

# 32

# Cubic Designs

**3D designs and drawings to  
provide extension activities in  
the Space strand.**

Written by Paul and Jo Larkin.  
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# Teachers' Notes

This book has been written partly as a response to the demands of children I have taught who have a compelling fascination with 3D designs and drawings and also as a follow up to my first book, "32 Great Designs for Kids".

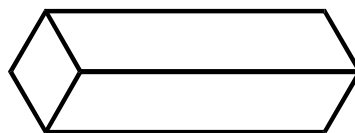
The designs provide excellent horizontal extension in the space strand of the maths curriculum and offer a stimulating challenge to children who demonstrate an ability to work at a higher level and have a good concentration span.

I have attempted to grade the designs over four levels of difficulty to cater for a range of ages and ability levels. They provide a great source of satisfaction in drawing the designs and then finishing them with felt tip pens or pencils.

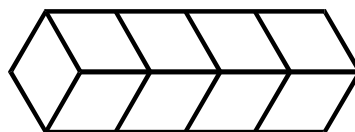
## Using this book

The coordinates have been carefully plotted to produce the complete designs. Please note, however, that not every single line is covered.

For example the design may come out as:



... and will require the extra lines to be added to produce:



For this reason I have included a picture of the finished design. To get the most out of this book I would suggest the following:

- ❖ Start with the Level 1 designs to gain confidence and to work out how the designs come together, then move on to the harder levels.
- ❖ Use a ruler to help line up the coordinates and draw them in pencil first.
- ❖ The finished designs gain a truly 3D effect when coloured using two brightly coloured felt tip pens and black for the three faces that are seen in any cubic design.

Good luck and happy drawing!

**Paul Larkin**  
**Jo Larkin**

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# Level 1

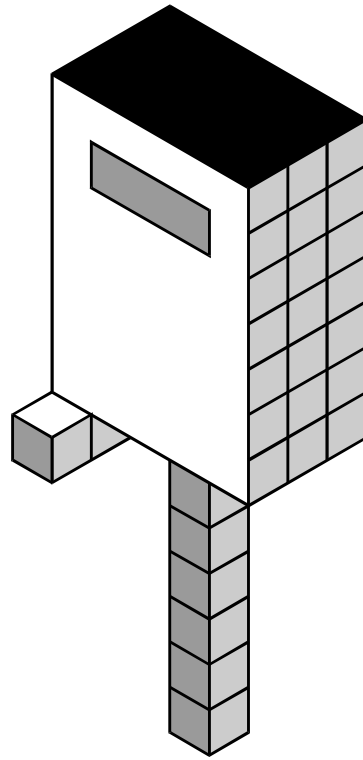
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# The Letterbox

Instructions: Draw lines to connect the following points.  
 You will have to add lines to complete as shown.  
 Colour in three colours for 3D effect.

- J2 - G5      J2 - O7      G21 - G23**
- G5 - L10      L10 - O7      G23 - F22**
- G5 - G19      L10 - L24      F22 - F20**
- O7 - O21      G19 - L24      J34 - K35**
- J22 - J34      K23 - K35      K35 - L34**
- L24 - L34      F20 - G19**
- G21 - H20      G23 - I21**
- H8 - K11      H10 - K13**
- H8 - H10      K11 - K13**
- L24 - O21      F20 - G21**



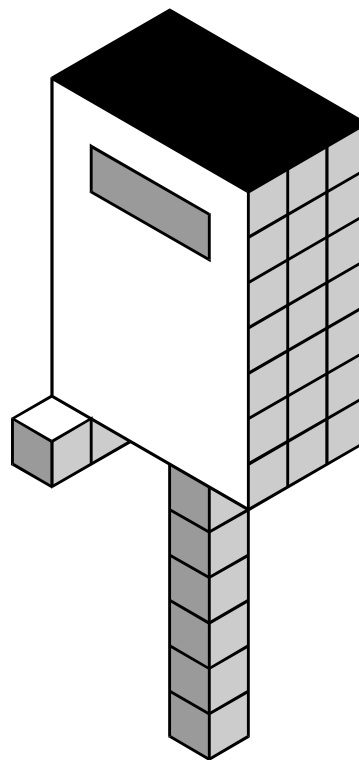
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# The Letterbox

## Finished example

Instructions: Draw lines to connect the following points.  
You will have to add lines to complete as shown.  
Colour in three colours for 3D effect.

- J2 - G5      J2 - O7      G21 - G23
- G5 - L10     L10 - O7     G23 - F22
- G5 - G19     L10 - L24    F22 - F20
- O7 - O21     G19 - L24    J34 - K35
- J22 - J34     K23 - K35    K35 - L34
- L24 - L34     F20 - G19
- G21 - H20     G23 - I21
- H8 - K11     H10 - K13
- H8 - H10     K11 - K13
- L24 - O21     F20 - G21

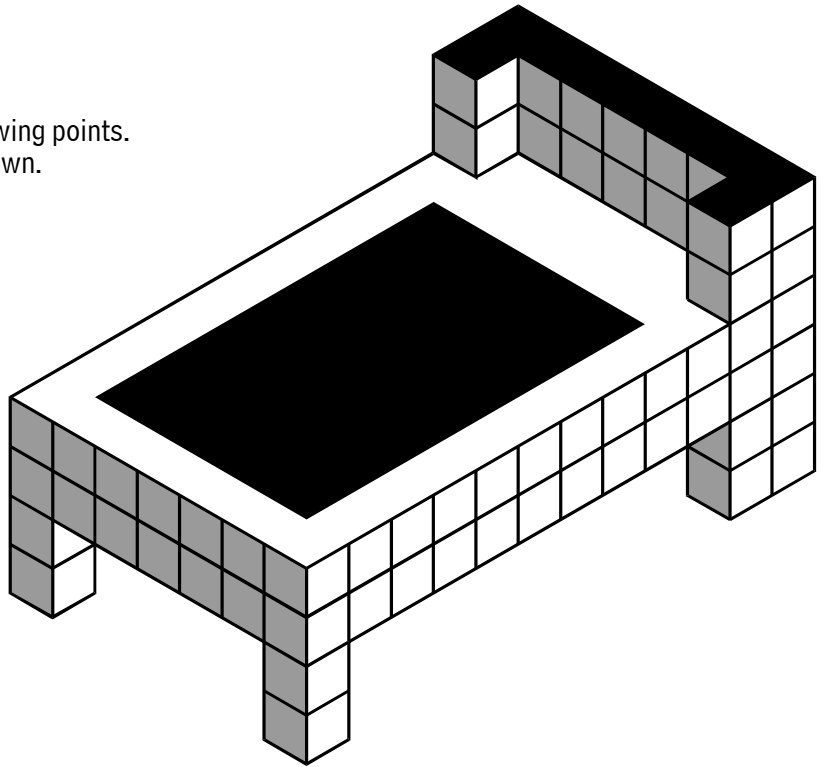


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# The Bed

Instructions: Draw lines to connect the following points.  
 You will have to add lines to complete as shown.  
 Colour in three colours for 3D effect.

- |                  |                  |                  |
|------------------|------------------|------------------|
| <b>C25 - D26</b> | <b>I31 - J32</b> | <b>C21 - J28</b> |
| <b>C17 - J24</b> | <b>E17 - J22</b> | <b>S21 - T22</b> |
| <b>M9 - R14</b>  | <b>M7 - N8</b>   | <b>O7 - S11</b>  |
| <b>S13 - T14</b> | <b>N2 - U9</b>   | <b>O1 - V8</b>   |
| <b>O1 - M3</b>   | <b>O7 - N8</b>   | <b>V9 - T10</b>  |
| <b>V12 - J24</b> | <b>V16 - J28</b> | <b>V21 - T22</b> |
| <b>K31 - J32</b> | <b>E25 - D26</b> | <b>R14 - J22</b> |
| <b>M9 - E17</b>  | <b>M7 - C17</b>  | <b>M3 - M7</b>   |
| <b>N4 - N8</b>   | <b>O3 - O7</b>   | <b>S9 - S13</b>  |
| <b>T10 - T22</b> | <b>S15 - S21</b> | <b>S9 - T8</b>   |
| <b>K23 - K31</b> | <b>J24 - J32</b> | <b>I23 - I31</b> |
| <b>E19 - E25</b> | <b>D18 - D26</b> | <b>C17 - C25</b> |
| <b>M3 - N4</b>   | <b>V8 - V20</b>  | <b>N4 - O3</b>   |



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
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