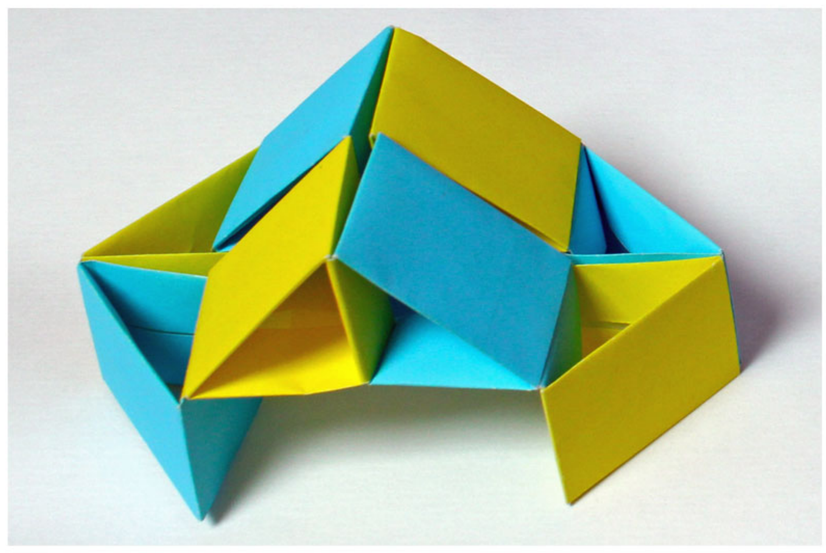
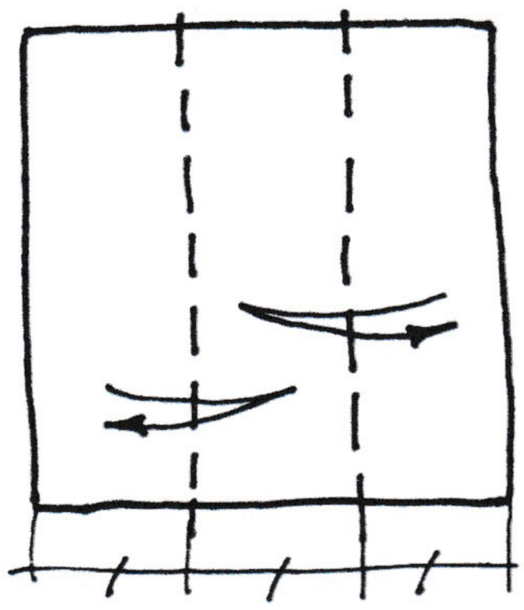
Triangle Flexicube

by Dave Brill© 2015



A development of the classic Flexicube,
using triangular units instead of cubes.
Several orientations of the units are possible,
giving surprising flexing sequences.

1 Divide a 20cm square into thirds



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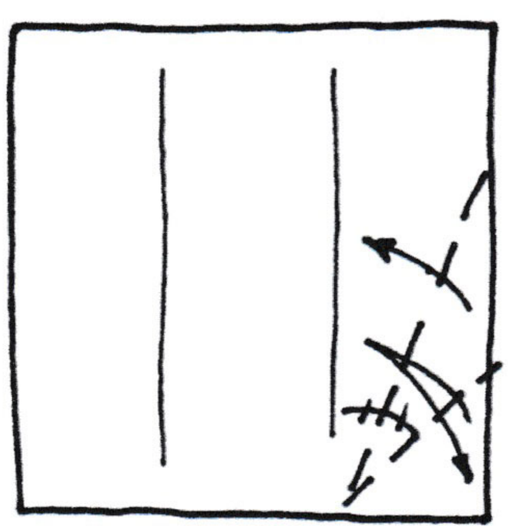

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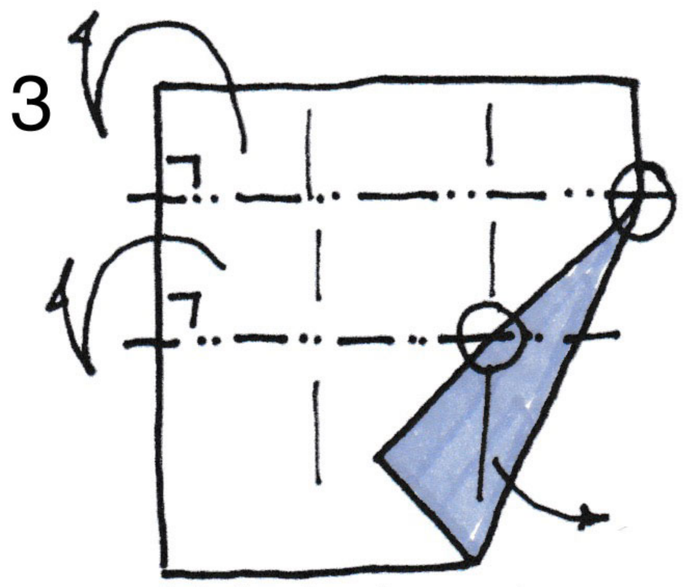
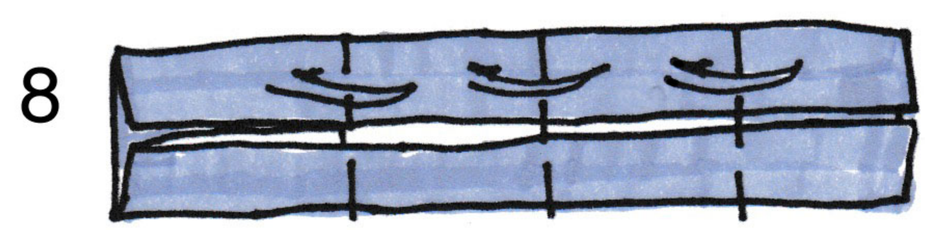


