

## **Everyday chemicals (14–16)**

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

| $H_2O_2$ $C_2H_5OH$ | $HNO_3$ $SO_2$ $CO$ |  |
|---------------------|---------------------|--|
| name                | formula             |  |
| sodium hydroxide    | NaOH                |  |
| silver nitrate      | AgNO₃               |  |
| carbon monoxide     |                     |  |
| hydrogen peroxide   |                     |  |
| sulfur dioxide      |                     |  |
| ethanol             |                     |  |
| nitric acid         |                     |  |
| manganese(IV) oxide | MnO <sub>2</sub>    |  |

## **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 |                   |
|----------------|------|---------|-------------------|
| silver nitrate |      |         | NaOH              |
|                |      |         |                   |
|                | СО   |         | hydrogen peroxide |
|                |      |         |                   |
| forn           | nula | na      | ime               |





# **gridlocks** – can you unlock the grid?

## Puzzle 2

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

| name    |      | formula |                     |
|---------|------|---------|---------------------|
| ethanol |      |         | SO <sub>2</sub>     |
|         |      |         |                     |
|         |      |         | manganese(IV) oxide |
| HNO₃    |      |         |                     |
| forn    | nula | na      | me                  |

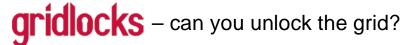
#### Puzzle 3

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

| name        |      | formula          |    |
|-------------|------|------------------|----|
| nitric acid |      |                  |    |
|             |      | SO <sub>2</sub>  |    |
|             |      | sodium hydroxide |    |
|             | СО   |                  |    |
| forn        | nula | na               | me |







## Everyday chemicals (14-16) - answers

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

| $H_2O_2$ $C_2H_5OH$ | HNO <sub>3</sub> SO <sub>2</sub> CO |  |
|---------------------|-------------------------------------|--|
| name                | formula                             |  |
| sodium hydroxide    | NaOH                                |  |
| silver nitrate      | AgNO₃                               |  |
| carbon monoxide     | СО                                  |  |
| hydrogen peroxide   | H <sub>2</sub> O <sub>2</sub>       |  |
| sulfur dioxide      | SO <sub>2</sub>                     |  |
| ethanol             | C <sub>2</sub> H₅OH                 |  |
| nitric acid         | HNO <sub>3</sub>                    |  |
| manganese(IV) oxide | MnO <sub>2</sub>                    |  |

## 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                       |                   |
|-------------------------------|-------------------|-------------------------------|-------------------|
| silver nitrate                | hydrogen peroxide | СО                            | NaOH              |
| carbon monoxide               | sodium hydroxide  | H <sub>2</sub> O <sub>2</sub> | AgNO₃             |
| NaOH                          | CO                | silver nitrate                | hydrogen peroxide |
| H <sub>2</sub> O <sub>2</sub> | AgNO <sub>3</sub> | sodium hydroxide              | carbon monoxide   |
| forn                          | nula              | na                            | ime               |





## gridlocks – can you unlock the grid?

## Puzzle 2 - answers

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

| name                |                  | formula          |                     |
|---------------------|------------------|------------------|---------------------|
| ethanol             | nitric acid      | MnO <sub>2</sub> | SO <sub>2</sub>     |
| manganese(IV) oxide | sulfur dioxide   | C₂H₅OH           | HNO₃                |
| SO <sub>2</sub>     | C₂H₅OH           | nitric acid      | manganese(IV) oxide |
| HNO₃                | MnO <sub>2</sub> | sulfur dioxide   | ethanol             |
| formula             |                  | name             |                     |

## Puzzle 3 – answers

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

| name            |                  | formula          |                 |
|-----------------|------------------|------------------|-----------------|
| nitric acid     | sulfur dioxide   | СО               | NaOH            |
| carbon monoxide | sodium hydroxide | SO <sub>2</sub>  | HNO₃            |
| SO <sub>2</sub> | HNO₃             | sodium hydroxide | carbon monoxide |
| NaOH            | СО               | nitric acid      | sulfur dioxide  |
| forn            | nula             | na               | me              |



