

Team # _____

School Name: _____

Student Name: 1) _____ 2) _____

GRADER:

Answer Sheet

- 1) (0.5) ice _____ (word)
- 2) (0.5) 1 : 63360 _____ (number)
- 3) (0.5) d _____ (letter a-e)
- 4) (0.5) 30.48 m _____ (number)
- 5) (0.5) 29.5° _____ (number)
- 6) (0.5) sea level / datum (both OK) _____ (word)
- 7) (0.5) 15 _____ (number)
- 8) (0.5) d _____ (letter a-e)
- 9) (0.5) a) 61°44'±0.2', 142°18' ±0.5' (number)
 (0.5) b) 61.73±0.2, 142.3'±0.1' (number)
- 10)(1) nonconformity _____ (word)
- 11)(0.5) a) QTwd/Wrengell Lava/T_Rng/Nikolai Greenstone (all OK)
 (1) b) igneous _____ (word)
- 12) (0.5) QTwd/QT_w/QT_{wv}/QT_{wc}/Tf/Wrengell Lava/Frederika Formation
- 13)(1) C, B, D, A _____ (letters A-D)
- 14)(0.5) a) H _____ (letter E-H)
 (0.5) b) G _____ (letter E-H)
- 15)(0.5) a) 1) Hansen Creek Formation _____ (name)
 (0.5) 2) Frederika Formation _____ (name)
 (1) b) sedimentary _____ (word)
 (1) c) 1) marine _____ (word)
 (1) 2) coastal plain _____ (word)
- 16)(2) b _____ (letter a-c)
- 17)(0.5) a) tuff/pyroclastic rocks (both OK) (name)
 (0.5) b) lava/lava flow/any flow _____ (name)
 (0.5) c) dikes / sills _____ (name)
 (0.5) d) lava/lava flow/any flow _____ (name)
- 18)(1) QT_w/ Tf/Wrengell Lava/Frederika Formation (name)
- 19)(1) angular _____ (word)
- 20)(1) anticline/fold _____ (word)
- 21)(4) f, e, b, a, e, b, d, c (THIS ORDER!) (letters a-f)
- 22)(1) a) red _____ (color)
 b) yellow _____ (color)
 c) blue _____ (color)
- 23)(1) e _____ (letter a-e)
- 24)(0.5) a) risk: Risk = Threat (Hazard) x
 Vulnerability x Exposure _____
 (short answer)
- (0.5) hazard: physical event and/or phenomenon, potentially harmful _____
 (short answer)
- (1) b) Because the region is densely populated, therefore the vulnerability and exposure are extremely high --> high risk volcano. Potent volcanoes in deserted areas don't represent a risk.
 (short answer)
- 25)(0.5) b, c, a _____ (letters a-c)
- 26)(0.5) a) C _____ (letter A-C)
 b) A _____ (letter A-C)
 c) B _____ (letter A-C)
- 27)(0.5) b _____ (letter a-d)
- 28)(0.5) c _____ (letter a-d)

