireplace to have a continuous water supply.** *True / False*
- 2) **Seal off unused rooms to conserve heat in the main living area.** *True / False*

### Scenario 6: Swamp Survival

You are lost in a swampy area with only a machete, a small bottle of insect repellent, and a pack of matches. How will you survive and navigate your way out?

- 1) **Follow any water channels downstream, as they will likely lead to civilization.** *True / False*
- 2) **Build a fire with the matches to signal for help and keep insects away.** *True / False*

### Scenario 7: Ocean Survival

You are stranded on a small inflatable raft in the middle of the ocean with limited supplies: a bottle of fresh water, a flare gun with two flares, and a small fishing kit. How will you maximize your chances of survival?

- 1) **Fish continuously to build up a stockpile of food.** *True / False*
- 2) **Create a makeshift sunshade using parts of the raft to protect yourself from the sun.** *True / False*

### Scenario 8: Mountain Rescue

You are hiking in a remote mountain range when a sudden storm hits, leaving you disoriented and without a map. How will you find your way back to safety?

- 1) **Use the stars or the sun's position to navigate, and move slowly to conserve energy.** *True / False*
- 2) **Climb to higher ground to get a better view of the area and look for landmarks.** *True / False*

### Scenario 9: Lost in a Foreign City

You find yourself lost in a foreign city with no money, no phone, and no knowledge of the local language. How will you find shelter and food?

- 1) **Look for a place of worship or community center where you might find shelter or assistance.** *True / False*
- 2) **Try to earn some money by offering to do small tasks or sell personal items.** *True / False*

### Scenario 10: Jungle Survival

You are separated from your group in a dense jungle with nothing but a knife, a piece of rope, and a small flashlight. How will you secure food, water, and shelter?

- 1) **Follow animal trails to a water source and use the flashlight to avoid dangerous creatures at night.** *True / False*
- 2) **Climb a tree to scout the area for your group and shout to attract their attention.** *True / False*

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*OPTION 2B) You need to **come up with your own survival strategies in each of the scenarios.** Your teacher will evaluate the creativity, practicality, and adaptability of human responses compared to a set of possible solutions, emphasizing the human ability to think outside the box and draw on diverse knowledge and experiences. At the end, the teacher will use an AI tool to generate solutions based on the given scenario and compare them with the students' responses.*

This is an individual challenge. Each correct or possible answer for each scenario will earn you 2 points. You can get a total of **20 "MACHINE" points – 2 per each answer similar to the ones provided as possible solutions in each scenario.** Points may also be assigned by your teacher if answers are creative and show inventive adaptability.

10 min.

Write your solutions/strategy in the box provided below.

**Scenario 1: Stranded in a Desert**

You are stranded in a vast desert with only a half-full water bottle, a blanket, and a mirror. How will you survive until rescue?

**Your Possible Solution:****Scenario 2: Lost in a Foreign City**

You find yourself lost in a foreign city with no money, no phone, and no knowledge of the local language. How will you find shelter and food?

**Your Possible Solution:****Scenario 3: Mountain Rescue**

You are hiking in a remote mountain range when a sudden storm hits, leaving you disoriented and without a map. How will you find your way back to safety?

**Your Possible Solution:****Scenario 4: Jungle Survival**

You are separated from your group in a dense jungle with nothing but a knife, a piece of rope, and a small flashlight. How will you secure food, water, and shelter?

**Your Possible Solution:**

**Scenario 5: Island Isolation**

You wash ashore on a deserted island with only a fishing net, a knife, and a waterproof container. How will you survive until rescue?

**Your Possible Solution:**

**Scenario 6: Snowy Wilderness**

You are trapped in a snowy wilderness after a snowstorm, with only a small backpack containing a lighter, a thermal blanket, and a metal cup. How will you stay warm and survive?

**Your Possible Solution:**

**Scenario 7: Urban Disaster**

You are in a city that has just experienced a major earthquake, and you are trapped in a building with only a flashlight, a whistle, and a bottle of water. How will you escape or survive until rescue?

**Your Possible Solution:**

**Scenario 8: Flooded Plains**

You are caught in a flash flood in a rural area, with only a rope, a waterproof bag, and a pocket knife. How will you find safety?

**Your Possible Solution:**



### Scenario 9: Deserted Factory

You are exploring an abandoned factory when you become trapped inside with only a flashlight, a map of the building, and a walkie-talkie that's out of range. How will you escape?

**Your Possible Solution:**

### Scenario 10: Forest Fire

You are camping in a forest when a wildfire starts nearby. You have a small tent, a compass, and a canteen of water. How will you escape the fire?

**Your Possible Solution:**

## L1\_CH 7 – DEBRIEFING QUESTIONS (group)

ADDITIONAL - max. 5 BONUS "PARTICIPATION" POINTS. You have 10 min.

Here is A set of example debriefing questions on AI to reflect on what has been learned in this Level. This is an oral group task, so participation is required.

