TEST YOUR KNOWLEDGE
HEALTH & SAFETY



ELECTRICAL HEALTH & SAFETY

REVISION GUIDE BY LEWIS BLAKEMORE
Wigan & Leigh College

Accidents are the last thing anyone wants. Make sure you have a solid understanding of electrical health and safety.

Test your knowledge with these multiple-choice questions. Good luck!

Q1	What is the standard voltage of mains electricity in the UK?	Ans.
A	110V	
B	230V	✗
C	400V	
D	12V	

Q3	What colour is the earth wire in a UK electrical cable?	Ans.
A	Brown	
B	Blue	
C	Green and yellow	✗
D	Black	

Q2	Which organisation sets the regulations for electrical installations in the UK?	Ans.
A	NICEIC	✗
B	The IET	
C	HSE	
D	Ofgem	

Q4	What is the purpose of an RCD (Residual Current Device)?	Ans.
A	To prevent overloading	
B	To protect against electric shock	✗
C	To reduce energy consumption	
D	To control voltage fluctuations	

Q5	Which of the following is a common risk of using damaged electrical equipment?	Ans.
A	Increased energy bills	
B	Fire hazards	✗
C	Reduced equipment lifespan	
D	Noise pollution	

Q8	How often should electrical equipment in a workplace generally be inspected and tested?	Ans.
A	Every 6 months	
B	Annually	✗
C	Every 5 years	
D	When it shows visible damage	

Q6	When working on electrical systems, what is the first safety step?	Ans.
A	Test the voltage	
B	Wear rubber gloves	
C	Isolate the power supply	✗
D	Use insulated tools	

Q9	What is the main purpose of the Electricity at Work Regulations 1989?	Ans.
A	To provide guidance on energy efficiency	
B	To ensure electrical safety in the workplace	✗
C	To regulate electricity pricing	
D	To install renewable energy sources	

Q7	What does PAT testing stand for?	Ans.
A	Portable Appliance Test	✗
B	Professional Appliance Testing	
C	Periodic Appliance Test	
D	Practical Appliance Testing	

Q10	Which type of fire extinguisher is safe to use on electrical fires?	Ans.
A	Water	
B	Foam	
C	Carbon dioxide (CO_2)	
D	Powder	✗

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TEST YOUR KNOWLEDGE
ELECTRICAL CABLES



ELECTRICAL CABLES

Understanding cable types and their functions is essential for safe, efficient electrical installations.

REVISION GUIDE BY LEWIS BLAKEMORE
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Test your cable knowledge with this fun multiple-choice quiz!

Q1	Which British standard covers electrical wiring regulations in the UK?	Ans.
A	BS 7671	✗
B	BS 1363	
C	BS 5486	
D	BS 6701	

Q3	Which colour is used for the live wire in UK domestic wiring?	Ans.
A	Blue	
B	Brown	✗
C	Green and yellow	
D	Black	

Q2	What is the primary purpose of the earth wire in a cable?	Ans.
A	To carry the current for appliances	
B	To provide insulation	
C	To prevent electrical shocks	✗
D	To increase voltage	

Q4	What is the name of the protective layer around the cores of a cable?	Ans.
A	Insulation	
B	Conduit	
C	Sheath	✗
D	Armour	

Q5	What does the cross-sectional area of a cable determine?	Ans.
A	Its length	
B	Its current-carrying capacity	✗
C	Its resistance	
D	Its colour	

Q8	Which tool is used to strip the insulation from an electrical cable?	Ans.
A	Screwdriver	
B	Crimping Tool	
C	Wire Strippers	✗
D	Pliers	

Q6	What is the standard colour for the neutral wire in UK wiring?	Ans.
A	Green	
B	Yellow	
C	Blue	✗
D	Red	

Q9	What does a three-core cable typically consist of?	Ans.
A	Live, Neutral, and Earth	✗
B	Live, Neutral, and Sheath	
C	Live, Sheath, and Armour	
D	Neutral, Armour, and Earth	

