TEST YOUR KNOWLEDGE

RENEWABLE TECHNOLOGIES



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RENEWABLE TECHNOLOGIES

From heat pumps to solar thermal systems, staying up to date with renewable technologies is more important than ever.

Plumbers play a vital role in the shift towards energy-efficient and sustainable solutions. Think you've got the knowledge to tackle the future of heating? Put your knowledge to the test with this multiple-choice quiz! Answers are available on our website.

Q1	What is meant by the term renewable?	Ans.
A	It can be disposed of and a new one bought	
B	It can be replaced or has an endless supply	✗
C	Recycled nuclear energy	
D	Grey water from fresh water	

Q2	Identify three types of renewable resources from the list below:	Ans.
A	Ocean	✗
B	Hydropower	✗
C	Xayla power	
D	Geothermal	✗

Q3	Identify the best way to ensure saving water for a consumer is implemented?	Ans.
A	Install water saving components	
B	Educated and change behaviours	✗
C	Increase charges for water	
D	Screw down each isolation valve at appliances	

Q4	When was the Climate Change Act passed in the UK?	Ans.
A	January 2000	
B	November 2008	✗
C	April 2012	
D	May 2019	

Q5	What does SCoP mean?	Ans.
A	Seasonal Coefficient of Performance	✗
B	Second Conductive of Pressure	
C	Secondary Circulation of Pipework	
D	Selective Control of Pump	

Q6	How much unobstructed airflow must there be around a heat pump?	Ans.
A	150mm	
B	200mm	
C	350mm	
D	500mm	✗

Q7	Identify the **incorrect** answers if a heat pump is oversized	Ans.
A	Overheating	✗
B	Reserve energy for future proofing a system	✗
C	Higher temperatures achieved	✗
D	Energy efficient	✗

Q8	Identify three types of rainwater harvesting systems from the list below.	Ans.
A	Water Butt	✗
B	Direct pumped	✗
C	Gravity system	✗
D	Indirect soakaway system	

Q9	Identify the maximum flow temperature on a low temperature heating system according to Approved Document Part L dwellings.	Ans.
A	82ºC	
B	72ºC	
C	55ºC	✗
D	50ºC	

Q10	What is meant by the term 'embodied carbon'?	Ans.
A	Carbon emissions in a body	
B	The cycle of carbon emissions applied from a products life to disposal	✗
C	The pathways which carbon emissions find	
D	Carbon emissions found within a heat pump	

Q11	Do you need planning permission for a rainwater harvesting system?	Ans.
A	Yes	
B	No	✗

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TEST YOUR KNOWLEDGE
SANITATION