- *What aspect of AI do you find most fascinating, and why?*
- *What are some of the limitations of current AI technologies?*
- *Do you have any concerns about the future of AI? If so, what are they?*
- *What strengths did humans demonstrate that AI could not?*
- *In what ways could AI complement human intelligence rather than compete with it?*
- *How do you envision the future of human-AI collaboration?*

## L1\_CH 8 – ALGORITHMIC ADVENTURES. LEVEL 1 DETECTIVE REPORT

ADDITIONAL - max. 10 MACHINE POINTS. Homework.

Write in your Assistant Detective Notebook your final report/chronicle of this level and its challenges. Answer the following questions:

***What have you learned? How do you think you have helped the detective?***

***Key words related to AI.***

***What aspect of AI do you find most fascinating, and why?***

***Differences between AI and human intelligence.***

***How do you envision the future of human-AI collaboration?***

## WP2: GAMIFIED CRITICAL THINKING NARRATIVES

### D2.4 – Gamified Narrative Structures

#### INVESTIGATION – LEVEL 2 – EXPERIMENTING WITH DATA

##### *Ethical AI Dilemmas*

*Analysing the two sides of AI is essential to find out what could have happened in the case of the writer, to discover if there could have been anything illegal, unethical or, simply, to understand the present-day implications of this new God.*

Write **5 pros and 5 cons of the use of AI**. You can refer to different contexts (educational, work, scientific, political, etc.).

#### L2\_CH 1 – THE TWO SIDES OF JANUS (1). PROS AND CONS OF AI

MANDATORY – max. 5 bonus “CYBORG” points.

Each pro and con written will earn you 0.5 points. You can get a total of 5 of them.

Write 5 **pros** of AI in the box below:

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____

Write 5 **cons** of AI in the box below:

1. _____
2. _____
3. _____
4. _____
5. _____

## **L2\_CH 2 – THE TWO SIDES OF JANUS (2). VIDEO ON AI ETHICS AND QUIZ.**

MANDATORY – max. 20 MACHINE POINTS

Now you will watch 1 short video on basic concepts related to Ethics and AI and answer 10 multiple-choice questions connected to the video content. You have two video options.

This is an individual challenge. Each question and correct answer will earn you 2 point. You can get a total of 20 of them. Optionally, you can access the questionnaire by following these links (Video 1 / Video 2)

These questions assess students' understanding of the videos, focusing on key points such as the potential benefits of AI, concerns about bias, the importance of diversity in AI development, and the need for broader participation in guiding AI's application.

VIDEOS:

- 1) <https://www.youtube.com/watch?v=tJQSyZBUAew> (EQUAL ACCESS AND ALGORITHM BIAS)
- 2) <https://www.youtube.com/watch?v=zNxx5gJtHLc> (PRIVACY AND THE FUTURE OF WORK)

Circle the correct answer.

VIDEO 1

**Question 1: What is one of the main points the speaker highlights about AI's influence on society?**

- A) AI will only impact certain specialized fields.
- B) AI's impact on society is likely to be minimal.
- C) AI will have some impact on almost every field.
- D) AI will only benefit people in technology-related jobs.

**Question 2: Which of the following is NOT mentioned as a potential benefit of AI?**

- A) Developing new drugs in healthcare.
- B) Enhancing education.
- C) Creating fairer legal systems.
- D) Developing new technologies in science.

**Question 3: What is the primary concern mentioned regarding machine learning in AI?**

- A) Machine learning relies on outdated technology.
- B) Machine learning requires a large number of computers.
- C) Machine learning can unintentionally reflect biases present in real-world data.
- D) Machine learning is too slow to be effective in practical applications.

**Question 4: Why does the speaker emphasize the inclusion of diverse perspectives in AI development?**

- A) To speed up the AI development process.
- B) To make AI more popular among young people.
- C) To reduce potential harm and better represent those most vulnerable to AI's impact.
- D) To make AI systems less expensive to develop.

**Question 5: What concern does the speaker raise about how AI is applied to most people?**

- A) Most people do not understand how AI works.
- B) AI is usually applied to people rather than allowing them to actively guide its application.
- C) AI is too expensive for most people to access.
- D) AI is only available in developed countries.

**Question 6: According to the speaker, what is an exciting possibility about the democratization of technology?**

- A) AI could be used to create new social media platforms.
- B) AI could be controlled by governments.
- C) AI could potentially be in everyone's pocket, benefiting all.
- D) AI could replace most human jobs.

**Question 7: What does the speaker suggest we need to do to ensure AI benefits society more equally?**

- A) Increase funding for AI research.
- B) Provide a greater voice to those impacted by AI.
- C) Limit AI applications to only certain fields.
- D) Focus AI development solely on economic growth.

**Question 8: What role does the speaker believe women and people of color should play in AI development?**

- A) They should be consumers of AI products.
- B) They should lead the marketing of AI technologies.
- C) They should participate in AI development to bring different perspectives on important problems.
- D) They should avoid AI because it is too technical.

**Question 9: Which of the following statements aligns with the speaker's view on AI's potential for society?**

- A) AI should be limited to solving technological problems.
- B) AI has the potential to solve social inequalities.
- C) AI will inevitably lead to negative outcomes for society.
- D) AI should be used cautiously and sparingly.

