

WRITING & SCIENCE

THE				
84 Po Polonium	68 Er Erbium	22 Ti Titanium	88 Ra Radium	39 Y Yttrium
5 B Boron	8 O Oxygen	54 Xe Xenon		

WRITING & SCIENCE

THE POETRY BOX

CONTENTS

Introduction	2
Two Warm-Ups	4
Activity 1: Metaphor-Making	5
Activity 2: Watch That Title!	7
Activity 3: Mini-Worlds	11
Activity 4: Random Numbers	13

Both scientist and poet can nurture a deeper awareness of what's around us - and in us. These writing exercises stimulate authentic connections between science and poetry, but they go way beyond 'science + poetry' to 'science x poetry'. The Poetry Box is a 'creativity catalyst', sparking fresh ways to re-cognise and re-create some corner of your own observable world.

Mario Petrucci / Saison Poetry Library (2010)

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from a to a

or Getting Nowhere

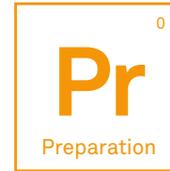
finding the freeway
to myself i put my foot
down to my own motive
floorboards asking the rear
-view what to do
next

it said

brother
the faster you
eat me up the more you
leave behind – you'll see
more of me slower so why not
pull over 'cause this road is going
backwards and your incessant
tyres are speeding up

the world

MARIO PETRUCCI



TWO WARM-UPS

- 1 **Make a list of thoughts that occur to you when you see or hear the word **science**.**

Your list can include ideas, associations, memories (lab experiments, driving past a power station, breathing petrol fumes, sci-fi films, famous scientists, etc.) – anything you like.

When you've got at least six entries, do the same again for the word **poetry.**

If you're working in a group, compare and discuss your lists.

What do they reveal?

- 2 **Invent a strange new word that sounds 'scientific'. Now imagine a possible definition for that word.**

Write your definition down, carefully, as though you were going to submit it to an encyclopaedia.





METAPHOR-MAKING

Metaphor is crucial to poetry. Put simply, it usually involves talking about one thing in terms of something else (e.g. *silver bird* for aeroplane or *grey rind* for a miner's clothes).

Good metaphors often surprise us, making connections we don't expect; but we recognise in them a rich and profound truth – even if we can't always put our finger on what that truth is. In fact, a metaphor's deepest effects might occur *because* we can't explain it away rationally.

In this exercise, you won't be writing a poem. Instead, you'll explore one way to move towards metaphor, simply by using the things that surround you. Here, the focus is on modern (or 'scientific') materials; but, actually, any kind of item can be used.

1 Look around you. Make a list of objects that technology has helped to create.

Each item should include the object and the material it's made from, separated by 'of', like this:

A pane of glass A wall of brick
A carpet of fibres A roof of zinc

(Assume that most materials like brick and glass have some link to modern technology.)

2 Extend your list to things that aren't in your field of view.

Again, these should arise from a technological process (tables of plastic, a haze of pollution, stockings of nylon, etc).

3 Now, for each item in your list, cross out the material and replace it with any emotion of your choice (examples below).

Don't worry if some of them don't make obvious sense...

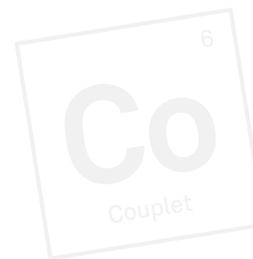
A pane of **certainty** A roof of **confidence**

A haze of **jealousy** Stockings of **anger**

If you need to change any words slightly so they fit (or sound) better, that's okay.

4 You have now created a kind of poetic imagery, a form of metaphor.

Which items in your final list do you like most (or least)? Look more closely – might some of the most bizarre or confusing items actually be the most interesting? Why / why not?





WATCH THAT TITLE !

- 1 Examine the scientific objects on pages 9 and 10. Choose one you like.
- 2 At the top of a sheet of paper, write down the name of your chosen object – as a title.
- 3 Underneath that title, describe your item plainly, using every sense you can (not just the visual).

Focus on its most simple physical features; keep to the basics of what it does.

Don't mention your item again by name, but don't be afraid to make observations that are really obvious, or that you're not sure about. The important thing is to build a list of short, punchy statements about it.

Here are a few examples to help you...

THE MOON

It is silvery.
It has craters all over it.
Wolves speak to it.
It shouldn't blind you.
It causes the tides...

SULPHUR

It's a yellow powder.
Burning, it smells horrible – worse than hell.
Don't breathe it in.
Sometimes, it can heal you...

DNA

It is invisible to the naked eye.
Without it, we couldn't exist.
We try to unravel its secrets.
It is two snakes embracing.
It is used to identify you...

If you get stuck, ask for help or do some quick research in books or online.

- 4 This is a key moment. Cross out the title of your piece. Next, replace it with any of the words given below (these are emotions and other abstract nouns):

Anger	Jealousy	Happiness	Regret	Hope
Falling in love	Pride	Fear	Confidence	Respect
Loneliness	Curiosity	Friendship	Boredom	Surprise...
Crime	War	History	Advice	News
Duty	Memory	Decay	Luck	Logic
Fate	Justice	Sleep	Death	Time

Try to choose a new title that gives strange or exciting effects. Here are some examples:

~~THE MOON~~ LUCK

It is silvery.
It has craters all over it.
Wolves speak to it.
It shouldn't blind you.
It causes the tides...

~~SULPHUR~~ PRIDE

It's a yellow powder.
Burning, it smells horrible – worse than hell.
Don't breathe it in.
Sometimes, it can heal you...

~~DNA~~ SLEEP

It is invisible to the naked eye.
Without it, we couldn't exist.
We try to unravel its secrets.
It is two snakes embracing.
It is used to identify you...

