Mineral Identification Lab: Team Directions

Here are the directions that Keith Olive distributed to each lab team at the start of the mineral identification lab.

Mineral Identification Lab Teams
Make It Tight, Do It Right!

1. Everyone needs their science journal and a pencil
2. Re-read Mineral Identification Technique notes
3. Vocabulary to **know**: luster, hardness, streak and cleavage/fracture. Talk over definitions with your team mates.
4. One person pick up samples
5. One person pick up 3 hardness kits
6. One person pick up 3 data tables and 3 identification keys
7. How to collect your data:
    a. Decide which luster the sample is: M=metallic, NML=nonmetallic light, NMD=nonmetallic dark (it must be black or dark dirt brown in color)
    b. Do a streak test and record the color. If white or colorless record as "none"; anything else, record the actual color.
    c. Do your hardness test and record the number. If less than 2.5 record as "<2.5". If it scratches glass, record as ">7". Anything else record as the actual number.
    d. Look for cleavage planes; they can be small or large. "Pinch the parallel surfaces." Count how many planes you find and record the number.
    e. Decide on the actual color of the sample and record.
8. **Every team member does each sample on their own!** Learn to do the tests in the order listed above and record your information accurately.
9. After finishing all samples, discuss with your team each sample and every piece of data recorded. If there are disagreements, redo the test together.
10. **As a team,** start with one sample and use your keys to match your data to the minerals listed on the key. Begin with luster then hardness, streak, cleavage/fracture and lastly, color. Decide on the best match and the name of the mineral.