

Receipt extraction setup: receipt photos to Google Sheets rows with an n8n agent

Drop a receipt photo into an n8n chat. An AI agent reads it, pulls out the date, vendor and total, picks a category and adds a row to your sheet.

What you need

- n8n and the OpenAI credential from the n8n AI agent lesson, or an OpenAI API key with some credit on it.
- A Google account with Drive and Sheets. A sheet called **Invoices** with headers Date, Category, Vendor and Amount.
- A clear photo: flat, well lit and in focus.

Build it

1. **Create workflow, Add first step, On chat message.** n8n's chat lets you attach files.
2. Click +, search **agent**, add **AI Agent**.
3. **Chat Model: OpenAI Chat Model**, credential **OpenAI account**, model **gpt-4o** so it can read images.
4. **Memory: Simple Memory**. It remembers the last 5 messages of each chat session.
5. **Tool: Google Sheets Tool. Create new credential**, leave **Managed OAuth2, Sign in with Google**.
6. Change **Operation** to **Append Row**, pick **Invoices** and **Sheet1**, and click ♦ next to each column.

The system message

You are a helpful assistant. You will receive a receipt.

Extract the date, vendor, and amount. Come up with a category.

Use the google sheets tool to add the receipt to the sheet.

Open **AI Agent, Add Option, System Message**. It never says which value goes where: the column names do that.

Test and check

- Click **Open chat**, type **Heres a receipt.**, attach the photo with the **paperclip** and send.
- Compare the new row with the receipt. In the lesson: Corner Mart, 31.57, filed as Groceries without being told.
- AI can misread a blurry photo. Check the rows before you use totals for taxes.

Remember: Clear column names do the mapping for you. Check every row against its receipt at first, before you trust the totals.

Have a professional review it. This prompt helps you draft and organize, not give tax advice. Tax rules change and depend on the client, so have a CPA or enrolled agent review anything about taxes before it goes out.

Practice it free: AI Receipt Extractor: Receipts to Google Sheets with n8n at learn.ynteractive.com/modules/receipt-extractor. This sheet: learn.ynteractive.com/content/cheat-sheets/receipt-extraction-setup. Businesses in the lesson examples are made up. By Robert Breen, October 1, 2026.