Puzzle No. 011:
The Azran Vault (Apprentice)

Professor Layton has unearthed an Azran Vault deep in a chamber in the Amazon jungle. The vault no doubt contains archaeological relics of untold value, but it's protected by a devious lock trap! Layton must enter a **nine-letter word** to open the lock. If he gets the word wrong, the chamber will collapse and doom Layton to death.

Layton has no idea what the correct word is. Unbeknownst to him (and after much research) Layton's colleague, Dr. Andrew Schrader, has figured out how to open the lock! Layton is deep within the Amazon (with nary a cell tower around) so Schrader has decided to help out by sending the code via parrots, which can be trained to repeat short words for Layton. Schrader would like to choose words for the parrots to repeat so that Layton can recover the code.

Schrader can send parrots to Layton, each of which can repeat exactly one three-letter English word. However, some parrots fly faster than others, and so the parrots might arrive in any order. Layton only has one try to disarm the lock trap, so this means he must be able to figure out the code *no matter which order the parrots arrive in.* Parrots are expensive (and professors aren't too wealthy) so Schrader wants to use as few parrots as possible.

How this puzzle will be checked:
- Designate one member of your team to act as Schrader, and another member as Layton. A BAPHL staff member will supply Schrader with the nine-letter code, along with a blank sheet of paper.
- Your Schrader will have **one minute** to write up to **nine** three-letter English words on the supplied blank sheet of paper. (Each of these words will be taught to a different parrot and sent to Layton.)
- A BAPHL staff member will collect your sheet of paper. They will randomly scramble and then copy your words onto a new sheet of paper, which they will give to Layton.
- If Layton can reconstruct the original word from the sheet of paper he is given within **one minute**, then you win! If not, a BAPHL member will construct a new code for you next time you try.