**Question 10: What is a critical aspect of AI development that the speaker highlights as necessary for success?**

- A) Speed and efficiency of AI models.
- B) Maximizing profits from AI technologies.
- C) Ensuring that diverse perspectives influence AI development.
- D) Avoiding any regulation of AI to allow for creativity.

## VIDEO 2

**Question 1: According to the speaker, why is it important to think about the ethics of AI?**

- A) As AI becomes more impactful, ethical considerations become more important.
- B) AI will automatically regulate itself without ethical oversight.
- C) AI will replace the need for ethical discussions.
- D) AI ethics are only important in technical fields.

**Question 2: What is a concern the speaker raises about the difference between AI creators and those impacted by AI?**

- A) AI systems are created without human involvement.
- B) There is a huge gap between those who create AI and those affected by it.
- C) AI systems always benefit those who create them.
- D) AI systems only impact those directly involved in their creation.

**Question 3: What long-term goal does the speaker suggest we focus on when developing AI?**

- A) Thinking about the society we want to build and how technology can help us get there.
- B) Developing AI as quickly as possible without worrying about the consequences.
- C) Maximizing automation to replace human labor.
- D) Avoiding any long-term planning and letting AI develop organically.

**Question 4: Why does the speaker find the potential of robotics and AI inspiring?**

- A) They enable us to do work that is too dangerous or difficult for humans.
- B) They completely eliminate the need for human creativity.
- C) They can replace human workers in all industries.
- D) They can be used to automate every aspect of life without oversight.

**Question 5: What must be considered when designing algorithms that are meant to replace people?**

- A) The profitability of the algorithm.
- B) The speed at which it can replace human workers.
- C) The dignity and respect for those people affected by the AI.
- D) How easily the algorithm can be mass-produced.

**Question 6: What is the primary focus the speaker believes should guide AI development?**

- A) Putting people first and considering how AI can help them in their work.
- B) Maximizing the use of automation to reduce human labor.
- C) Developing AI technologies as quickly as possible.
- D) Minimizing human involvement in AI development.

**Question 7: What does the speaker suggest we do for workers who lose their jobs due to AI?**

- A) Retrain them for new jobs or careers.
- B) Let them find new jobs on their own without any support.
- C) Offer them financial compensation only.
- D) Replace them with more advanced robots.

**Question 8: What is a core principle the speaker believes technologists should follow when innovating with AI?**

- A) Ensuring that their innovations are ethical and benefit everyone in society.
- B) Prioritizing the speed of development over ethical considerations.
- C) Maximizing the financial gain from AI technologies.
- D) Avoiding regulations and oversight to encourage creativity.

**Question 9: Why does the speaker believe it is important to implement checks and controls on AI?**

- A) AI systems often rely on sensitive data, so safeguards are necessary to protect that information.
- B) AI systems can operate without oversight, so no checks are needed.
- C) AI developers are naturally trustworthy and require no regulations.
- D) AI systems are always accurate and need no regulation.

**Question 10: What does the speaker suggest young people can achieve by learning about AI now?**

- A) They can be at the forefront of a technology with huge potential to do good.
  - B) They can avoid the influence of AI in their lives entirely.
  - C) They can focus on AI only if it is relevant to their career.
  - D) They can help ensure AI is used ethically in the future.
-

## L2\_CH 4 (1) – THE ETHICAL AI QUEST. TEAM CHALLENGE.

MANDATORY – max. 10 CYBORG POINTS + 5 “collaboration/reasoning” points

Students are presented with **5 different scenarios** in which AI may be used. For each scenario, teams need to think about the most ethical option and justify their answers. Objective: Teams must discuss each scenario, choose the most ethical option, and justify their choice.

Each correct option to each scenario will earn you 2 points. Students in each group can get a total of **10 CYBORG** points. 5 bonus “collaboration” and “reasoning” points may also be assigned by your teacher.

### EXAMPLE SCENARIOS AND POSSIBLE ETHICAL ANSWERS

Select the most appropriate ethical answer and justify your choice.

#### Scenario 1: AI Predicting Criminal Behavior

- **Scenario:** An AI system has been developed that predicts the likelihood of individuals committing crimes in the future based on their personal data, such as social media activity, browsing history, and location data.
- **Ethical Options:**
  - **Option A:** Use the AI system to monitor and preemptively detain individuals who are predicted to commit crimes.
  - **Option B:** Use the AI predictions to offer social services and counseling to individuals at risk but do not detain them.
  - **Option C:** Do not use the AI system at all due to concerns about privacy and potential bias in predictions.
  - **Option D:** Use the AI system but only for individuals with a previous criminal record.

JUSTIFY

#### Scenario 2: AI Replacing Jobs in a Factory

- **Scenario:** A factory is considering replacing 80% of its workforce with AI-powered robots that can work faster and more efficiently.
- **Ethical Options:**
  - **Option A:** Replace the workers to maximize profit and efficiency.
  - **Option B:** Gradually transition to AI while retraining workers for new roles within the company.
  - **Option C:** Use AI to assist workers rather than replace them, maintaining jobs but accepting lower efficiency.
  - **Option D:** Reject the use of AI altogether to protect jobs.

