## gridlocks - can you unlock the grid?

## Elements 3

Before you answer the puzzles below fill in the table of elements using:

| nitrogen | Ca | Ni | Zn | Sr | P | carbon | Ba |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Element | Symbol | Element | Symbol |
| :---: | :---: | :---: | :---: |
| magnesium | Mg |  | C |
| calcium |  | oxygen | O |
| strontium |  | zinc |  |
| barium | N | nickel | Fe |
|  |  | iron | Cu |
| phosphorus |  | copper |  |

## Gridlock 1

Each row, column and $2 \times 2$ box contains information about the first four elements listed above, these are all in group 2. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

| name |  |  | symbol |
| :--- | :--- | :--- | :--- |
| magnesium |  |  | Ba |
|  |  | barium |  |

## gridlocks - can you unlock the grid?

Gridlock 2
Each row, column and $2 \times 2$ box contains the p block elements: phosphorus, oxygen, carbon and nitrogen.

| name |  |  | symbol |
| :--- | :--- | :--- | :--- |
| phosphorus |  |  |  |
|  |  | O |  |

## Gridlock 3

Each row, column and $2 \times 2$ box contains the d block metals: zinc, copper, iron and nickel.

| name |  |  | symbol |
| :--- | :--- | :--- | :--- |
| nickel |  |  | Zn |
|  |  |  |  |

## gridlocks - can you unlock the grid?

## Elements 3 - answers

Before you answer the puzzles below fill in the table of elements using:

| nitrogen | Ca | Ni | Zn | Sr | $\mathbf{P}$ | carbon | Ba |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Element | Symbol | Element | Symbol |
| :---: | :---: | :---: | :---: |
| magnesium | Mg | carbon | C |
| calcium | Ca | oxygen | O |
| strontium | Sr | zinc | Zn |
| barium | Ba | nickel | Fe |
| nitrogen | N | iron | Cu |
| phosphorus | P | copper |  |

## Puzzle 1 - answers

Each row, column and $2 \times 2$ box contains information about the first four elements listed above, these are all in group 2. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

| name |  | symbol |  |
| :---: | :---: | :---: | :---: |
| magnesium | calcium | Sr | Ba |
| strontium | barium | Mg | Ca |
| Ca | Sr | barium | magnesium |
| Ba | Mg | calcium | strontium |
| symbol |  | name |  |

## gridlocks - can you unlock the grid?

Puzzle 2 - answers
Each row, column and $2 \times 2$ box contains the p block elements: phosphorus, oxygen, carbon and nitrogen.

| name |  | symbol |  |
| :---: | :---: | :---: | :---: |
| phosphorus | oxygen | C | N |
| carbon | nitrogen | 0 | P |
| 0 | P | nitrogen | carbon |
| $N$ | C | phosphorus | oxygen |
| symbol |  | name |  |

## Puzzle 3 - answers

Each row, column and $2 \times 2$ box contains the d block metals: zinc, copper, iron and nickel.

| name |  | symbol |  |
| :---: | :---: | :---: | :---: |
| nickel | copper | Fe |  |
| iron | zinc |  |  |
| Zn |  | Cu |  |
| Cu |  |  |  |

