## Electronegativity values

No one expects you to learn the electronegativity value for all the elements but it is worth remembering a few of the main ones. Before you answer the puzzles below fill in the table of electronegativities using:
$2.1 \quad 0.7$

| element | electronegativity | element | electronegativity |
| :---: | :---: | :---: | :---: |
| F |  | Cs |  |
| O | 3.5 | N | 3.0 |
| Cl | 2.5 | Br | 2.8 |
| C | K | 0.8 |  |
| H |  | Na | 0.9 |

## Gridlock 1

Each row, column and $2 \times 2$ box contains information about the elements $\mathrm{F}, \mathrm{O}, \mathrm{Cl}$ and C . Use your problem solving skills and the answers in the table above to fill in the blank boxes.

| element |  |  |  | electronegativity |
| :---: | :---: | :---: | :---: | :---: |
| F |  |  | 2.5 |  |
|  |  | C |  |  |
|  |  |  |  |  |

Gridlock 2
Each row, column and $2 \times 2$ box contains information about each of the elements $\mathrm{H}, \mathrm{Cs}, \mathrm{N}$ and Br .

| Cs element |  |  | electronegativity |  |
| :--- | :--- | :--- | :--- | :--- |
| Cs |  |  |  |  |
|  |  |  |  |  |

## Gridlock 3

Each row, column and $2 \times 2$ box contains information about each of the elements $\mathrm{F}, \mathrm{Na}, \mathrm{K}$ and C .

| element |  | F electronegativity |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

grídlocks- can you unlock the girid?
Electronegativity values - answers

| element | electronegativity | element | electronegativity |
| :---: | :---: | :---: | :---: |
| F | 4.0 | Cs | 0.7 |
| O | 3.5 | N | 3.0 |
| Cl | 3.0 | Br | 2.8 |
| C | 2.5 | K | 0.8 |
| H | $\mathbf{2 . 1}$ | Na | 0.9 |

## Puzzle 1 - answers

| element |  | electronegativity |  |
| :---: | :---: | :---: | :---: |
| F | O | 3.0 | 2.5 |
| Cl | C | 4.0 | 3.5 |
| 3.5 | 3.0 | C | F |
| 2.5 | 4.0 | 0 | Cl |
| electronegativity |  | element |  |

gridlocks- can you unlock the gird?
Puzzle 2 - answers

| element |  | electronegativity |  |
| :---: | :---: | :---: | :---: |
| Cs | Br | 3.0 | 2.1 |
| N | H | 2.8 | 0.7 |
| 2.8 | 0.7 | H | N |
| 2.1 | 3.0 | Cs | Br |
| electronegativity |  | element |  |

Puzzle 3 - answers

| element |  | electronegativity |  |
| :---: | :---: | :---: | :---: |
| Na | F | 0.8 | 2.5 |
| C | K | 0.9 | 4.0 |
| 4.0 | 0.9 | C | K |
| 0.8 | 2.5 | F | Na |
| electronegativity |  | element |  |