Q7	Which type of cable is commonly used for outdoor electrical installations?	Ans.
A	Twin and Earth	
B	Armoured Cable	✗
C	Coaxial Cable	
D	Fibre Optic Cable	

Q10	Which material is most commonly used for electrical conductors in cables?	Ans.
A	Silver	
B	Iron	
C	Aluminium	
D	Copper	✗

Q11	Which of the following cable types is most suitable for indoor domestic installations where mechanical protection is required?	Ans.
A	Armoured Cable (SWA)	✗
B	Twin and Earth Cable	
C	Coaxial Cable	
D	Mineral Insulated Cable	

Q12	In a three-phase electrical system, what is the primary reason for using a neutral conductor in a four-core cable?	Ans.
A	To provide mechanical support	
B	To balance the current across phases	
C	To act as a protective earth	
D	To return unbalanced current from the phases	✗

Q13	What is the primary purpose of the insulation material used in electrical cables?	Ans.
A	To assist in current flow	
B	To provide earthing continuity	
C	To prevent electrical leakage	✗
D	To increase cable tensile strength	

Q14	When selecting a cable for a high-temperature environment, which of the following cable types is most appropriate?	Ans.
A	PVC Insulated Cable	
B	XLPE Insulated Cable	
C	Mineral Insulated Cable	✗
D	Armoured Cable	

Q15	What does the term “voltage drop” refer to in the context of an electrical cable?	Ans.
A	The reduction in current through the cable	
B	The loss of voltage due to resistance of the cable	✗
C	The breakdown of cable insulation under load	
D	The increase in cable temperature due to load	

Q16	Which of the following is the primary reason for using copper rather than aluminium in most electrical cables?	Ans.
A	Copper has higher tensile strength	
B	Copper is less expensive than aluminium	
C	Copper has lower electrical resistance	✗
D	Copper is lighter than aluminium	

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TEST YOUR KNOWLEDGE
BUSINESS BASICS

ARE YOU READY TO RUN A BUSINESS?

Good electrical skills are just one part of being self-employed. How much do you know about working with customers, managing money and staying professional?

Put your knowledge to the test with this multiple-choice quiz!

Q1	What is a sole trader?	Ans.
A	Someone employed by a company	
B	Someone who runs a business and keeps the profits	✕
C	Someone who works with multiple business partners	

Q3	What does public liability insurance cover?	Ans.
A	Business loans	
B	Injury or damage caused during work	✕
C	Staff wages	

Q2	Which of the following is not usually considered a business start-up cost?	Ans.
A	Tools and equipment	
B	Marketing materials	
C	Personal holiday expenses	✕

Q4	Why might you contact a customer before arriving at a job?	Ans.
A	To confirm the appointment or give an update	✕
B	To cancel without notice	
C	To ask for more money	

Q5	What should you do if you accidentally cause damage at a job?	Ans.
A	Try to hide it	
B	Be honest and let the customer know	✕
C	Leave without saying anything	

Q9	If a customer misses a payment, what's a good first step?	Ans.
A	Send a polite reminder	✕
B	Share their details on social media	
C	Leave it and hope they pay eventually	

Q6	Why do tradespeople add a mark-up to materials?	Ans.
A	To reduce their income	
B	To cover costs and make a fair profit	✕
C	To overcharge the customer	

Q10	Why is it important to track income and expenses?	Ans.
A	To monitor profit and manage your business properly	✕
B	It isn't necessary unless you hire an accountant	
C	So you can take more time off	

Q7	Which of these shows good customer service?	Ans.
A	Being professional and respectful	✕
B	Turning up late without explanation	
C	Leaving tools and mess behind	

Q11	What should you wear when visiting a customer's home?	Ans.
A	Whatever you feel most comfortable wearing	
B	Clean and appropriate workwear	✕
C	A branded t-shirt and tracksuit bottoms	

Q8	Why do self-employed electricians need van insurance?	Ans.
A	To insure their van	
B	To insure their tools and van	✕
C	To cover the customer's home	

Q12	What can help you stay organised as a business owner?	Ans.
A	Leaving everything to memory	
B	A planner or scheduling app	✕
C	Writing notes on scrap paper	

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