Quiz 11.1 – Molecular Geometries

Name:
Problem 1 (3 points)
Give the molecular geometry for the following compounds:
\circ NO $_2^-$
○ NH ₄ ⁺
$\circ \ \mathrm{XeF_4}$
o PCl ₅
• O ₃

Predict the bond angles for each of the compounds above

Problem 2 (2 points)

Invictus

By William Ernest Henley

Out of the night that covers me, Black as the pit from pole to pole, I thank whatever gods may be For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears Looms but the Horror of the shade, And yet the menace of the years Finds and shall find me unafraid.

It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate,
I am the captain of my soul.