

<<Barron's SAT II 物理>>

图书基本信息

书名：<<Barron's SAT II 物理>>

13位ISBN编号：9787510034565

10位ISBN编号：7510034566

出版时间：2011-6

出版时间：世界图书出版公司

作者：Joseph A. Mascettap

页数：356

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<Barron's SAT II 物理>>

内容概要

this 10th edition of barron's sat subject physics contains corrections to the 9th edition and some new material. unlike other review books, which just present practice test questions, this book provides you with full content review, tips for improving problem-solving skills, test-taking strategies, special sidebars that highlight important concepts, and self-assessment rubrics to improve your test score.

the book begins with an introduction to the sat subject test in physics. remember that any review book can give you only an approximation of the full content of an sat subject exam. since the material contained on an actual exam is owned by copyright, all tests included in this book (as well as percentages of content distribution) are necessarily simulated to reflect the level and types of questions you may encounter on the actual exam.

<<Barron's SAT II 物理>>

作者简介

作者：（美国）格维尔茨（Herman Gewirtz）（美国）沃尔夫（Jonathan S.Wolf）

<<Barron's SAT II 物理>>

书籍目录

前言

入门

前言

考试内容

物理题解题技巧

考试技巧

摸底考试

摸底考试

答案

答案释疑

自评指南

1 实验室技能中的测量和关系

物理学的测量

实验室技能中的有效数字和标准符号

实验分析中的建立关系

2 向量

坐标系统和参考系

向量是什么?

向量加法

向量减法

使用向量分解的向量加法

习题

3 一维运动

入门

平均速度和瞬时运动

匀加速运动

重力加速度运动

运动图表分析

习题

4 二维运动

相对运动

平抛运动

平抛运动公式

匀速圆周运动

习题

5 力和牛顿运动定律

入门

力

牛顿运动定律

牛顿运动定律的静态应用

牛顿运动定律的动态应用

中心力

摩擦

习题

6 功、能量和功率

<<Barron's SAT II 物理>>

- 功和能量
- 弹性和胡克定律
- 习题
- 7 碰撞和动量
 - 内力和外力
 - 碰撞和动量变化
 - 动量守恒定律
 - 弹性碰撞和非弹性碰撞
 - 习题
- 8 引力
 - 开普勒行星运动定律
 - 牛顿万有引力定律
 - 牛顿关于开普勒定律的解释
 - 重力能和运行轨道
 - 习题
- 9 热能和温度
 - 功理论
 - 温度和热能
 - 温度测量
 - 热胀冷缩
 - 习题
- 10 热能的测量
 - 热容量
 - 相位变化
 - 习题
- 11 热能和功
 - 热能和机械能
 - 热力学
 - 热能的传递方式
 - 习题
- 12 波运动和声
 - 波运动
 - 声
 - 谐振和干扰
 - 空气柱振动
 - 弦振动
 - 多普勒效应
 - 习题
- 13 几何光学：反射和折射
 - 反射
 - 折射
 - 透镜
 - 色彩和光
 - 习题
- 14 物理光学：干涉和衍射
 - 光的干涉
 - 衍射

<<Barron's SAT II 物理>>

- 偏振
- 习题
- 15 电学
 - 电荷的本质
 - 电荷的检测和测量
 - 库仑定律
 - 电场
 - 电势和电势差
 - 电势差；电流——直流电
 - 欧姆定律与直流电路
 - 电能和功率
 - 习题
- 16 磁学
 - 一些基本术语
 - 有关磁铁的理论和事实
 - 电磁感应
 - 互感现象和变压器
 - 习题
- 17 电子元件
 - 电容器和电容
 - 阴极射线管
 - 习题
- 18 量子理论和核物理
 - 光电效应
 - 原子模型
 - 原子和放射性
 - 原子核的变化
 - 核反应
 - 粒子和粒子加速器
 - 裂变和聚变
 - 习题
- 19 狭义相对论
 - 爱因斯坦的狭义相对论
 - 长度收缩
 - 同时性和时间膨胀
 - 相对论质量和能量
 - 习题
- 测试题
 - 测试题1
 - 答案
 - 答案释疑
 - 自评指南
 - 测试题2
 - 答案
 - 答案释疑
 - 自评指南
 - 测试题3

<<Barron's SAT II 物理>>

答案

答案释疑

自评指南

附录

i. 三角函数值

ii. 公式总结

iii. 数学复习

iv. 物理参照表

v. 物质的密度

vi. 国际原子量

术语表

索引

章节摘录

版权页：插图：In the nineteenth century, chemical experiments to explain these effects showed the presence of molecules called ions in solution. These ions possessed similar affinities for certain objects, such as carbon or metals, placed in the solution. These objects are called electrades. The experiments confirmed the existence of two types of ions, positive and negative. The effects they produce are similar to the two types of effects produced when ebonite and glass are rubbed. Even though both substances attract small objects, these objects become charged oppositely when rubbed, as indicated by the behavior of the pith ball. Further, chemical experiments coupled with an atomic theory demonstrated that in solids it is the negative charges that are transferred. Additional experiments by Michael Faraday in England during the first half of the nineteenth century suggested the existence of a single, fundamental carrier of electric charge, which was later named the electron. The corresponding carrier of positive charge was termed the proton. When ebonite is rubbed with cloth, only the part of the rod in contact with the cloth becomes charged. The charge remains localized for some time (hence the name static). For this reason, among others, rubber, along with plastic and glass, is called an insulator. A metal rod held in your hand cannot be charged statically for two reasons. First, metals are conductors, that is, they allow electric charges to flow through them. Second, your body is a conductor, and any charges placed in the metal rod are conducted out through you (and into the earth). This effect is called grounding. The silver-coated pith balls mentioned in the preceding section can become statically charged because they are suspended by thread, which is an insulator. They can be used to detect the presence and sign of an electric charge, but they are not very helpful in obtaining a qualitative measurement of the magnitude of charge they possess. An instrument that is often used for qualitative measurement is the electroscope. One form of electroscope consists of two "leaves" made of gold foil (Figure 15.2a). The leaves are vertical when the electroscope is uncharged. As a negatively charged rod is brought near, the leaves diverge. If you recall the hypothesis that only negative charges move in solids, you can understand that the electrons in the knob of the electroscope are repelled down to the leaves through the conducting stem. The knob becomes positively charged, as can be verified with a charged pith ball, as long as the rod is near but not touching (Figure 15.2b). Upon contact, electrons are directly transferred to the knob, stem, and leaves. The whole electroscope then becomes negatively charged (Figure 15.2c). The extent to which the leaves are spread apart is an indication of how much charge is present (but only qualitatively). If you touch the electroscope, you will ground it and the leaves will collapse together.

<<Barron's SAT II 物理>>

编辑推荐

《Barron's SAT 2:物理(第10版)》：太傻：中国最顶尖的教育服务公司，集教育服务、教育咨询、网路服务、图书出版与教育培训为一体，是中国目前服务规模最大的专注于留学服务，特别是留学信息服务与留学咨询服务的顶尖公司。

旗下太傻咨询中心每年为几千位客户提供留学咨询服务，2011年度57%客户获得美国TOP50院校录取

。是中国最大的出国留学网站，独立IP访问量1800万 / 年，网页浏览量2-2亿次 / 年，被留学生誉为留学DIY天堂。

<<Barron's SAT II 物理>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介, 请支持正版图书。

更多资源请访问:<http://www.tushu007.com>