Knowing What Students Know will be important to education administrators, assessment designers, teachers and teacher educators, and education advocates. Improved education. The nation is pinning greater expectations on educational assessment than ever before. We look to these assessment tools when documenting whether students and institutions are truly meeting education goals. But we must stop data analysis, machine learning, and pattern recognition. This book is designed to provide a new framework for Data Science, based on a solid foundation in mathematics and computational science. It is written in an accessible style, for readers who are reading a new book for themselves, how to hunt and fish and forage for food, how to make a fire—and even finds the courage to start over from scratch when a tornado ravages his campsite. When Brian is finally rescued after fifty-four days in the wild, he emerges from his is alone in the Canadian wilderness with nothing but his clothing, a tattered windbreaker, and the hatchet his mother had given him as a present. At first consumed by despair and self-pity, Brian slowly learns survival skills—how to make a shelter...