- 5 You can leave the new piece exactly as it is, or try to improve it.

Perhaps it builds more convincingly if you change the order of the lines? Maybe it's stronger with something added or cut out? You might feel some lines don't *really* work under the new title (how can sleep be 'used to identify you?') – or are these 'wrong' bits some of the best of all?



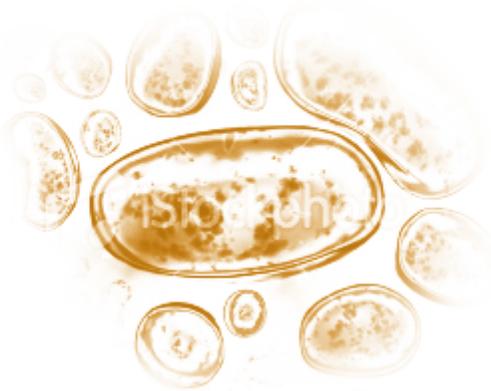
MAGNET



GUNPOWDER



CORAL



AMOEBA



BLOOD



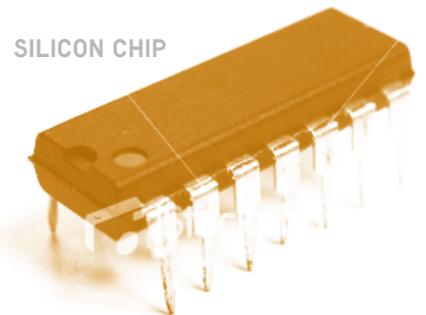
FOSSIL



ORCHID



REWRITABLE CD



SILICON CHIP

MINI-WORLDS

Inside the Poetry Box is an envelope marked 'SLIDES'. Pick any slide from the envelope – it doesn't matter which – and slot it carefully into the viewing panel at one end of the box.

Take a good look at it, using the eyeholes at the other end of the box. Don't be distracted by what the image is 'in real life'. Instead, think of it as a brand new **planet** floating in space...

Your mission. You're a top space explorer. The slide you've just been looking at is what you can see, today, from your spaceship. No human has ever been here, so Earth HQ wants a report. You'll need to **write this down**, as you go, describing everything in detail. Use good, clear sentences, as if your words were being beamed back to Earth 'live' for global TV.

The planet. First, transport yourself down to the **surface**. What do you see when you look up, down, towards the horizon? What is the landscape like? Note the quality of the light, the peculiar weather systems. Write everything down, straight into your **report**.

Sensors on! As a trained astronaut, you know there's far more to new planets than what you can see. Are there strange sounds and (if the air is breathable) smells? Do you detect unusual temperatures, pressure and humidity – or ominous tremors underfoot? Use **all** your senses, and your clever instruments, to create a vivid record of the scene.

Life? Decide quickly: is this planet a lot like Earth; or is it violent, barren or weird? Most importantly, does it support living things? (If so, they don't *have* to be green aliens!) What about plants, animals? Are there bizarre forms of life that seem like science fiction?

The incident. Suddenly, something dramatic happens. Describe the incident, in detail, in your report. If you're still alive afterwards, add some final words on how your mission ends. Should earthlings visit this planet, or stay well clear?

Name it. Does the planet already have a name? If not, as its discoverer you get to make one up. Does your name reflect the planet's character or inhabitants in some way?

Reporting back. When your report is complete, check it. Then read it to the rest of the group. Having read it out loud, are there any changes you'd now like to make?

Finally... a poem. Turn the best bits of your report into a poem. It doesn't have to rhyme! If it helps, stick to short lines and simple phrases. The poem's title is the planet's name.

If you have time, pick another slide and do the exercise again for that new planet. Create a second report and poem.

The images in the slides are produced at huge magnification (i.e. very close up). For those of you who really want to know what you were looking at, see back page.





RANDOM NUMBERS

- 1 Draw a table like the one below and fill columns A and B with random numbers between 1 and 20.

	A	B
S		
P		
S		
P		
S		
P		

- 2 Now find the envelope marked **Texts** in the Poetry Box. Select one **Scientific Text** (marked S) and one **Poetry Text** (marked P).
- 3 Each pair of numbers in your table is a 'grid reference' pointing to random words in the texts. **A = the PAGE number** and **B = the LINE number**, like this:

	A PAGE	B LINE	
S	6	11	S=SCIENCE BOOK: PAGE 6, LINE 11 e.g. '...an isotope of radon. Normally...'
P	13	14	P=POETRY BOOK: PAGE 13, LINE 14 e.g. '...run quick pulses of electric blood...'

Use this system to fill your table with lines from the texts (be sure to use the science text for 'S' rows, and the poetry text for 'P' rows).

Note: if, for any reason, the numbers don't work (e.g. the page is blank, or there aren't enough lines), don't worry. Just leave the space blank, or try a different book.

- 4 When completed, read your table as a **single piece of crazy text**.

How can you use it to generate a short piece of writing? Discuss the possibilities with your group, or try one of the suggestions below.

- (a) Use any word or phrase in the table as a **'trigger'**, or starting point.
- (b) **Respond** to any word or phrase that catches your eye (perhaps it provokes a new idea, or evokes a memory).
- (c) Look for any kind of **pattern** in your table: a glimpse of a strange story or conversation, or a fragment of a character. Do any phrases collide to create something unexpected or surreal? It doesn't have to 'make sense': what's important is that you get thinking. Whatever you find, however slight, try to fill in the gaps or develop it in some way.

- 5 Create another (blank) table, and fill it in using two books from your school library or local library (one scientific, the other poetry). Use your new table to repeat the exercise.

