

Extraction of copper

Before you answer the puzzles below fill in the table of some of the compounds involved in the extraction of copper using:

| CH ₄ | CuCO ₃ | CO ₂ | H ₂ O |
|------------------|-------------------|-----------------|------------------|
| Name | | Formula | |
| copper carbonate | | | |
| copper oxide | | CuO | |
| carbon dioxide | | | |
| methane | | | |
| water | | | |

Gridlock 1

Each row, column and 2 x 2 box contains information about the first four compounds listed above. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

| name | | formula | |
|---------|------------------|---------|-------------------|
| | copper carbonate | | CH ₄ |
| | | | CuCO ₃ |
| | | | |
| CuO | | | carbon dioxide |
| formula | | name | |

gridlocks – can you unlock the grid?

Gridlock 2

Each row, column and 2 x 2 box contains information about each of the first four compounds in the table.

| name | | formula | |
|-----------------|--|---------|-------------------|
| copper oxide | | | CuCO ₃ |
| | | | |
| | | | methane |
| CO ₂ | | | |
| formula | | name | |

Gridlock 3

You will need to identify which four compounds are in this puzzle.

| name | | formula | |
|--------------|------------------|------------------|--|
| copper oxide | | | |
| | | CH ₄ | |
| | | copper carbonate | |
| | H ₂ O | | |
| formula | | name | |

Extraction of copper – answers

Before you answer the puzzles below fill in the table of some of the compounds involved in the extraction of copper using:

CH₄ CuCO₃ CO₂ H₂O

| Name | Formula |
|------------------|-------------------|
| copper carbonate | CuCO ₃ |
| copper oxide | CuO |
| carbon dioxide | CO ₂ |
| methane | CH ₄ |
| water | H ₂ O |

Puzzle 1 – answers

Each row, column and 2 x 2 box contains information about the first four compounds listed above. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

| name | | formula | |
|-------------------|------------------|------------------|-------------------|
| carbon dioxide | copper carbonate | CuO | CH ₄ |
| methane | copper oxide | CO ₂ | CuCO ₃ |
| CuCO ₃ | CO ₂ | methane | copper oxide |
| CuO | CH ₄ | copper carbonate | carbon dioxide |
| formula | | name | |

gridlocks – can you unlock the grid?

Puzzle 2 – answers

Each row, column and 2 x 2 box contains information about each of the first four compounds in the table.

| name | | formula | |
|-------------------|------------------|------------------|-------------------|
| copper oxide | carbon dioxide | CH ₄ | CuCO ₃ |
| methane | copper carbonate | CuO | CO ₂ |
| CuCO ₃ | CuO | carbon dioxide | methane |
| CO ₂ | CH ₄ | copper carbonate | copper oxide |
| formula | | name | |

Puzzle 3 – answers

You will need to identify which four compounds are in this puzzle.

| name | | formula | |
|-------------------|------------------|------------------|-------------------|
| copper oxide | methane | H ₂ O | CuCO ₃ |
| water | copper carbonate | CH ₄ | CuO |
| CH ₄ | CuO | copper carbonate | water |
| CuCO ₃ | H ₂ O | copper oxide | methane |
| formula | | name | |