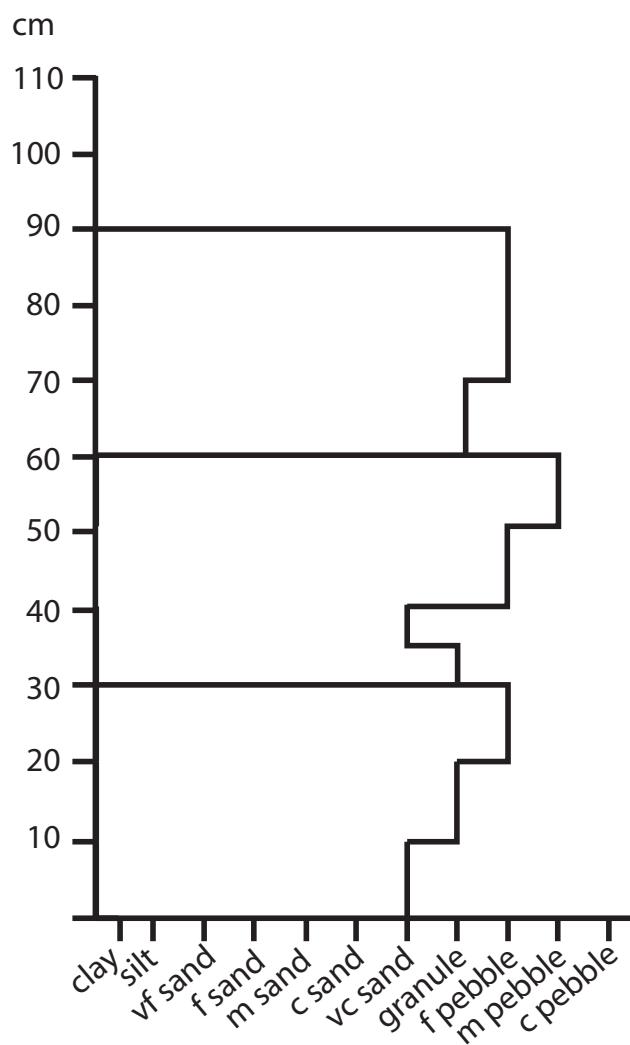
- 29)(1) a) seismometers _____ (word)
 (1) b) gas detectors/infrared cameras _____ (word)
 (1) c) gps / satellite images _____ (word)
- 30)(2) measure gravity and magnetic anomalies _____
 _____ (short answer)
- 31)(2) A) c _____ (letter a-i)
 B) a _____ (letter a-i)
 C) h _____ (letter a-i)
 D) f _____ (letter a-i)
 E) e _____ (letter a-i)
 F) a _____ (letter a-i)
- 32)(0.5) b and c _____ (letter a-d)
- 33)(1) c _____ (letter a-d)
- 34)(2) d,f,b,g,a,e,h,c OR a,e,h,c,d,f,b,g _____ (letters a-h)
- 35)(0.5) 3 _____ (number)
- 36) DRAW ON PAGE ?
- 37)(1) clast/grain size, sequence thickness, strike
 and dip of contact between sequences _____
 _____ (short answer)
- 38) DRAW ON PAGE ?
- 39) (2) 230 ± 20 m _____ (number)
- 40)(0.5) A,Oma, Ok, Oc, €cr, €mn, €n, €m,
 €rv, Qal, €ru, J, I,EFGH, a, D, C, B₁ _____ (order
does not matter)
 _____ (short
 answer)
- 41) (0.5) a) hinge/trough of a fold/syncline
 (0.5) b) syncline _____ (words)
- 42)(1) a) On, Ordovician _____
 _____ (short answer)
- (1) b) Or, Ordovician _____
 _____ (short answer)
- 43)(0.5) reverse fault/thrust (both ok) _____ (word)
- 44) (0.5) a) 2 _____ (number)
 b) 1 _____ (number)
 c) 1 _____ (number)
 d) 1 _____ (number)
- 45) (0.5) €cr _____ (name)
- 46)(1) a) unsure _____
 _____ (short answer)
 (1) b) burried _____
 _____ (short answer)
- 47)(1) c _____ (letter a-d)
- 48)(3) Qal, Ow, Ohb, Omc, Orc, Op, Oo, On,
 Ol, Oc, Ocu, Ocl, €cr, €mn, €mnl (THIS
 ORDER!) _____ (short answer)
- 49)(1) Cambrian _____ (word)
- 50)(1) Cenozoic _____ (word)
- 51)(1) g, b, a, d, e, h, c (THIS ORDER!) _____ (letters a-h)
- 52)(0.5) ridge _____ (word)
- 53)(2) East _____ (word)
- 54) DRAW ON PAGE ?
- 55)(0.5) High Plains _____ (name)
- 56)(0.5) High Plains, Ozark Plateaus _____ (names)
- 57)(0.5) Great Plains,Western Interior Plains
- 58)(1) a) confined aquifers/ Great Plains,Western
 Interior Plains _____ (short answer)
 b) 20 ± 5 m _____ (number)
- 59)(0.5) d _____ (letters a-e)

- 60) (0.5) a) all the aquifers: High Plain, Great Plains, Western, Ozark
 (0.5) b) confining unit _____ (name)
 (0.5) c) all the aquifers: High Plain, Great Plains, Western, Ozark
 (0.5) d) confining unit _____ (name)

