

28 Which row identifies methods used to prevent iron from rusting?

	greasing	painting	washing with distilled water
A	✓	x	✓
B	x	✓	✓
C	✓	✓	x
D	✓	✓	✓

key

✓ = yes

x = no

27 An iron nail is fully covered with zinc to prevent it from rusting.

Which row describes this method of protection and explains why zinc is used to protect the iron nail?

	method of protection	reason zinc is used
A	barrier method and sacrificial protection	zinc is more reactive than iron
B	barrier method and sacrificial protection	iron is more reactive than zinc
C	sacrificial protection only	zinc is more reactive than iron
D	barrier method only	iron is more reactive than zinc

29 Galvanising prevents iron from rusting.

Which statements about galvanising are correct?

- 1 Galvanising involves coating the iron with silver.
- 2 Galvanising prevents oxygen and water from coming into contact with the iron.
- 3 Galvanising works because the metal coating loses electrons more readily than iron.

A 1, 2 and 3 **B** 1 and 3 only **C** 2 and 3 only **D** 2 only

27 Zinc is used to galvanise iron to prevent it from rusting.

Which statements are correct?

- 1 Galvanising is an example of a barrier method.
- 2 If the zinc is scratched, the iron will rust very quickly.
- 3 Galvanising is an example of sacrificial protection.
- 4 Zinc is more reactive than iron and so accepts electrons more readily.

A 1, 2 and 4 **B** 1 and 3 **C** 2, 3 and 4 **D** 2 and 3 only

27 An example of sacrificial protection is the fitting of zinc blocks to the outside of a ship's steel hull.

Which statement explains why zinc is used to protect the iron in the steel from rusting?

- A** Zinc is more reactive than iron so it loses electrons more easily.
- B** Zinc is less reactive than iron so it loses electrons more easily.
- C** Zinc is more reactive than iron so it gains electrons more easily.
- D** Zinc is less reactive than iron so it gains electrons more easily.