GUIDED NOTES

What AI Is, and Where You Already Meet It

Guided Notes

Fill in the blanks as we go. Every answer is in the word bank.

Word bank artificial intelligence · algorithm · input · output · data · rule-based · machine learning · pattern · model · classify

What does artificial intelligence mean?

It's not one thing, and that's why the word gets confusing.

A machine doing something we'd call thinking if a person did it is _____. Deciding, sorting, recognizing and writing all count.

A set of steps a machine follows to get something done is an _____. Every program has one, and most algorithms have nothing to do with artificial intelligence.

Whatever you give a machine to work on is the _____, and what it hands back is the _____.

Facts, numbers, words, pictures and sounds a machine can work with are all _____.

What's the first kind?

Somebody wrote the rule down, and you could go read it.

A machine that follows steps a person wrote out is _____. A thermostat turning the heat on below 68 degrees is rule-based.

If a written rule causes a mistake, a person can find that rule and change it.

A form that rejects an email address with no @ in it is rule-based. So is a spell checker that flags any word missing from its list.

One if-then rule on its own is just an ordinary program. A rule-based machine gets called AI when many written rules work together on a job that looks like thinking.

What's the second kind?

Nobody wrote the rule. The machine worked it out from examples.

A machine that was shown a lot of examples and found the patterns in them is using _____. This is what people usually mean by AI now.

Something that repeats in the examples, which the machine can use on something new, is a _____.

What the machine ends up with after all that, and what it uses to answer, is a _____.

Nobody wrote the rule down, and often nobody can say it simply. That's the real difference between the two kinds.

Where do you already meet both?

You've been using both kinds for years without sorting them.

Putting something into a group is what it means to _____. A phone deciding if a face is yours is classifying.

Unlocking with a face, a playlist picking the next song and a text about a strange charge on a card all use machine learning.

A password that must be eight characters, a curfew timer and a sale price that comes off at the register are all rule-based.

Some things use both. A bank checks fixed rules about your account and a learned model about how unusual a purchase looks.

REMEMBER

The word artificial intelligence covers two different kinds of machine, and you already use both.