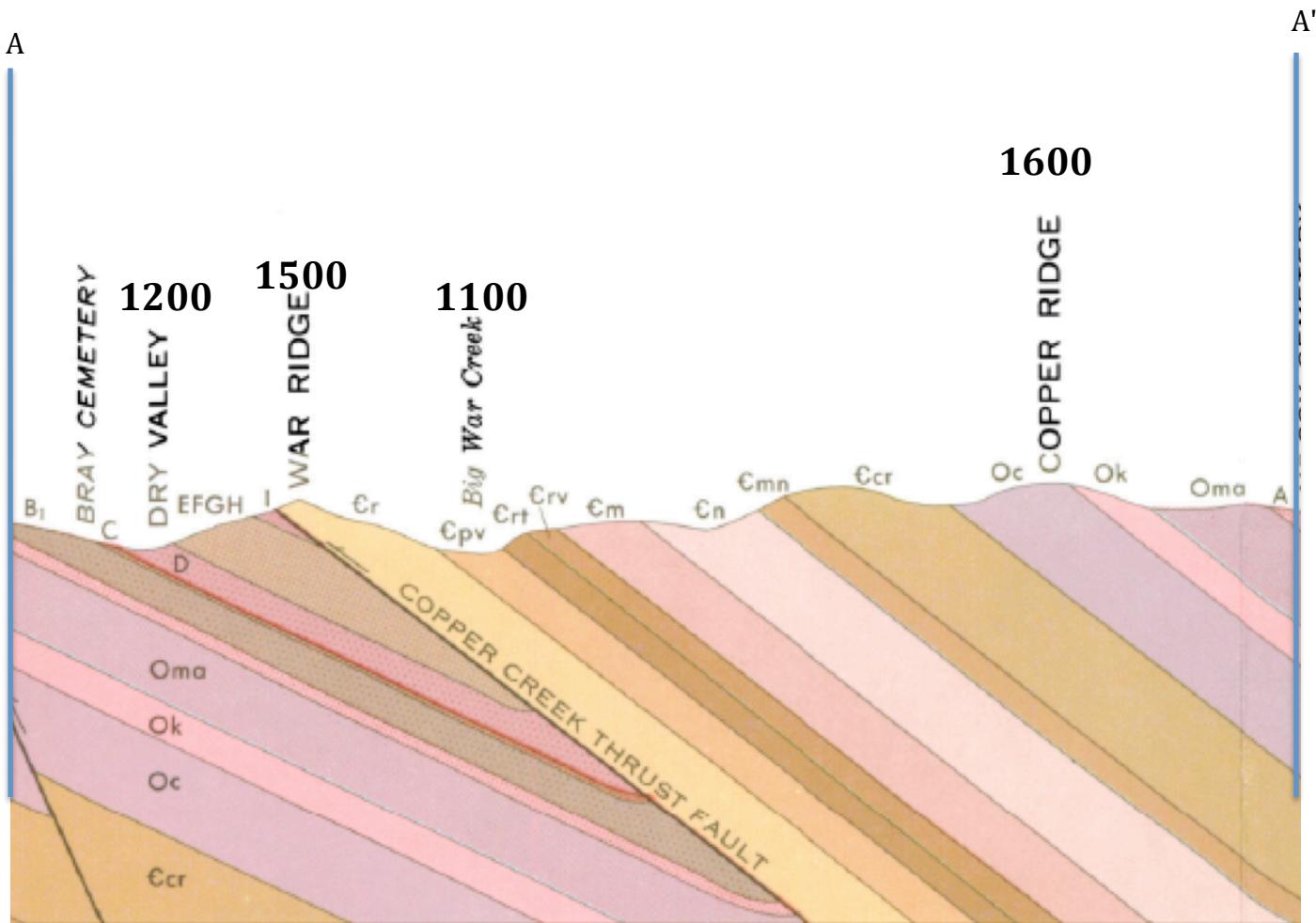
- 61) (0.5) Conic _____ (word)
 62) (0.5) Area _____ (word)
 63) (0.5) Between the two standard parallels (2930 and 4530 - optional) _____
 _____ (short answer)

- 64) (2) _____ a, c, d _____ (letters a-e)
 65) (0.5) _____ decline _____ (word)
 66) (1) _____ a, b, c, e (any order) _____ (letters a-e)
 67) (0.5) _____ d _____ (letters a-e)
 68) DRAW ON PAGE ?
 69) (0.5) _____ b _____ (letters a-e)
 70) (0.5) _____ $26^\circ/118^\circ (\pm 5^\circ \text{ each})$ _____ (number)
 71) (2) right hand rule _____ (short answer)
 72) (1) dip direction _____ (short answer)
 73) (0.5) _____ $050/35$ _____ (number)

