

## Puzzle 0: Bilbo, The Lucky Number

In J.R.R. Tolkien's novel *The Hobbit*, Bilbo Baggins joins a party of thirteen dwarves on a grand adventure. Gandalf the Wizard organized the group and convinced the dwarves' leader, Thorin Oakenshield, that the hobbit was a valuable asset (if for no other reason than to change their party's count from the unlucky "thirteen"). By the time the great dragon Smaug is confronted, Bilbo has, indeed, proven his worth many times over and proudly wears many titles:

"... I come from under the hill, and under the hills and over the hills my paths led. And through the air. I am he that walks unseen."  
"So I can well believe," said Smaug, "but that is hardly your usual name."  
"I am the clue-finder, the web-cutter, the stinging fly. I was chosen for the lucky number."

But back at the beginning of the story, things got off to a rather chaotic start. You see, Bilbo never expected to be going on a quest; the dwarves just barged into his hobbit-hole and into his life. The names of all of them were: Balin, Bifur, Bofur, Bombur, Dori, Dwalin, Fili, Gloin, Kili, Nori, Oin, Ori, and Thorin. They all wore colorful hoods, too, which they carefully hung on pegs just inside Mr. Baggins's doorway as they entered. There were three blue hoods (one brighter than the others and with a silver tassel), two purple, two yellow, two green (one dark and one pale), a red, a brown, a grey, and a white.

Finally, after mealtime, most of the dwarves brought forth musical instruments to accompany the telling of their great stories. Two of the dwarves did not have such items, but the other eleven each played one of a type: viol, fiddle, flute, clarinet, drum, or harp (some played the same type of instruments as others).

At the end of his adventuring Bilbo sat down to write his memoirs (titling them, "There And Back Again, A Hobbit's Holiday"), but after all of the dangerous escapades, he could not precisely remember some of the details about that first day. He wants his account to be accurate, so can you help him deduce in what order the dwarves arrived at his home, what color hood each was wearing, and what instrument (if any) each played?

You are given a logic grid to help keep track of your information, but in order to learn the statements of fact that will help you solve the puzzle, you are going to have to go on a bit of an adventure yourself. You, see, all of the pieces of information that Bilbo does remember I have put on slips of paper and tacked those slips of paper onto bulletin boards throughout Haley Center. There are eighteen such notes (though that may be a couple more than are absolutely necessary to deduce all of the information). Find the notes (**but do not remove them from the bulletin boards!**), determine all of the desired correlations, fill out the grid, and a message should appear. **You are not allowed to use the Internet to look up information about *The Hobbit* or the dwarves or anything!** Follow the instructions of that message, and Eric will give you your team's puzzle booklet necessary for the remainder of EPP13 (and that's when the adventure really begins!)

If your team has not solved this introduction puzzle by 2:30 pm, you will be given your puzzle booklet by default. Note that Eric will not be back at his house until about 3:00 pm, so no hints may be given or call-ins made before that time (you should still be able to submit puzzle answers through your team's webpage, however).

Good luck.

- There were more flutes than any other instrument.
- If two dwarves wore a hood of the exact same color, then they played the same instrument.
- Bifur and Bofur are the only two dwarves with the same initial letter in their names whose hoods were the same color; they were also fairly late -- only two dwarves arrived after them.
- When Nori hung up his purple hood, there was already another purple one present (as well as two dark blue, the dark green, and a red one).
- Only two dwarves' arrival number matched their ranking in the alphabetical list of the dwarf names: Dori and Thorin; and neither of them wore a yellow hood.
- Dwalin and Bombur each wore green hoods, but Bilbo cannot recall which wore the dark one and which the paler.
- Kili (who hung the first dark blue hood) played a fiddle, one of the five stringed instruments present.
- There was only one drum and one harp (the latter was played expertly by Thorin).
- Ori's hood was a unique color, but his instrument was most common. He also arrived immediately after a wearer of a purple hood.
- The first two dwarves to arrive both played the viol but had different color hoods.
- The eleventh dwarf to arrive wore a yellow hood and played a clarinet.
- Oin wore a brown hood and played no instrument; neither did the owner of the white hood.
- Dori was the first flutist to arrive.
- The wearer of the dark green hood and the drum player shared no common letters between their names; the former was the first to arrive, the latter was the next to last to arrive.
- Players of the same type of instrument always arrived sequentially.
- When Bombur deposited his instrument at the front door, there were already four different types of instruments stored there.
- At least one of the viol players' names began with a "B".
- While Fili and the wearer of the grey hood each played the same type of instrument as the dwarf who arrived immediately before him did, the same cannot be said of Bifur.