

Name: Peter Chehade Lab day Wed Lab time: 11:30pm

45
50

Earth Sciences 1022a **Mineral and Rock Quiz** 2010

Answer the prompts for each sample directly on these pages with *words or circles*. Please give the sheets to the TA before leaving the room. Good luck.

- 1) Mineral name: Graphite
- Hardness (on the Moh scale): 2.5
- 2) Translucent or opaque mineral? (choose one)
- 0 Name the metal in this mineral: Copper
- 3) Mineral name: Galena
- Name the metal in this mineral: lead
- 4) Cleavage: Basal
- Found mostly in mafic or felsic rocks? (circle one)
- 5) Mineral name: Orthoclase
- Diapheneity: Translucent
- 0 6) Metallic or nonmetallic mineral? (choose one)
- Found mostly in mafic or felsic rocks? (circle one)
- 7) Crystal form: Cubic
- Opaque or transparent? (circle one)
- 0 8) Cleavage: 2 directions at 90°
- 0 Mineral name: Plagioclase

9) **No sample.** 2 marks. For minerals listed below, match property to name with lines:

- halite ~~basal cleavage~~
- biotite ~~salty taste~~
- pyrite "fools gold"

10) **No sample.** 2 marks. Match environment of formation to rock name with lines:

- rhyolite ~~hypabyssal~~
- trachyte porphyry ~~intrusive~~
- granite ~~extrusive~~

- 11) Rock name: Granite
- Name one mineral in this rock: orthoclase

18

12) This rock has a coarse component called orthoclase
and a fine component called ground mass

13) Texture: Phaneritic
Rock name: Gabbro

14) Why is this rock so glassy? Because it's formed by fire and magma
Most commonly formed from felsic or mafic (circle one) magma?

15) Cooled fast or slowly? (circle one)
Rock name: Pumice

16) Aphanitic or porphyritic? (circle one)
Felsic or mafic parent magma? (circle one)

17) Rock name: Sandstone
Formed in sand dune or organic reef? (circle one)

18) Clastic or nonclastic (circle one) sedimentary rock?
Formed in river bed or restricted basin? (circle one)

19) Formed in turbulent or quiet water? (circle one)
Rock is fine, medium, or coarse grained? (circle one)

20) Made of sand grains or shells of tiny organisms? (circle one)
Formed in a stream or deep ocean? (circle one)

21) **No sample.** 2 marks. For the rocks below, match texture to rock name with lines:

conglomerate	coarse clastic
coquina	mostly clay particles
shale	mostly shell fragments

22) Rock name: Coal
Organic or inorganic? (circle one)

23) Low or medium (circle one) grade of metamorphism?
Parent rock before metamorphism was: Shale

24) High or low (circle one) grade of metamorphism?
Texture: Foliated (Gneissic layering)

25) Foliated or nonfoliated? (circle one)
Parent rock before metamorphism was made of calcite or clay? (circle one)