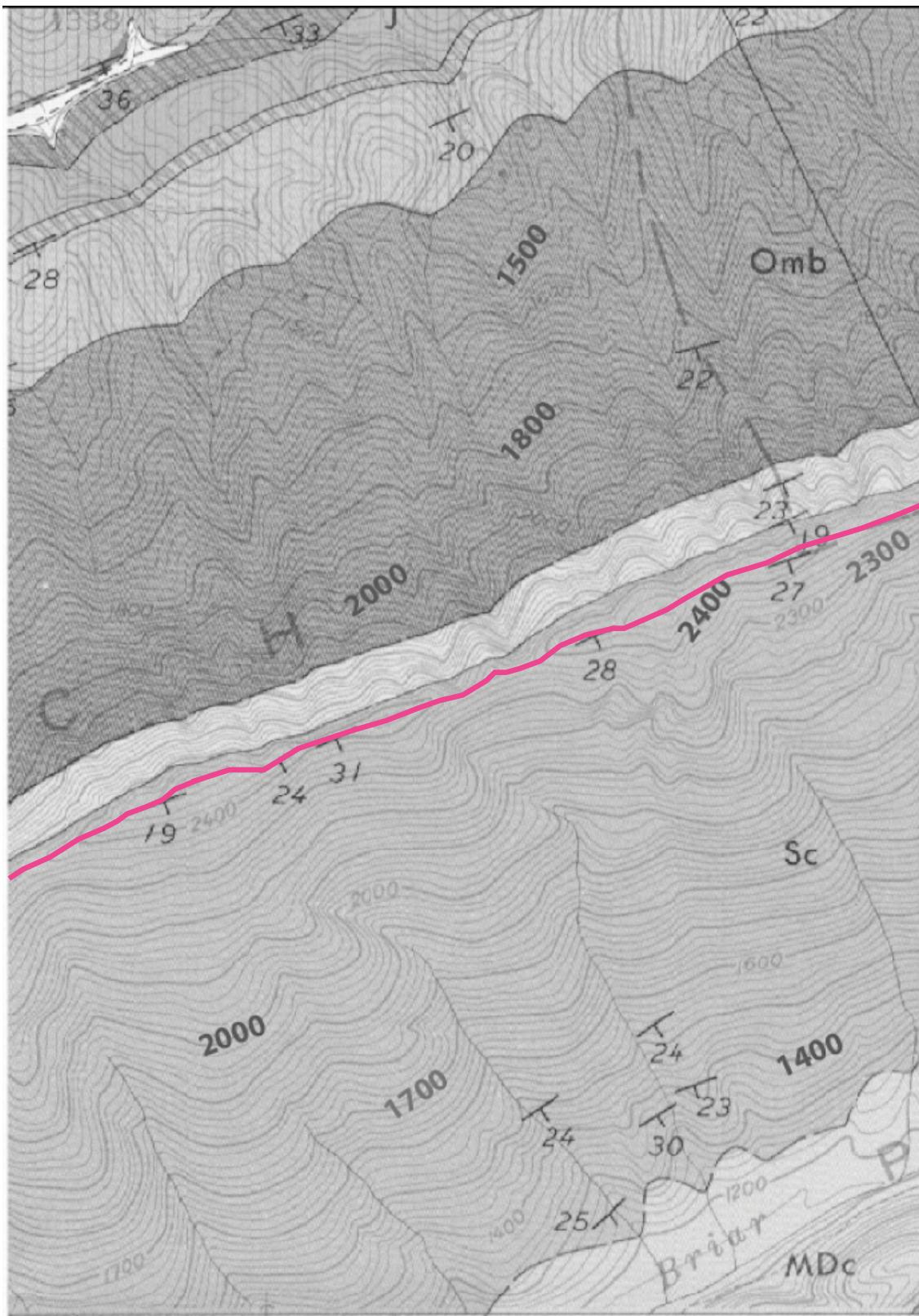
→ 36) (3) DRAW STRATIGRAPHIC COLUMN HERE:



→ 38) (15pt) T01 DRAW A-A' CROSS SECTION WITH TOPOGRAPHIC PROFILE HERE:



→ 54) (3pt) DRAW DRAINAGE DIVIDE



→ 68) (4pt) STEREONET:

