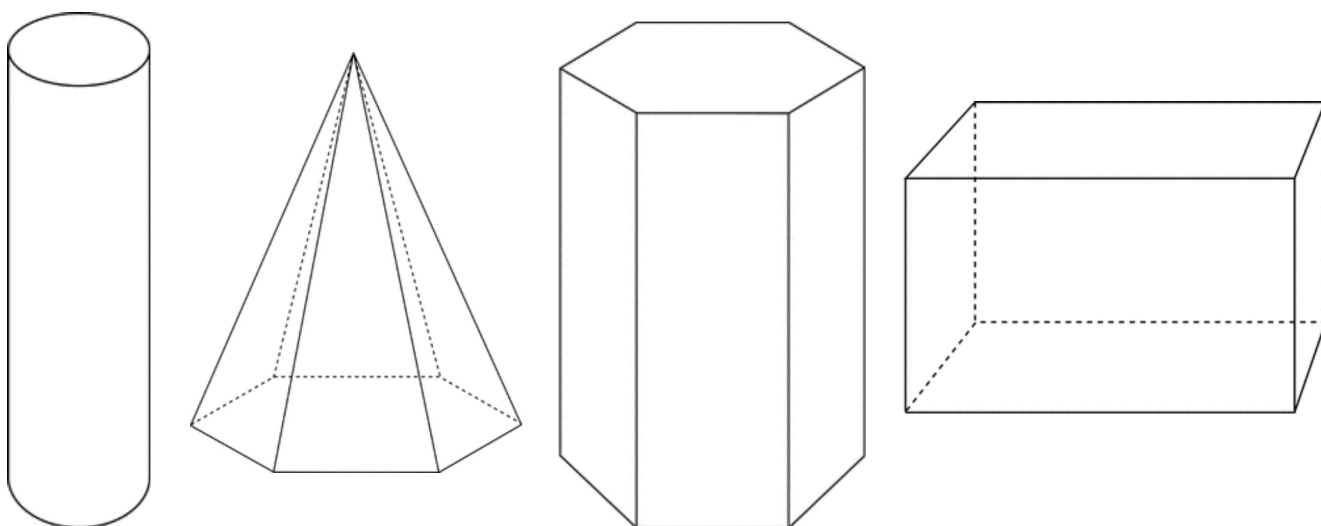


Clue 1—It's all in 3D

1	Number of vertices a cone has	1	a
2	Number of vertices a hexagonal pyramid has	7	g
3	3 x the number of faces a cube has	18	r
4	Number of faces a square based pyramid has	5	e
5	Number of vertices of a square based pyramid	5	e
6	Twice the number of faces of a hexagonal pyramid	14	n
7	Number of vertices of an octagonal prism	16	p
8	Half the number of vertices of a pentagonal prism	5	e
9	Number of faces a sphere has	1	a
10	1 less than the number of edges a cuboid has	11	k
11	1 less than the vertices of a triangular prism	5	e
12	Number of vertices a tetrahedron has	4	d
13	Number of faces a hexagonal prism has	8	h
14	The number of circular faces a cone has	1	a
15	Twice the number of faces of an octagonal prism	20	t



Clue 2 - Divide and Conquer

You have to find out the highest number from 2,3,5,6 & 10 which will divide into each of the numbers below. How do you know if a number is a multiple of each of those factors ?

There is no need for a calculator – for 2, 5 & 10, you look at the last digit of a number – even numbers are divisible by 2, numbers ending in 0 are divisible by 10 and numbers ending in 5 or 0 are divisible by 5.

To find out if a number is a **multiple of 3, add up the digits**. If the answer is a multiple of 3, then the number is. eg 258 : $2+5+8=15$ (15 is a multiple of 3 so 258 is).

Multiples of 6 are **even and divisible by 3**. eg 72 – even and $7+2=9$ (divisible by 3)

Number of digits	Highest factor				
	2	3	5	6	10
2	a	e	i	o	u
3	b	c	d	f	g
4	h	j	k	l	m
5	n	p	r	s	t
6	v	w	q	y	z

Number	Highest Factor	letter
34	2	A
12845	5	R
81	3	E
357	3	C
27	3	E
65	5	I
14637	3	P
87540	10	T
348	6	F
98645	5	R
78	2	O
6450	10	M
26322	6	S
16803	3	P
99	3	E
123	3	C

Number	Highest Factor	
84642	6	S
82	2	A
365848	2	V
39	3	E
87625	5	R
41532	6	S
654	6	F
84	6	O
38475	5	R
129	3	C
96	6	O
87622	2	N
74160	10	T
92	2	A
831	3	C
45710	10	T
84132	6	S

Clue 3 –A new angle on the case.

Draw 8 lines with perfect accuracy to get 8 words. Rearrange the order to get the clue.

the	male	plonker	female	glasses	freckles
a	hat	skirt	beard	for	he
wears	tights	no	murderer	knife	gun
neck	face	escape	she	cigars	case
cigarettes	smoke	mobile	inhale	unhealthy	running
cold	kill	Rope	candlestick	library	kitchen
plum	prison	green	mustard	police	white

A B C D

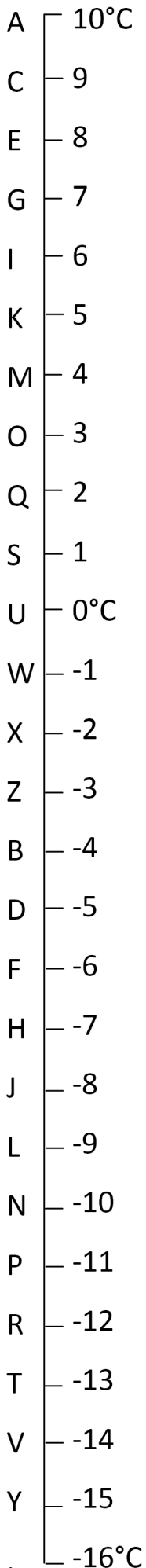
dead	alive	gun	run	clue	no
HTC	Samsung	Nokia	iphone	code	Motorola
yes	poison	sugar	cheeks	face	DNA
a	the	vital	Blackberry	phone	escape
charger	treasure	LG	Cookie	text	bury
spots	Boots	chest	ink	invisible	new
secret	fish	passage	stairs	guilty	old

F G H I

BAX	100°	AX	5.7cm
ABY	128°	BY	7.3cm
DCZ	132°	CZ	4.0cm
CDM	81°	DM	3.9cm
GFR	24°	FR	10.0cm
FGW	34°	GW	7.0cm
IHT	27°	HT	4.8cm
HIQ	29°	IQ	12.3cm

Clue 4—The big freeze

The temperature scale has letters attached. Decipher the message as the temperature rises and falls. Start each question at 0°C



1) $-5 + 15$ A

2) $-1 - 3$ B

3) $-4 - 8$ R

4) $-6 + 12$ I

5) $-3 + 10$ G

6) $-3 - 4$ H

7) $2 - 15$ T

8) $-7 - 8$ Y

9) $-3 + 11$ E

10) $2 - 11$ L

11) $-14 + 5$ L

12) $-4 + 7$ O

13) $8 - 9$ W

14) $4 - 13$ L

15) $-5 + 11$ I

16) $10 - 3$ G

17) $-16 + 9$ H

18) $-8 - 5$ T

19) $-4 + 12$ E

20) $6 - 18$ R

21) $-12 - 4$.

Clue 5 – Null Points

This clue includes lots of nulls – letters put in to disguise the real message.

Remove the nulls and everything will be clear.

21	46	9	97	68	46	81	100	29	6	49	31	33	775	85	39	28	17	19	72
d	r	e	a	m	y	b	a	b	y	d	o	l	l	p	r	e	t	t	y

87	60	81	8	43	13	24	36	72	45	82	27	1	37	165	64	55	47	58	35
l	i	t	t	l	e	f	l	u	f	f	y	m	o	u	s	e	f	a	t

2	13	93	76	14	25	69	73	67	215	95	99	79	121	12	86	63	83	9	70
r	a	t	m	y	s	o	f	t	&	c	r	e	a	m	y	t	r	u	e

145	71	23	92	144	15	42	77	16	89	94	26	9	59	57	98	51	4	52	53
a	s	h	i	n	e	g	l	e	a	m	f	a	v	o	u	r	i	t	e

Cross out these numbers and the letters below them:

1. All square numbers.
2. All multiples of 5
3. All even numbers
4. All multiples of 11
5. All multiples of 3