	A FEW FACTS ABOUT HEAT
Name:	

**Directions**: Read each passage below and identify how the author has organized the information in the text.

A. Heat plays an important part in the splitting of rocks and in the formation of débris. Rocks in exposed places are greatly affected by changes in temperature, and in regions where the changes in temperature are sudden, severe, and frequent, the rocks are not able to withstand the strain of expansion and contraction, and as a result crack and split. In the Sahara Desert, much crumbling of the rock into sand has been caused by the intense heat of the day followed by the sharp frost of night. The heat of the day causes the rocks to expand, and the cold of night causes them to contract, and these two forces constantly at work, loosen the grains of the rock and force them out of place, thus producing crumbling.

1) cause and effect 2) sequence and process 3) compare and contrast

**B.** If two similar basins containing unequal quantities of water are placed in the sunshine on a summer day, the smaller quantity of water will become quite warm in a short period of time, while the larger quantity will become only lukewarm. Both vessels receive the same amount of heat from the sun, but in one case the heat is utilized in heating to a high temperature a small quantity of water, while in the second case the heat is utilized in warming to a lower degree a larger quantity of water. Equal amounts of heat do not necessarily produce equivalent temperatures, and equal temperatures do not necessarily indicate equal amounts of heat. It takes more heat to raise a gallon of water to the boiling point than it does to raise a pint of water to the boiling point, but a thermometer would register the same temperature in the two cases.

1) chronological 2) sequence and process 3) compare and contrast

**C.** If a kettle of water is placed above a flame, the temperature of the water gradually increases, and soon small bubbles form at the bottom of the kettle and begin to rise through the water. At first, the bubbles do not get far in their ascent, but disappear before they reach the surface; later, as the water gets hotter and hotter, the bubbles become larger and more numerous, rise higher and higher, and finally reach the surface and pass from the water into the air; steam comes from the vessel, and the water is said to *boil*. The temperature at which a liquid boils is called the boiling point.

1) problem / solution 2) sequence and process 3) compare and contrast