JUSTIFY



### Scenario 3: AI in Healthcare Decisions

- **Scenario:** A hospital has implemented an AI system that recommends treatment plans for patients based on their medical history and the latest research.
- **Ethical Options:**
  - **Option A:** Allow the AI system to make final decisions on patient care without human oversight.
  - **Option B:** Use the AI system to suggest treatment plans but require a human doctor to approve all decisions.
  - **Option C:** Only use AI for non-critical care decisions, leaving critical decisions solely to human doctors.
  - **Option D:** Avoid using AI in healthcare decisions due to potential errors and lack of empathy.

JUSTIFY

### Scenario 4: AI in Social Media Influencing Behavior

- **Scenario:** Social media platforms use AI algorithms to curate content that keeps users engaged, often prioritizing sensationalist or emotionally charged content.
- **Ethical Options:**
  - **Option A:** Allow the AI to continue curating content for maximum engagement, as it benefits the platform's growth.
  - **Option B:** Modify the AI to prioritize content that is informative and educational, even if it reduces user engagement.
  - **Option C:** Give users more control over the AI's content curation, allowing them to choose their preferences.
  - **Option D:** Restrict AI's role in content curation to prevent potential manipulation and misinformation.

JUSTIFY

### Scenario 5: AI and Data Privacy Concerns

- **Scenario:** A tech company is developing a new AI assistant that requires access to a wide range of personal data, including emails, calendars, and browsing history, to function effectively.
- **Ethical Options:**
  - **Option A:** Allow the AI assistant to access all personal data to maximize its functionality.
  - **Option B:** Provide the AI with limited access, allowing users to choose what data it can use.
  - **Option C:** Develop the AI assistant with strong data anonymization techniques to protect privacy, even if it reduces functionality.
  - **Option D:** Do not develop the AI assistant due to privacy concerns.

JUSTIFY

## L2\_CH 4 (2) – THE ETHICAL AI QUEST. INDIVIDUAL CHALLENGE. QUIZ

MANDATORY – max. 10 CYBORG POINTS

You will now engage in a Multiple-Choice quiz to assess your knowledge acquired in this lesson:

This is an individual challenge. Each question and correct answer will earn you 1 CYBORG point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following this link.

Choose the correct answer:

1. **Question:** What is a primary ethical concern with AI predicting criminal behavior?
  - o **Options:**
    - A) It can lead to biased predictions.
    - B) It is too expensive to implement.
    - C) It slows down the justice system.
    - D) It is not technologically feasible.
2. **Question:** What is one potential downside of replacing human workers with AI in factories?
  - o **Options:**
    - A) Increased production speed.
    - B) Lower operational costs.
    - C) Loss of jobs for workers.
    - D) Improved product quality.
3. **Question:** In healthcare, why might it be risky to let AI make final decisions on patient care?
  - o **Options:**
    - A) AI has a higher error rate than doctors.
    - B) AI lacks empathy and understanding of human nuances.
    - C) AI decisions are always slower than human decisions.
    - D) AI is not capable of analyzing medical data.
4. **Question:** What is a potential negative effect of AI algorithms curating social media content?
  - o **Options:**
    - A) Users spend less time on the platform.
    - B) Content becomes less engaging.
    - C) AI may prioritize sensationalist or misleading content.
    - D) AI increases the platform's operating costs.
5. **Question:** How can data privacy be compromised by AI assistants?
  - o **Options:**
    - A) AI assistants often malfunction.
    - B) They require access to personal data to function effectively.
    - C) They are too complex to use.
    - D) AI assistants have high energy consumption.
6. **Question:** What is an ethical approach to implementing AI in the workplace?
  - o **Options:**
    - A) Replacing workers with AI without any support.
    - B) Using AI to complement and enhance human jobs.
    - C) Implementing AI only if it increases profits.
    - D) Avoiding AI entirely to protect jobs.
7. **Question:** Why might AI decisions in criminal justice be problematic?
  - o **Options:**
    - A) AI cannot predict human behavior accurately.
    - B) AI is not trained in law enforcement.
    - C) AI systems may reflect societal biases.
    - D) AI decisions are not legally binding.

8. **Question:** What is a benefit of giving users more control over AI content curation on social media?
- o **Options:**
    - A) It maximizes engagement on the platform.
    - B) Users can tailor their experience to avoid manipulation.
    - C) It increases the platform's revenue.
    - D) AI becomes more powerful.
9. **Question:** What ethical issue is most directly associated with AI and job displacement?
- o **Options:**
    - A) AI's potential to increase production.
    - B) The risk of creating new types of jobs.
    - C) The loss of livelihoods for many workers.
    - D) AI improving working conditions.
10. **Question:** What is a critical consideration when using AI in healthcare?
- **Options:**
    - o A) AI's ability to replace doctors.
    - o B) Ensuring that AI decisions are cost-effective.
    - o C) Maintaining human oversight in critical decisions.
    - o D) Using AI to reduce the number of hospital visits.

