FIRST EDITION / FREE SAMPLE

Electrician Jobsite English & Troubleshooting

首批版练习册选段 / 一张术语卡、一个场景、作答与复习记录

This is a free excerpt. The full purchase is a printable HTML workbook with 30 term cards and 10 scenarios. This sample is not the full product.

本 PDF 是免费选段；完整付费商品为包含 30 张术语卡及 10 个场景的 HTML 可打印练习册。

01 / Term card - 术语卡

open circuit

开路/断路（open circuit）

Meaning / 释义

A break in the circuit path that prevents normal current flow; one side of the break may remain energized.

回路路径在某处断开，正常电流无法完整流过；断点一侧仍可能保持带电。

Jobsite context / 工地语境

“The light is out but the supply side is energized; the evidence points toward an open in the load path.”

“灯不亮但进线侧仍有电，现有证据更像 load path 上的 open circuit。”

Safety and usage / 安全与用法

An open can stop equipment without making it safe; floating conductors and shared circuits can also produce confusing readings.

不工作的设备可能因开路而停机，但并不因此安全；浮空导体和共享回路也会产生迷惑读数。

Scope / 适用范围

General foundation term. Testing to locate the open belongs to qualified personnel following system procedures.

通用基础术语。定位断点所需测试由合格人员按系统程序执行。

Your practice / 你的练习

Explain why an open circuit can still contain an energized point.

解释 open circuit 为什么仍可能存在带电点。

02 / Scenario - 先作答，再看下一页解析

One dead receptacle in an otherwise live room

同一房间只有一个插座没电

Situation / 现象

A lamp does not work at one receptacle, while other receptacles and lights in the room work. There is no odor, heat, or visible damage.

台灯在该插座不亮，但同一房间其他插座和照明正常；没有焦味、发热或可见损伤。

Stop point / 停手边界

Learners stop at external, non-invasive observations. Do not treat a three-light tester as a complete safety proof, remove the faceplate, or perform energized testing on an unknown circuit.

普通学习者只做外部、非侵入式观察。不要把三灯测试器结果当作完整安全证明，不要拆面板或在未知回路上带电测量。

Information to collect / 要收集的信息

1. Cross-check with a known-good, low-risk plug-in load: does the problem follow the load or stay with the receptacle?

用已知正常、低风险的插接负载交叉确认：问题是否跟随负载，还是固定在该插座。

2. Map the affected area: same wall, adjacent rooms, and outdoor/wet-location receptacles.

记录受影响范围：同一墙面、相邻房间、室外/潮湿区域插座是否也失电。

3. From outside, note any GFCI/RCD, switched receptacle, trip indication, loose faceplate, or recent alteration.

从外部观察是否有 GFCI/RCD、开关控制插座、跳闸指示、松动面板或装修改动。

4. Record protective-device labels and status without removing covers or reaching into the box.

记录保护装置标签和状态，但不拆面板、不伸入盒内。

Your decision and evidence / 你的判断与证据

Use the supplied facts. State what is uncertain and when to hand over. / 依据已知事实作答，写清未知项与移交边界。

03 / Answer review - 判断与解析

1. If the symptom follows the lamp, classify it first as a load/cord issue rather than a receptacle-circuit issue.

若故障跟随台灯移动，优先归类为负载/软线问题，而不是插座回路问题。

2. If several downstream points are dead, a protective trip, upstream GFCI/RCD, or upstream open deserves priority over a single-device failure.

若多个下游插座同时失电，保护装置动作、上游 GFCI/RCD 或上游开路比单个插座机械故障更值得优先验证。

3. If only one point is dead and looks normal, possibilities include switch control, an open termination, failed device, or incorrect circuit assumptions; external evidence cannot yet distinguish them.

若只有一个点失电且外观正常，可能性包括开关控制、端接开路、器件失效或标签/回路理解错误；现有证据不足以从外部确定哪一个。

4. Scorching, heat, crackling, looseness, or moisture upgrades the case from a simple outage to stop-use and professional inspection.

若出现烧痕、发热、噼啪声、松动或潮湿，立即从“普通失电”升级为停止使用和专业检查。

Best next decision / 最佳下一步

First cross-check the load and map the affected area. If the fault stays with the receptacle or requires opening/testing, hand it to a locally qualified person using the required isolation and test procedure.

先完成负载交叉确认和受影响范围映射；若问题固定在插座或需要开盖/电气测试，由符合当地要求的人员按隔离和测试程序继续。

Why / 解析

The best starting point is not guessing that the receptacle failed. First classify the fault as load-side, single-point, or multi-point. Scope evidence determines the next safe path; current information does not justify replacing a device.

最好的排故起点不是猜“插座坏了”，而是先把故障归到负载侧、单点或多点范围。范围证据会决定下一条安全路径；当前信息不能支持直接更换器件。

Regional scope / 地区边界

Reasoning practice for common plug-in final circuits; GFCI/RCD layout, ring/radial circuits, and test authority vary by region.

适用于常见插接式末端回路的思维训练；GFCI/RCD 布置、环形/辐射回路和测试权限因地区而异。

One correction for next time / 下次要修正的一点

04 / Practice record - 复习记录

Write your own response before checking the model. Revisit it the next day using a new location or device. A self-review is not a qualification or permission to work.

核对前先写下自己的表达。隔天更换位置或设备重练。自评不等于资质认证或现场作业许可。

Date / 日期	Task / 任务	My evidence or sentence / 证据与表达	One correction / 一处修正

Safety boundary / 安全边界

For language and troubleshooting-reasoning practice only—not field-work instructions. Codes, permits, role boundaries, conductor colors, device names, and test procedures vary by country, jurisdiction, system, and employer. Any task involving exposed energized parts, opening equipment, testing, isolation, re-energization, or repair must be performed by people with the locally required qualifications, training, authorization, and PPE, following current local rules, risk assessment, manufacturer instructions, and employer procedures. If a safe state cannot be confirmed, treat the equipment as energized and escalate.

仅供语言与排故思维训练，不是现场作业指令。电气规范、许可、职责边界、导线颜色、设备名称和测试流程因国家、地区、系统与雇主而异。任何接近裸露带电部件、开盖、测量、隔离、复电或维修的工作，都必须由具备当地所需资质、培训、授权和 PPE 的人员，按最新当地规范、风险评估、设备说明书及雇主程序执行。不能确认安全状态时，将设备视为带电并停手升级处理。

Source and complete materials / 来源及完整材料

Source entries: open-circuit; dead-receptacle-one-room. This excerpt uses the same source text as the first-edition HTML workbook.

来源条目：open-circuit、dead-receptacle-one-room。选段使用首批版 HTML 练习册的同一份内容数据。

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