新东方背诵文选80篇：50细胞与温度CellsandTemperature PDF转换可能丢失图片或格式，建议阅读原文 https://www.100test.com/kao_ti2020/207/2021_2022__E6_96_B0_E4_B8_9C_E6_96_B9_E8_c96_207317.htm 50 Cells and Temperature Cells cannot remain alive outside certain limits of temperature, and much narrower limits mark the boundaries of effective functioning. Enzyme systems of mammals and birds are most efficient only within a narrow range around 37 °C. a departure of a few degrees from this value seriously impairs their functioning. Even though cells can survive wider fluctuations, the integrated actions of bodily systems are impaired. Other animals have a wider tolerance for changes of bodily temperature. For centuries it has been recognized that mammals and birds differ from other animals in the way they regulate body temperature. Ways of characterizing the difference have become more accurate and meaningful over time, but popular terminology still reflects the old division into "warm blooded" and "cold blooded" species. warm-blooded included mammals and birds whereas all other creatures were considered cold-blooded. As more species were studied, it became evident that this classification was inadequate. A fence lizard or a desert iguana -- each cold-blooded -- usually has a body temperature only a degree or two below that of humans and so is not cold. Therefore the next distinction was made between animals that maintain a constant body temperature, called homeotherms, and those whose body temperature varies with their environment, called poikilotherms. But this classification also proved inadequate, because among mammals

there are many that vary their body temperatures during hibernation. Furthermore, many invertebrates that live in the depths of the ocean never experience a change in the chill of the deep water, and their body temperatures remain constant. 细胞与温度 细胞只能在一定的温度范围内存活，而进一步保证它们有效工作的温度范围就更小了。 哺乳动物和鸟类的酶系统只能在37°C左右的很小范围内才能有效工作。 与此相差仅几度的温度都会大大削弱它们的工作效率。 尽管温度变化更大时细胞仍能存活，但机体系统的整体运行能力却被削弱了。 其它动物对体温的变化有更强的适应性。 几个世纪以来，人们就认识到哺乳动物和鸟类调节体温的方式与其它动物不同。 随着时间的推移，人们对这种差异的描述越来越精确和有意义，但是"暖血动物"和"冷血动物"这一古老的分类方式至今仍在大众词汇中有所反映。 暖血动物包括哺乳动物和鸟类，其它动物统统被视为冷血动物。 但是对更多物种进行的研究表明这种分类显然是不适当的。 美洲一种小型蜥蜴和沙漠鬣蜥同属冷血动物，但实际上它们的体温通常只比人类的体温低1～2度，因此并不是真正的冷血。 因此又出现了恒温动物(即保持恒定体温的动物)和变温动物(即体温随外界环境的变化而改变的动物)这一区分方式。 但这种分类也不恰当。 因为有不少哺乳动物在冬眠期间会改变体温，而许多生活在深海的无脊椎动物在寒冷的深海水域中体温并不变化，而是恒定的。 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com