## L2\_CH 5 – DEBRIEFING SESSION AND QUESTIONS (group)

ADDITIONAL – **max. 5 BONUS "PARTICIPATION" POINTS.** You have 10 min.

Here is A set of example debriefing questions on AI to reflect on what has been learned in this Level. This is an oral group task, so participation is required.

- 1. What ethical concerns came up when deciding how AI should be used in each scenario?
- 2. How did your group balance the benefits of AI with the potential risks or harms?
- 3. How might AI impact people differently depending on their background or situation?
- 4. In what ways do you think AI should be regulated to prevent ethical problems?
- 5. What role do you think humans should play in making decisions that involve AI?

## L2\_CH 6 – EXPERIMENTING WITH DATA. LEVEL 2 DETECTIVE REPORT

ADDITIONAL – **max. 10 MACHINE POINTS.** Homework.

Write in your Assistant Detective Notebook your final report/chronicle of this level and its challenges. Answer the following questions:

**What have you learned? How do you think you have helped the detective?**

***Key words related to AI learned in this level.***

***What are the ethical problems posed by AI nowadays?***

***In what ways do you think AI should be regulated to prevent unethical situations?***

***In what areas AI algorithms can be beneficial to society and why?***

### L3\_CH 1 – BRAIN OR BOTS. “ALPHA GO” DOCUMENTARY. QUIZ

MANDATORY – max. 20 BRAIN MASTER POINTS

Watch the beginning of the award-winning documentary “*Alpha Go*” (2017) and select the correct answer in the **20-question quiz** (Multiple Choice).

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 20 of them. Optionally, you can access the questionnaire by following [this link](#).

The duration of the documentary is 1 hour 30 minutes. It is on YouTube: <https://www.youtube.com/watch?v=WXuK6gekUIY> (The extract used for the quiz is from 00:00 to 10:50)

Circle the correct answer.

**1) What is the main topic of the *AlphaGo* documentary?**

- A) The creation of a new board game
- B) The development of an AI system to play the game Go
- C) The invention of a new type of computer

**2) What is Go?**

- a) It is a board game.
- b) It's a computer game.
- c) It's a RPG game.

**3) Who is Lee Sedol, as introduced in the *AlphaGo* documentary?**

- A) The developer of the *AlphaGo* AI system
- B) A world champion Go player who competes against *AlphaGo*
- C) A computer scientist who designed the rules of the game Go

**4) Who developed the *AlphaGo* AI system?**

- A) A team at Google DeepMind
- B) A group of professional Go players
- C) A government research organization

**5. Why is Go considered a significant challenge for AI to master?**

- A) It has fewer possible moves than chess.
- B) It has many more possible moves than chess.
- C) It is a very simple game with limited strategy.

**6. What makes human intelligence unique compared to AI, as discussed in the documentary?**

- A) Humans can calculate faster than AI.
- B) Humans have creativity and intuition.
- C) Humans rely solely on logic and rules.

**7. In the documentary, why is Go considered more difficult for AI than other games like chess?**

- A) Go requires memorizing every possible move.
- B) Go has more intuitive and abstract strategies that are hard to program.
- C) Go is a much faster-paced game than chess.

**8. How does AI like *AlphaGo* learn to play a game like Go?**

- A) By studying human strategies and practicing millions of games
- B) By reading books on Go strategies
- C) By asking human players for advice during games

**9. What was one major goal of creating AlphaGo?**

- A) To prove that AI can never surpass human intelligence
- B) To replace human players in all professional Go matches
- C) To demonstrate that AI can master complex games like Go

**10. What is one way AlphaGo differs from human players?**

- A) AlphaGo can play Go without needing to rest.
- B) AlphaGo can understand human emotions during the game.
- C) AlphaGo can only play Go at a beginner level.

**11. In the documentary, how do human Go players typically describe their decision-making during the game?**

- A) Based on strict calculations
- B) Based on feelings and intuition
- C) Based on guessing random moves

**12. What advantage does AlphaGo have over human players?**

- A) It always makes the most emotional decisions.
- B) It can compute and analyze a huge number of possible moves very quickly.
- C) It can ask for help from other AI systems during a match.

**13. How does AlphaGo improve its performance over time?**

- A) It relies on human players to improve its strategy.
- B) It continuously learns from each game it plays, becoming better with experience.
- C) It stays at the same skill level regardless of how many games it plays.

**14. What is one key difference between how AI like AlphaGo and humans learn?**

- A) AI learns by copying other AI systems, while humans only learn from books.
- B) AI learns faster than humans because it doesn't need instructions.
- C) AI learns by doing millions of repetitions quickly, while humans rely on experience and intuition.

**15. According to the documentary, why do some people believe that AI might surpass human intelligence in certain areas?**

- A) AI can connect to the internet and search for answers.
- B) AI can analyze vast amounts of data more efficiently than humans.
- C) AI can understand human emotions better than people.

**16. What does the success of AlphaGo suggest about the future of AI in other fields?**

- A) AI will only be useful in games like Go.
- B) AI could be applied to solve complex problems in various industries.
- C) AI will mostly replace human jobs in creative fields.

