CONCEPT: NONPOLAR AMINO ACIDS

●*Nonpolar amino acids*: contain R-groups that are largely _____ due to lack of terminal electronegative atoms.

□ Includes: Gly, Ala, Val, Leu, Ile, Met, & Pro.

□ _____ structures are nonpolar/hydrophobic.

●Recall: amino acid groupings are relative & can _____ from textbook to textbook.

□ Other amino acids might be grouped as nonpolar in your textbook, but we've grouped them elsewhere.

EXAMPLE:

Nonpolar Amino Acids

Nonpolar Amino Acids: "GAV LIMP"
Hydrophobic Amino Acids

GAVin **LIMP**ing away

Glycine, _____, ___

Notes:
-smallest ___-group.

-So easy it just Gly$_{des}$ through!

Alanine, _____, ___

Notes:
-Like 1st letter of alphabet:
1) A is easy to remember (_____ group).
2) A is a leader.

Valine, _____, ___

Notes:
-Val is Ala with a ___-shape.

Leucine, _____, ___

Notes:
-Leu: a loose, extension of V.

Isoleucine, _____, ___

Notes:
-Ile is an _____ of leucine.

-Ile is a lopsided Val.

Methionine, _____, ___

Notes:
-M looks like an ___.

-Met has a methyl-thiol.

Proline, _____, ___

Notes:
-P looks like the loop of a flipped ___.

-Proline = _____

PRACTICE: Draw in the R-groups from memory for each of the nonpolar amino acids.

G | A | V | L | I | M | P

PRACTICE: Fill-in the missing R-groups for the following tripeptide: L-A-M.