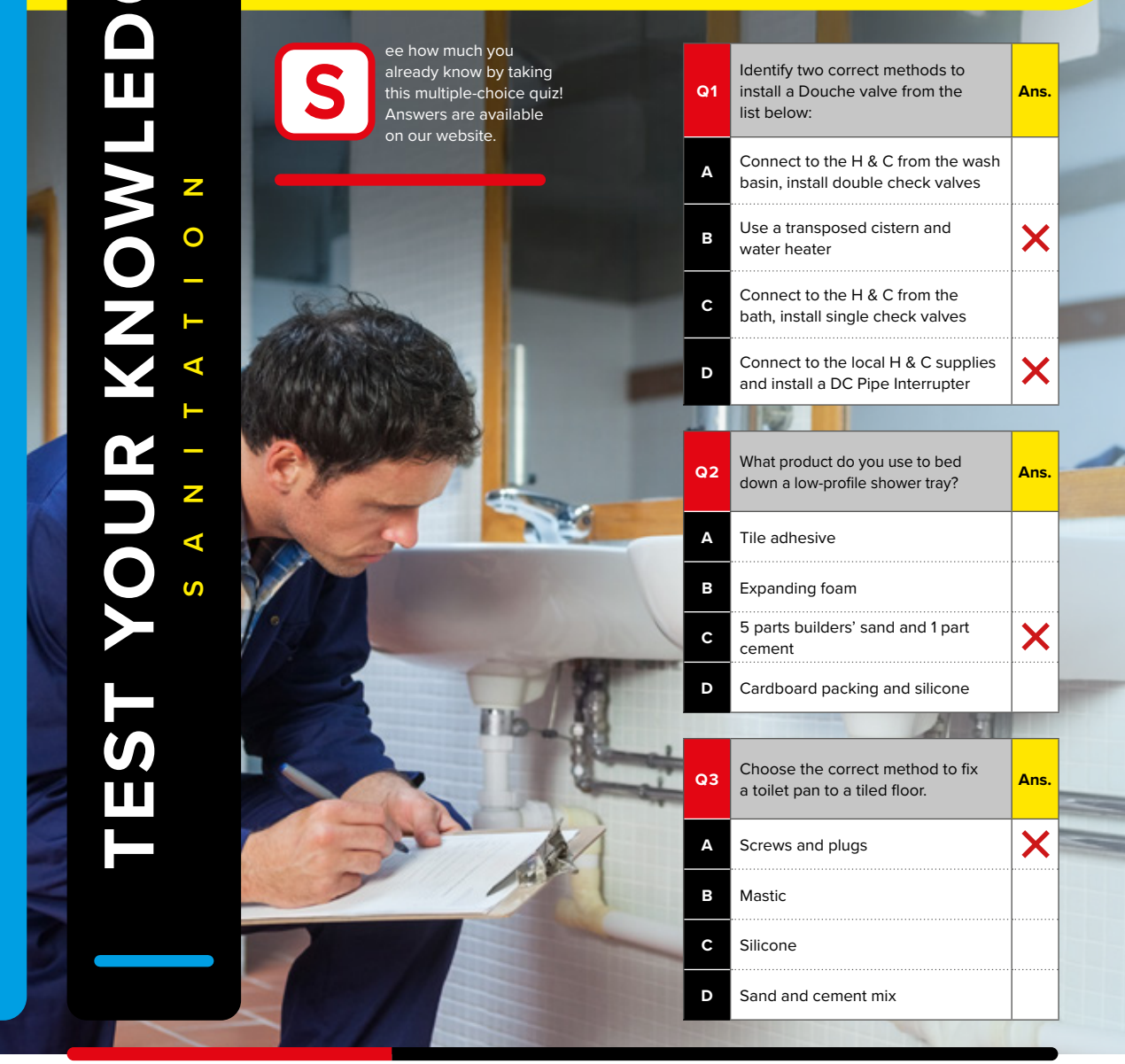


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SANITATION

Sanitation is a key part of plumbing - covering everything from basins and baths to perfectly sized waste pipes. Understanding how to install and maintain sanitation systems correctly is essential for any plumbing apprentice.

See how much you already know by taking this multiple-choice quiz! Answers are available on our website.



Q1	Identify two correct methods to install a Douche valve from the list below:	Ans.
A	Connect to the H & C from the wash basin, install double check valves	
B	Use a transposed cistern and water heater	✗
C	Connect to the H & C from the bath, install single check valves	
D	Connect to the local H & C supplies and install a DC Pipe Interrupter	✗

Q2	What product do you use to bed down a low-profile shower tray?	Ans.
A	Tile adhesive	
B	Expanding foam	
C	5 parts builders' sand and 1 part cement	✗
D	Cardboard packing and silicone	

Q3	Choose the correct method to fix a toilet pan to a tiled floor.	Ans.
A	Screws and plugs	✗
B	Mastic	
C	Silicone	
D	Sand and cement mix	

Q4	The wash basin you're installing has a mixer tap, the mixing of water takes place in the body. How is the pipework connected below?	Ans.
A	Flexi tail pipe connectors	
B	Male iron to copper adapters	
C	Single check valves and flexi tail pipe connectors	✕
D	Flexi hose onto a split 15 mm compression socket	

Q5	If a flexi hose is WRAS Approved, what does this mean?	Ans.
A	It complies with material and mechanical regulatory performance tests	✕
B	The hose can withstand high pressure	
C	It is approved for cold water systems	
D	It didn't pass quality checks in the UK	

Q6	Identify the correct type of trap applied when a discharge from a pressure relief valve on the UVHW cylinder is connected to a soil pipe.	Ans.
A	Running trap	
B	Self-closing waste valve with tundish adaptor	✕
C	Standpipe	
D	Self-closing waste valve	

Q7	Where is the spigot found on a WC pan?	Ans.
A	Under the cistern lid	
B	Under the toilet seat lid	
C	Where the waste outlet connects	✕
D	Where the waste overflows out	

Q8	What is the fluid category of a domestic kitchen sink?	Ans.
A	Cat 2	
B	Cat 3	
C	Cat 4	
D	Cat 5	✕