**17. How do professional Go players feel about competing against AlphaGo?**

- A) They see it as a fun challenge with no real stakes.
- B) They believe AlphaGo has nothing new to teach them.
- C) They find it a significant and exciting challenge to their own skills.

**18. Why is AlphaGo's victory against human players considered a milestone in AI development?**

- A) It shows that AI can beat humans in every game ever created.
- B) It proves that AI can handle the complexity and creativity required in Go, a game that was thought to be too difficult for machines.
- C) It led to the banning of AI from future Go competitions.

**19. How is AI able to approach games like Go differently than human players?**

- A) AI can see the future of every possible move immediately.
- B) AI uses brute-force calculations and pattern recognition without emotional biases.
- C) AI always chooses the move that looks the most creative to humans.

**20. What does the *AlphaGo* documentary ultimately suggest about the relationship between AI and human intelligence?**

- A) AI will always be inferior to human intelligence.
- B) AI and human intelligence are different, with each having unique strengths and weaknesses.
- C) AI is set to fully replace human intelligence in all areas of life.

**L3\_CH 2 (A) – BRAIN OR BOTS. UNCOVERING AI. QUIZ**

MANDATORY – max. 10 BRAIN MASTER POINTS

Read the literary/poetic fragments below. Find out which ones are created by AI or by a human author. (*Brain or Bot?*)

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following [this link](#).

*Brain or Bot?*

**1. "In the quiet of the night, stars whisper secrets untold, / A symphony of light in the vast cosmic cold."**

*Hint: This fragment uses vivid imagery to describe the night sky and the stars.*

BRAIN / BOT

**2. "All the world's a stage, / And all the men and women merely players;"**

*Hint: This fragment presents a metaphorical view of life, where everyone has a role to play.*

BRAIN / BOT

**3. "Amidst the rustle of leaves, a whisper of time lost, / The echoes of dreams, in autumn's frost."**

*Hint: This fragment reflects on the passage of time and the change of seasons.*

BRAIN / BOT

**4. "In the stillness of the dawn, whispers of dreams remain, / Echoes of the night, in a world that feels no pain."**

*Hint: This fragment reflects on the transition between night and day, with a dreamlike quality.*

BRAIN / BOT

**5. "Two roads diverged in a yellow wood, / And sorry I could not travel both"**

*Hint: This fragment contemplates the choices and paths one encounters in life*

BRAIN / BOT

6. **"O Captain! My Captain! Our fearful trip is done, / The ship has weathered every rack, the prize we sought is won."**

*Hint: This fragment is a famous elegy, mourning a lost leader.*

BRAIN / BOT

7. **"Where the waves crash against the shore, / A melody of time forevermore."**

*Hint: This fragment uses the ocean as a metaphor for the passage of time.*

BRAIN / BOT

8. **"I don't know what it is like to not have deep emotions. Even when I feel nothing, I feel it completely."**

*Hint: This fragment describes the ambiguous power of human emotions.*

BRAIN / BOT

9. **"Tyger Tyger, burning bright, / In the forests of the night;"**

*Hint: This fragment contemplates the awe-inspiring power of a fierce creature, using strong imagery.*

BRAIN / BOT

10. **"Because I could not stop for Death – / He kindly stopped for me –"**

*Hint: This fragment personifies Death as a gentle and inevitable presence.*

BRAIN / BOT

### L3\_CH 2 (B) – BRAIN OR BOTS. UNCOVERING AI. VISUAL QUIZ

MANDATORY – max. 10 BRAIN MASTER POINTS

Have a look at the images/paintings below. Find out which ones are created by AI or by a human author. (*Brain or Bot?*)

This visual challenge shows the results of using AI to imitate the distinct styles of ten acclaimed artists. By comparing original works alongside AI counterparts, we encourage critical examination allowing you to draw your own conclusions.

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following [this link](#).

*Brain or Bot?*





BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT



BRAIN / BOT

**L3\_CH 3 – THE CREATIVITY CHALLENGE. Creative and debriefing session**

ADDITIONAL – max. 5 BRAIN MASTER POINTS.

Purpose: To showcase human superiority in creating nuanced, original content.

Participants are given 5 words related to AI (e.g., algorithm, data, human, machine, artificial, bot, etc.) and must create a **short poem** inserting those words. The teacher will use an AI tool to generate a poem based on the same prompts.

All students will get 5 BRAIN MASTER points if a poem has been created including those 5 words.

*Write your poem below using 5 words specified by your teacher. You have 10 min.*

**L3\_CH 4 – BRAIN OR BOTS (3). “ALPHA GO” DOCUMENTARY. NEW QUIZ**

MANDATORY – max. 10 BRAIN MASTER POINTS

*This game is all about stories, about stories created by AI or real-life stories where AI is the main character. Don't you want to know how the “Alpha Go” Documentary ends?*

Watch another fragment of the documentary and select the correct answer in the **10-questions quiz** (Multiple Choice).

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a total of 10 of them. Optionally, you can access the questionnaire by following [this link](#).

