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Sommario/riassunto	Heat provides the energy that drives almost all geological phenomena and sets the temperature at which these phenomena operate. This

book explains the key physical principles of heat transport with simple physical arguments and scaling laws that allow quantitative evaluation of heat flux and cooling conditions in a variety of geological settings and systems. The thermal structure and evolution of magma reservoirs, the crust, the lithosphere and the mantle of the Earth are reviewed within the context of plate tectonics and mantle convection - illustrating how theoretical arguments can be combined with field and laboratory data to arrive at accurate interpretations of geological observations. Appendices contain data on the thermal properties of rocks, surface heat flux measurements and rates of radiogenic heat production. This book can be used for advanced courses in geophysics, geodynamics and magmatic processes, and is a reference for researchers in geoscience, environmental science, physics, engineering and fluid dynamics.