Q9	Which kitchen sink tap below isn't suitable for an AUK3 tap gap arrangement?	Ans.
A	Kitchen sink mixer tap swivel spout	
B	Pull out hose kitchen sink mixer tap/swivel spout	✕
C	Quarter turn mixer swivel tap	
D	Separate H & C high neck pillar taps	

Q10	A shower installation comes with a ring on the slider rail that the hose must go through to the shower head, why?	Ans.
A	Hang the shower gel on	
B	To keep the shower hose out of the way	
C	It's a backflow prevention device	✕
D	It can be used as a grab ring in case of slipping	

Q11	To install a bidet toilet you need to notify the water undertaker?	Ans.
A	True	✕
B	False	

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MIX & MATCH

How well do you know your sanitation? Match each term to its correct description. Good luck!



A
A trap fitted under a sink or basin to prevent sewer gases entering a building.
BOTTLE TRAP

B
Connects hot and cold supplies to a mixer tap.
FLEXI TAIL PIPE CONNECTORS

C
Ensures water fittings meet UK safety and performance standards.
WRAS APPROVAL

D
Safety feature for bidet or douche sprays.
DOUCHE VALVE

E
Prevents backflow into a drinking water system.
SINGLE CHECK VALVE

F
Releases excess pressure from an unvented hot water cylinder.
PRESSURE RELIEF VALVE (PRV) DISCHARGE

G
Used to fix tiles to walls and floors.
TILE ADHESIVE

H
Fluid that represents a slight health hazard due to substances like disinfectants or additives.
FLUID CATEGORY 3

I
Where the waste outlet connects on a WC pan.
WC PAN SPIGOT

WRAS APPROVAL
PRESSURE RELIEF VALVE (PRV) DISCHARGE
FLEXI TAIL PIPE CONNECTORS
DOUCHE VALVE
SINGLE CHECK VALVE
WC PAN SPIGOT
TILE ADHESIVE
FLUID CATEGORY 3
BOTTLE TRAP

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ABOVE-GROUND DRAINAGE



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Proper drainage is essential for keeping plumbing systems running smoothly - nobody wants leaks, blockages, or bad smells!

From soil stacks to vent pipes, understanding above-ground drainage is a must. Put your knowledge to the test with this multiple-choice quiz! Answers are available on our website.

Q1	Which of the following documents provides guidance on the installation of sanitary appliances?	Ans.
A	BS 806-5	
B	The Water Supply (Water Fittings) Regulations	
C	BS 12056	✗
D	Approved Document G	

Q2	Very long waste pipe runs can create trap seal loss. Identify which type of trap can help eliminate this.	Ans.
A	Anti-siphon trap	✗
B	Running trap	
C	P trap	
D	S trap	

Q3	Identify the maximum clipping distance for a 40mm vertical waste pipe.	Ans.
A	0.4m	
B	0.5m	
C	1m	
D	1.2m	✗

Q4	To avoid cross-flow, what is the non-connection zone dimension for a waste branch connection to a discharge stack where there is already a WC soil branch connected on the opposite side?	Ans.
A	100mm	
B	150mm	
C	175mm	
D	200mm	✗

Q5	What is the correct test pressure for an above-ground sanitation system?	Ans.
A	30mb	
B	38mm water gauge	✗
C	42mm water gauge	
D	52mm water gauge	

Q6	On a primary ventilated soil stack, where should the appliances be located?	Ans.
A	Anywhere the connections will reach	
B	Closely grouped around the stack	✗
C	It doesn't matter	
D	At the rear of the dwelling	

Q7	Complete the waste pipe bracket spacing intervals for horizontal runs.		Ans.
	Pipe size (mm)	Vertical centre (m)	Horizontal centre (m)
A	32	1.2	**0.5**
B	40	1.2	**0.5**
C	50	1.2	**0.5**

Q8	What is the distance of the highest branch connection that can be made on a stub stack from the invert level of the drain?	Ans.
A	750mm	
B	1m	
C	1.5m	
D	2m	✗

Q9	Can you install a boiler condense waste into a local rainwater pipe?	Ans.
A	True	
B	False	✗

Q10	Identify the smallest diameter a soil vent pipe can be reduced to on a primary stack.	Ans.
A	100mm	
B	75mm	✗
C	50mm	
D	40mm	

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