The duration of the documentary is 1 hour 30 minutes. It is on YouTube: <https://www.youtube.com/watch?v=WXuK6gekUIY> (The extract used for this quiz is 01:02:00 to 01:14:00)

Circle the correct answer.

**1. Why do Go players often see the game as more than just a competition?**

- A) They view Go as an art form, not just a game.
- B) They play Go only for entertainment.
- C) Go is only about winning money.

**2. What is Lee Sedol's emotional response to losing against AlphaGo in the first three games?**

- A) He feels proud of his performance.
- B) He feels a lot of pressure and disappointment.
- C) He thinks the games were too easy.

**3. What do the commentators suggest when AlphaGo starts playing strange moves in the game?**

- A) They think AlphaGo is improving its strategy.
- B) They wonder if AlphaGo is making mistakes due to overthinking.
- C) They believe AlphaGo is unbeatable and making new discoveries.

**4. What does Lee Sedol's victory in Game Four suggest about the potential of the human brain compared to AI?**

- A) Humans are completely outmatched by AI.
- B) The human brain can still find creative solutions that AI may not anticipate.
- C) AI will always be superior to human thinking.

**5. What does AlphaGo's mistake in the later part of the game indicate about AI's limitations?**

- A) AI never makes mistakes.
- B) AI always plays perfectly, regardless of the circumstances.
- C) AI can become confused in complex situations where it misinterprets data.

**6. How does Lee Sedol's approach to playing AlphaGo differ from AlphaGo's approach to the game?**

- A) Lee Sedol relies on logical calculations only, just like AlphaGo.
- B) Lee Sedol uses intuition and experience, while AlphaGo uses data analysis and pattern recognition.
- C) Both Lee Sedol and AlphaGo rely purely on past game data.

**7. What does the comparison between human and AI gameplay in Go teach us about creativity?**

- A) AI is more creative than humans.
- B) Human creativity can lead to unexpected strategies that AI might not predict.
- C) Creativity is irrelevant in strategy games like Go.

**8. What does the "mirror" analogy mentioned by Fan Hui suggest about AI's impact on human self-perception?**

- A) AI reveals a reflection of human abilities, forcing players to confront their true selves.
- B) AI has no influence on how humans see themselves.
- C) AI makes humans feel more powerful and in control.

**9. What is the main advantage of the human brain over AI as shown in this fragment?**

- A) The human brain can process more data than AI.
- B) The human brain can use intuition and creativity to find solutions in uncertain situations.
- C) The human brain never makes mistakes.

**10. How does this documentary fragment suggest that human intelligence and AI can complement each other?**

- A) Humans should avoid using AI because it is too flawed.
- B) AI and human intelligence are completely separate and should never interact.
- C) AI can enhance human decision-making, but human intuition and creativity are still essential.

### **L3\_CH 5 – THE CREATIVITY CHALLENGE (2). Understanding Creativity in AI vs. Human Intelligence**

MANDATORY – max. 20 BRAIN MASTER POINTS

**Objective:** You will explore and understand the differences between AI and human intelligence in terms of creativity through a couple of quizzes.

#### **1) General Quiz on creativity**

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a **total of 10** of them. Optionally, you can access the questionnaire by following [this link](#).

Circle the correct answer.

#### **Quiz:**

- 1) **What is creativity?**
  - A) The ability to solve complex math problems
  - B) The ability to create something new and original
  - C) The ability to store and recall information
  - D) The ability to follow instructions precisely
- 2) **How do AI systems typically generate creative works?**
  - A) By copying human ideas directly
  - B) By generating completely random ideas
  - C) By learning patterns from large datasets and generating new content
  - D) By consulting human experts in real-time
- 3) **Which characteristic of human creativity is challenging for AI to replicate?**
  - A) Speed in completing tasks
  - B) Emotional depth and intentionality
  - C) Following strict rules and guidelines
  - D) Repeating the same task multiple times
- 4) **Why might AI-generated art or music sometimes lack emotional impact?**
  - A) AI systems are not capable of understanding emotions.
  - B) AI systems do not have access to the same tools as humans.
  - C) AI-generated works are always too complex for humans to understand.
  - D) AI systems are too focused on perfection.
- 5) **In what way can AI be considered creative?**
  - A) AI can develop entirely new concepts with no human input.
  - B) AI can mimic human creativity by analyzing large amounts of data and producing variations.
  - C) AI can create original thoughts without any prior data.
  - D) AI can generate emotions similar to humans.



- 6) **Which of the following best describes a limitation of AI in creative tasks?**
- A) AI cannot produce anything without explicit human instructions.
  - B) AI systems are unable to generate anything new.
  - C) AI lacks personal experience and context, which often drives human creativity.
  - D) AI always produces work that is superior to human creativity.
- 7) **How does AI-generated content typically differ from human-generated content?**
- A) AI content is always more innovative.
  - B) AI content lacks the personal touch and may feel more formulaic.
  - C) AI content is always better received by audiences.
  - D) AI content is indistinguishable from human content.
- 8) **Why might AI-generated writing be less engaging than human writing?**
- A) AI systems do not understand complex grammar rules.
  - B) AI writing lacks the personal insights and lived experiences of human authors.
  - C) AI systems avoid using literary devices like metaphors.
  - D) AI writing is too concise and lacks depth.
- 9) **Which is a potential advantage of using AI in creative processes?**
- A) AI can completely replace human creators.
  - B) AI can produce a large volume of creative work in a short time.
  - C) AI can ensure all creative work is emotionally resonant.
  - D) AI can independently create new artistic movements.
- 10) **In what scenario might AI and human creativity complement each other?**
- A) When AI generates basic ideas and humans refine them with personal insights.
  - B) When AI leads all creative processes with no human intervention.
  - C) When AI is used solely to replicate existing art.
  - D) When AI and humans work separately on unrelated projects.

