



AI vs ML vs Deep Learning

Chapter: AI & Machine Learning · Level ★★★ ·
Time: 30 min

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Define AI, ML, DL and data science
- ✓ See how they nest
- ✓ Give examples of each
- ✓ Spot ML vs rule-based systems



Section A · Concept Check

• BEGINNER

4 × 1 = 4

- The broadest field is:
☐ A. AI ☐ B. ML ☐ C. DL ☐ D. NLP
- ML systems learn from:
☐ A. data ☐ B. rules only ☐ C. luck ☐ D. HTML
- Deep learning is built on:
☐ A. neural networks ☐ B. spreadsheets
☐ C. if-else rules ☐ D. SQL
- A spam filter that improves with examples is:
☐ A. machine learning ☐ B. hard-coded rules
☐ C. a database ☐ D. a compiler



Section B · Problem Solving

• INTERMEDIATE

2 + 3 × 3 = 11

- DL is a subset of ML, which is a subset of _____.
- ML learns patterns from _____ instead of explicit rules.
- Draw the nesting: AI, ML, DL.

- Give one example each of AI, ML, DL.

- Rules vs learning in one line?



Section C · Challenge

• CHALLENGE

5

- Is every AI system ML?

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature

Parent's Signature

✂ ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-A | 5 AI 6 data 7 = AI contains ML contains DL (concentric circles) 8 =
AI: chess engine; ML: spam filter; DL: image recognition 9 = Rules are written by humans; learning
extracts them from data | 10 = No - classic rule-based AI is not ML