

C4.2 Pre-Unit Quiz: Extraction of Metals

1. Choose the correct general word equation for the reaction of metals and acid. [1]

Tick (✓) **one** box.

A. Acid + metal \rightarrow salt + water

☐

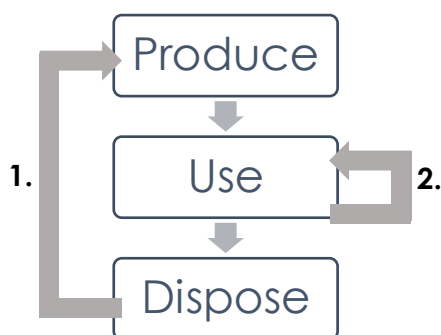
B. Acid + metal \rightarrow salt + hydrogen

☐

C. Acid + metal \rightarrow salt + carbon dioxide

☐

2. The diagram below shows ways to save the limited resources that are on Earth.



Complete the gaps in the diagram.

[1]

Tick (✓) **one** box.

A. 1 = recycle 2 = reduce

☐

B. 1 = reduce 2 = recycle

☐

C. 1 = recycle 2 = reuse

☐

D. 1 = reuse 2 = recycle

☐

3. The atomic structure of metals relates to their position on the Periodic Table.



Name:

Class:



In which group of the Periodic Table would you find the element represented by this electronic configuration? [1]

Tick (✓) **one** box.

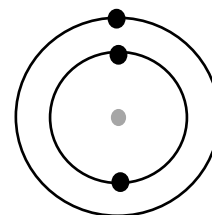
A. Group 2

☐

B. Group 3

☐

C. Group 1

☐

4. A finite resource is a resource that...

[1]

Tick (✓) **one** box.

A. is being used up more quickly than it is being made.

☐

B. is being made more quickly than it is being used up.

☐

C. is running out.

☐

5. Choose which describes a property of alkali metals.

[1]

Tick (✓) **one** box.

A. Unreactive

☐

B. Very high melting point

☐

C. Soft

☐

6. Choose the product of the following chemical reaction.



Name:

Class:



Lithium + fluorine \longrightarrow

[1]

Tick (✓) **one** box.

A. Lithium fluorate

☐

B. Lithium fluoride

☐

C. Lithium fluorine

☐

7. Choose the correct electronic configuration of a sodium atom.

The atomic number of sodium is 11.

[1]

Tick (✓) **one** box.

A. 2,8,1

☐

B. 2,9

☐

C. 4,7

☐

8. Choose the best explanation for why distillation isn't often used to obtain drinking water from salt-water.

[1]

Tick (✓) **one** box.

A. The boiling points of water and salt are very close so they are hard to separate accurately by distillation

☐

B. Only small volumes can be distilled


☐

C. It is very expensive due to the energy required

☐

9. This box shows the reactivity series.

Choose a metal that would displace aluminium from

Potassium	 Increasing reactivity
Sodium	
Calcium	
Aluminium	
Carbon	
Iron	
Tin	
Lead	
Hydrogen	
Below hydrogen	

Name:

Class:



aluminium oxide.

[1]

Tick (✓) **one** box.

A. Iron

☐

B. Platinum

☐

C. Sodium

☐

10. Iron oxide is an iron ore found on Earth.

Choose which method would extract the iron from iron oxide.

[1]

Tick (✓) **one** box.

A. React with a more reactive metal to displace the iron

☐

B. Filter the iron oxide to separate out the iron

☐

C. Add an acid to separate the iron and the oxygen

☐