

Quiz 10.4 – Classifying Solids

Name: _____

Question 1

Classify the following solids in as many ways as you can:

Quartz Crystal Naphthalene Aluminum Foil Glass Iron(III) Oxide

Question 2

For each property or observation, write whether it indicates a solid is amorphous or crystalline

- The atomic-scale structure is chaotic and disordered
- The solid cleaves easily along flat planes
- The solid shows flat faces and sharp corners and edges at the macroscopic scale
- A sharp, consistent melting point is observed
- The solid grows soft and pliable over a temperature range before finally melting
- The atomic-scale structure shows a regular, repeating order

Question 3

What types of forces are present in each type of solid?

- Metallic Solids
- Ionic Solids
- Covalent-Network Solids
- Molecular Solids

Caged Bird

By Maya Angelou

A free bird leaps
on the back of the wind
and floats downstream
till the current ends
and dips his wing
in the orange sun rays
and dares to claim the sky.

But a bird that stalks
down his narrow cage
can seldom see through
his bars of rage
his wings are clipped and
his feet are tied
so he opens his throat to sing.

The caged bird sings
with a fearful trill
of things unknown
but longed for still
and his tune is heard
on the distant hill
for the caged bird
sings of freedom.

The free bird thinks of another breeze
and the trade winds soft through the sighing trees
and the fat worms waiting on a dawn bright lawn
and he names the sky his own

But a caged bird stands on the grave of dreams
his shadow shouts on a nightmare scream
his wings are clipped and his feet are tied
so he opens his throat to sing.
The caged bird sings
with a fearful trill
of things unknown
but longed for still
and his tune is heard
on the distant hill
for the caged bird
sings of freedom.