SLIDE SCRIPT

Slide Script

Every slide in this lesson has speaker notes. They say what to point to, what to say out loud and what answers to listen for. This script prints the same notes, slide by slide. You can read ahead the night before or teach from paper.

Where to find the speaker notes

1. In PowerPoint, the notes sit in the box under each slide. If you can't see it, click Notes in the bar at the bottom of the window.
2. When you present, use Presenter View. You see the notes on your laptop, and students see only the slide.
3. In Google Slides, the notes sit in the box under each slide. If you can't see it, open the View menu and choose Show speaker notes.
4. Say: marks words to read out loud, and Ask: marks a question for the class. Every other line tells you what to do.

What AI Is, and Where You Already Meet It

Slide 1. Title slide and today's goal

- Read the goal out loud.
- **Say:** By the end of today you'll be able to sort almost anything into one of two kinds.

Slide 2. Warm-up: Name one thing your phone did for you this morning.

- Ask the question. Give pairs 1 minute.
- Take four or five answers and write them where everyone can see.
- **Say:** Some of those came from a rule somebody typed. Others came from a machine finding patterns. Today we learn to tell which is which.

Slide 3. These three words come up all day.

- Read each word.
- Students write algorithm, input and output in their notes.
- **Say:** Most algorithms have nothing to do with artificial intelligence. A recipe is an algorithm.

Slide 4. Artificial intelligence covers two kinds of machine.

- Read both lines.
- Students write artificial intelligence and data in their notes.
- **Say:** Keep these two straight and most of the confusion goes away.
- **Say:** One if-then rule on its own is just an ordinary program. The rule-based kind gets called AI when many written rules work together on a job that looks like thinking.

Slide 5. A written rule, and learning from examples.

- **Ask:** Which side shows the rule itself? Which side shows examples used for training?
- Point to the rule card. **Say:** A person wrote this, and you can read it and change it.
- Point to the animal cards. **Say:** These are examples, and each one has a label. The model is trained on them.
- **Say:** The email check is an ordinary program with one written rule. The box on the right stands for a trained model. It isn't a real machine.

Slide 6. These three words name what's happening.

- Read each word.
- Students write rule-based, machine learning and model in their notes.
- **Say:** If a written rule causes a mistake, somebody can find that line and change it.
- **Say:** A common way to train a model: it guesses the label for an example, checks the right label, adjusts itself a little, and tries again, thousands of times. Then it is tested on examples it has never seen.

Slide 7. Both kinds are already running in one room.

- Point to the squares: the speaker understanding a spoken request, the laptop sorting photos by who is in them, and the phone suggesting the next word. Each of those jobs learned from examples.
- Point to the circles: the thermostat turning the heat on at a set temperature, the clock alarm going off at a set time, and the door lock opening for a code someone chose. Somebody wrote those rules out.
- **Ask:** What job are we naming for this device?
- **Say:** A whole device can run both kinds. We are naming one job each thing does.

Slide 8. Which one had a person write the rule?

- Read all three. Students vote with 1, 2 or 3 fingers.
- Option 2 is the answer.
- **Say:** Somebody typed the rule about the @ sign. Nobody typed a rule for what your face looks like.
- **Say:** Options 1 and 3 came from huge numbers of examples.

Slide 9. The two kinds fail in different ways.

- Read both sides.
- **Say:** This is the most useful thing on today's page. When something goes wrong, which side you're on decides what you can even try.

Slide 10. Try it: which kind is this?

- Give students 1 minute to decide alone.
- It's a rule somebody wrote: if today is the birthday on file, send the coupon.
- **Say:** The description told us how it decides. If a description doesn't say, the honest answer is that it doesn't give enough information, and a real product can use both kinds.

Slide 11. Your turn: write the rule.

- Before the activity, check these note blanks with the word bank: pattern and classify.
- After the activity, ask: What told us if a decision came from a written rule or from examples?
- Hand out the activity sheet. The four machines are printed on it.
- Students work alone first, then check with a partner.
- The charger and the email form can be written as if-then rules. The face unlock and the music app can't.
- A student who writes if it is the owner's face, unlock has not written a rule. Ask how the machine would know.

Slide 12. Big idea

- Read the headline and the three tiles.