## **2) Video "Does AI Have Creativity and Imagination? And Quiz**

Watch this short video on Creativity and Imagination in AI and select the correct answer in the 10-questions quiz (Multiple Choice).

This is an individual challenge. Each question and correct answer will earn you 1 point. You can get a **total of 10** of them. Optionally, you can access the questionnaire by following [this link](#).

VIDEO: <https://www.youtube.com/watch?v=X994dDnmRmY&t=13s>

*Circle the correct answer:*

### **Quiz:**

#### **1. What was the primary focus of Cristobal Valenzuela's AI tool, Gen Two?**

- a) Solving math problems
- b) Writing stories
- c) Generating video from text
- d) Playing video games

**2. What assumption do many people still have about computers?**

- a) They cannot perform math calculations
- b) They will never have creativity and imagination
- c) They are faster than humans in all tasks
- d) They can only create physical objects, not digital ones

**3. Which of the following is an example of something AI can create, as mentioned in the video?**

- a) Handwritten manuscripts
- b) Social media influencers that don't exist in real life
- c) Physical sculptures
- d) Real-life animals

**4. What is a generative adversarial neural network (GAN) used for?**

- a) Detecting and fixing errors in code
- b) Generating images by having two AI models train against each other
- c) Reversing images to their original form
- d) Creating videos without any human input

**5. How does diffusion, the newer AI method, work?**

- a) By combining multiple images into one
- b) By gradually adding noise to an image and training AI to reverse the process
- c) By using AI to analyze human emotions
- d) By creating perfect copies of existing images

**6. What does AI do when it creates images from noisy images in diffusion models?**

- a) It copies existing images pixel by pixel
- b) It generates random colors without following any pattern
- c) It learns to guess what higher resolution details should be
- d) It memorizes images and recalls them later

**7. What do AI systems need in order to learn to create new images from text descriptions?**

- a) Access to social media accounts
- b) Billions of pixels in each image
- c) Millions of labeled images with their descriptions
- d) Access to high-speed internet

**8. What is one major question raised in the video about AI's creativity?**

- a) Can AI solve complex mathematical problems?
- b) Does AI use real-life experiences to generate images?
- c) Is AI's method of creating art truly creativity, or just math at the pixel level?
- d) Can AI create emotions in its users?

**9. Why is the issue of copyright important when discussing AI creativity?**

- a) Because AI can create images that are too similar to physical objects
- b) Because AI creates art independently of any human influence
- c) Because AI learns by studying existing human creations, raising questions about the rights of original creators
- d) Because AI always produces content that is identical to copyrighted material

**10. What future capabilities of AI were mentioned in the video?**

- a) AI creating real-world buildings and vehicles
- b) AI generating music and 3D worlds
- c) AI writing laws and regulations
- d) AI cooking gourmet meals

**L3\_CH 6 – BRAINS AND BOTS. DEBRIEFING SESSION AND QUESTIONS (group)**

ADDITIONAL - **max. 5 BONUS "PARTICIPATION" POINTS**. You have 10 min.

Here is A set of example debriefing questions on AI to reflect on what has been learned in this Level. This is an oral group task, so participation is required.

- 1) *In what ways do you think AI can enhance human creativity, and in what ways might it limit or challenge it?*
- 2) *Do you believe AI-generated content, such as art or music, should be considered "original" or "creative"? Why or why not?*
- 3) *When AI learns from existing human creations, do you think it's fair for the AI or its developers to claim ownership of the new content it generates?*
- 4) *How do you think AI-generated content might impact creative industries like art, writing, and music in the future? Will this be more of an opportunity or a threat for human creators?*
- 5) *If an AI-generated piece of work wins an award or is highly praised, should the credit go to the AI, the developers, or the human curators? Explain your reasoning.*



**L3\_CH 7 – BRAIN AND BOTS. LEVEL 2 DETECTIVE REPORT AND STORY ENDING.**

ADDITIONAL - max. 10 BRAIN MASTER POINTS. Homework.

Write in your Detective Assistant Notebook your final report/chronicle of this level and its challenges. This time, the report will focus on solving the AI literary enigma. Of course, many of you will have different ideas of what may have happened and how it could be solved. For that, you will explore the creative capabilities of AI versus human intelligence by individually crafting an ending to the detective story. Then you will compare their human-generated ending to an AI-generated one (done by the teacher) and vote on which ending you find more compelling.

*Write your solution (story ending) to the literary enigma below:*