

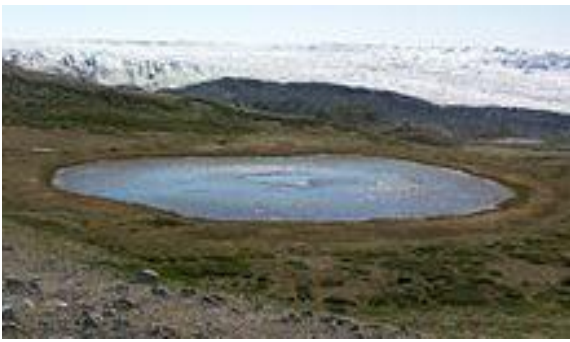
Glorious Glaciers

Name these Glacial Features



1.)

1.) _____



2.)

2.) _____



3.)

3.) _____



4.)

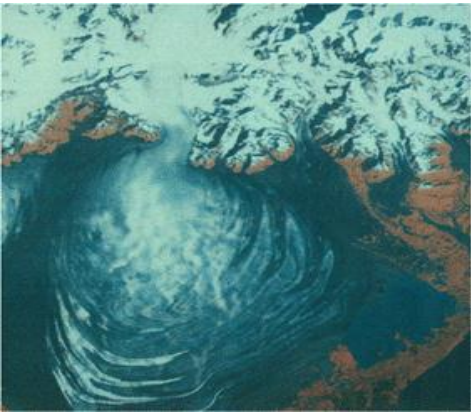
4.) _____

Name these types of Glaciers



5.)

5.) _____



6.)

6.) _____



7.)

7.) _____



8.)

8.) _____

True or False

- 9.) _____ The terminus marks the farthest extent of a glacier.
- 10.) _____ An arête is a bow or amphitheater shape in a glacier.
- 11.) _____ CO₂ levels are higher during glacial episodes.
- 12.) _____ Methane Hydrate breaks down into H₂O.
- 13.) _____ Glaciers exist on every continent.
- 14.) _____ The Great Lakes were created by glaciation.
- 15.) _____ Calving is a process that creates icebergs.
- 16.) _____ Glacier National Park is in Alaska
- 17.) _____ Alaska has 100 glaciers.
- 18.) _____ 75% of the world's glaciers are retreating.
- 19.) _____ A glacier can move forward and retreat at the same time.
- 20.) _____ *Ogives* are alternating wave crests and valleys that appear as dark and light bands of ice on glacier surfaces.
- 21.) _____ A drumlin field east of Rochester, New York is estimated to contain about 100 drumlins.

Short Answer

22.) Give a general definition of the milankovitch cycles.

23.) List them

24.) Identify and describe two factors that affect the speed of alpine glaciers movement.

25.) What is plastic flow?

26.) What is basal sliding?

Match the term with its definition

A. Stratugi **B. Thermokarst** **C. Loess** **D. Cryoconites** **E. Katabatic** **F. Diagenic Mounds**

G. Hoarfrost **H. Palsa** **I. Furrow** **J. Ablation** **K. Bergschrund** **L. Bergy Seltzer**

M. Rock Flour **N. Proglacial** **O. Avalanche** **P. Varve** **Q. Pit Pond** **R. Gendarmes**

27.) Low, often oval, frost heaves occurring in polar and subpolar climates, which contain permanently frozen ice lenses _____

28.) A depression in an outwash plain by the melting of a block of ice floated to its depositional site by meltwater and subsequently buried by sediment _____

29.) Snow Dune _____

30.) Ice towers such as seracs and penitantes. _____

31.) Can give outwash streams a milky appearance. _____

32.) A land surface characterized by very irregular surfaces of marshy hollows and small hummocks formed as ice-rich permafrost thaws _____

33.) Conical shapes up to two meters high covered with rock material _____

34.) The area in front of, or just at the outer edge of a glacier _____

35.) Melting _____

36.) A clastic, predominantly silt-sized sediment, which is formed by the accumulation of wind-blown dust _____

37.) The sound made as air bubbles formed at many atmospheres of pressure are released during the melting of glacier ice.

38.) Powdery windblown dust made of a combination of small rock particles, soot and microbes _____

39.) Also called radiation frost or pruina _____

40.) Long grooves in subglacial till or pavement gouged by englacial debris _____

41.) A wind that carries high density air from a higher elevation down a slope under the force of gravity _____

42.) Water and debris fall into this crack in the ice _____

43.) Rapid flow of snow down a slope _____

44.) Distinctive features of glacial lacustrine environments _____

Match the glacial features with the type that forms them, and write out whether they are erosional or depositional features.

A. Continental

B. Valley

C. Both

45.) Drumlin

46.) Arêtes

47.) Eskers

48.) Paternoster Lakes

49.) Erratic

50.) Tarns

51.) Truncated Spurs

52.) Striations

53.) Kames

54.) Horns

55.) Roche Moutonnees

56.) Moraines

57.) Cirques

58.) Tunnel Valleys

59.) Fjords

60.) Craggs

61.) Hanging Valley

62.) Glacial Troughs

63.) Outwash Fans

Multiple Choice

64.) Glacier ice forms by

- a. burial and metamorphism
- b. melting and refreezing
- c. erosion and deposition
- d. precipitation and melting

65.) How many distinct glaciations affected North America during the Pleistocene?

- a. One
- b. Two
- c. Three
- d. Four

66.) At present, what percentage of Earth's land surface is covered by glaciers?

- a. 10
- b. 70
- c. 50
- d. 1

67.) What direction do glaciers move?

- a. Upwards
- b. Downwards
- c. Sideways
- d. None of these

68.) To be considered a continental glacier it has to occupy how many square miles?

- a. 10
- b. 1000
- c. 100,000
- d. 1,000,000

69.) Which ice sheet did not cover North America during the last ice age?

- a. Laurentide
- b. Cordilleran
- c. Patagonian
- d. Greenland

70.) What rock type is conclusive evidence of past glaciation?

- a. Conglomerate
- b. Pegmatite
- c. Phyllite
- d. Tillite

71.) The last ice age ended approximately how many years ago?

- a. 100,000
- b. 70,000
- c. 500,000
- d. 10,000

72.) Which sea froze over during the little ice age?

- a. Red Sea
- b. Dead Sea
- c. Baltic Sea
- d. Mediterranean Sea

73.) Kettle ponds would be mostly found in which of the following states?

- a. Connecticut
- b. Georgia
- c. Kentucky
- d. Nevada

74.) Large masses of ice that show evidence of movement are called

- a. Icebergs
- b. Ice cubes
- c. Glaciers
- d. None of these

Name the place where these glaciers are found

75.) Byrd Glacier _____

76.) Malaspina Glacier _____

77.) Fox Glacier _____

78.) Briksdal Glacier _____

80.) Franz Josef Glacier _____

81.) Vatnajokull Glacier _____

82.) Donjek Glacier _____

83.) Perito Moreno Glacier _____

84.) Columbia Glacier _____

85.) Hubbard Glacier _____

86.) Siachen Glacier _____

87.) Lambert Glacier _____