

## The gases in air

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

oxygen 21	carbon dioxide /8	3 CO₂ argon
Name	Formula	% abundance in air
nitrogen	N <sub>2</sub>	
	O <sub>2</sub>	
	Ar	0.93
		0.04

#### **Gridlock 1**

Each row, column and 2 x 2 box contains information about each of the four main gases in air. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

name		% abundance in air	
oxygen			
		0.04	
		nitrogen	
	0.93		
% abunda	ance in air	na	me



## gridlocks – can you unlock the grid?

## **Gridlock 2**

Each row, column and 2 x 2 box contains information about each of the four main gases in air.

name		formula	
nitrogen			CO <sub>2</sub>
	carbon dioxide	N <sub>2</sub>	
	Ar		
		21	
forn	nula	% abunda	ance in air

### **Gridlock 3**

Each row, column and 2 x 2 box contains information about each of the four main gases in air.

formula		% abundance in air	
O <sub>2</sub>			78
			CO <sub>2</sub>
0.93			
% abunda	ance in air	forn	nula





## gridlocks - can you unlock the grid?

## The gases in air - answers

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

oxygen 21	carbon dioxide 78	B CO₂ argon
Name	Formula	% abundance in air
nitrogen	$N_2$	78
oxygen	O <sub>2</sub>	21
argon	Ar	0.93
carbon dioxide	CO <sub>2</sub>	0.04

#### Puzzle 1 - answers

Each row, column and 2 x 2 box contains information about each of the four main gases in air. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

name		% abundance in air	
oxygen	carbon dioxide	0.93	78
argon	nitrogen	0.04	21
0.04	21	nitrogen	argon
78	0.93	oxygen	carbon dioxide
% abunda	ance in air	na	me



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

### Puzzle 2 - answers

name		formula	
nitrogen	oxygen	Ar	CO <sub>2</sub>
argon	carbon dioxide	N <sub>2</sub>	O <sub>2</sub>
O <sub>2</sub>	Ar	0.04	78
CO <sub>2</sub>	N <sub>2</sub>	21	0.93
forn	nula	% abunda	ance in air

### Puzzle 3 - answers

formula		% abundance in air	
O <sub>2</sub>	Ar	0.04	78
CO <sub>2</sub>	N <sub>2</sub>	21	0.93
78	21	Ar	CO <sub>2</sub>
0.93	0.04	N <sub>2</sub>	O <sub>2</sub>

% abundance in air formula