Make horizontal mountain folds noting the reference points



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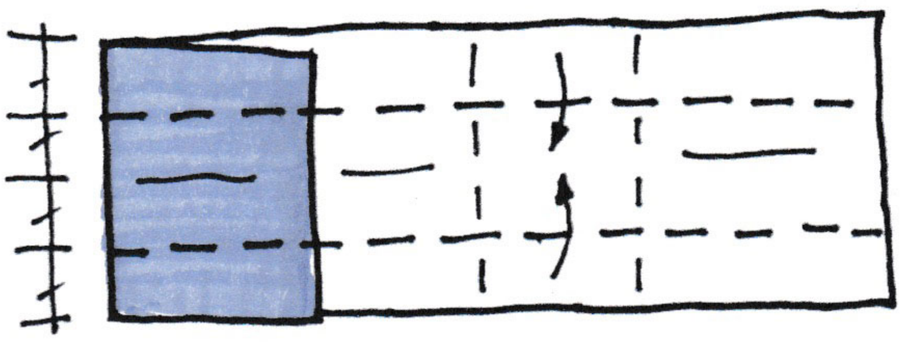

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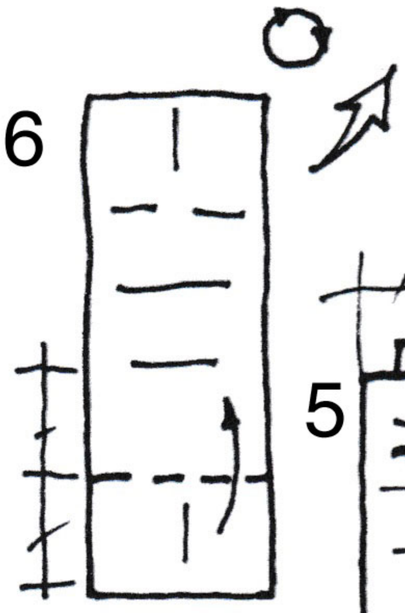

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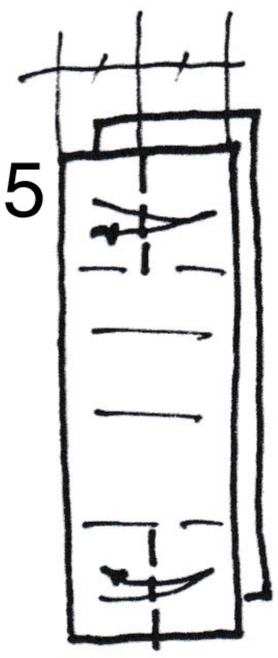

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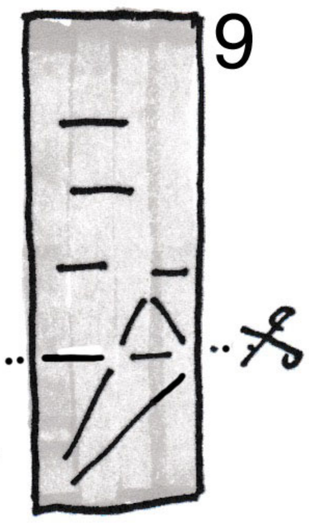

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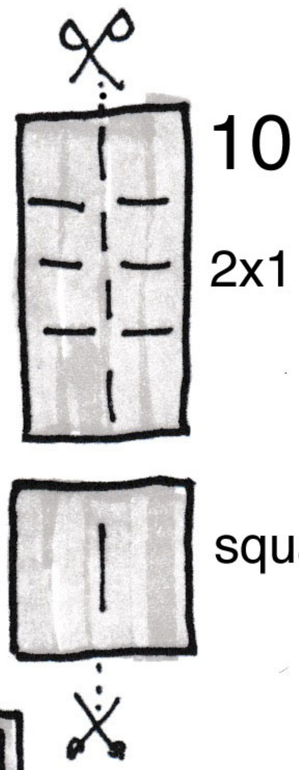
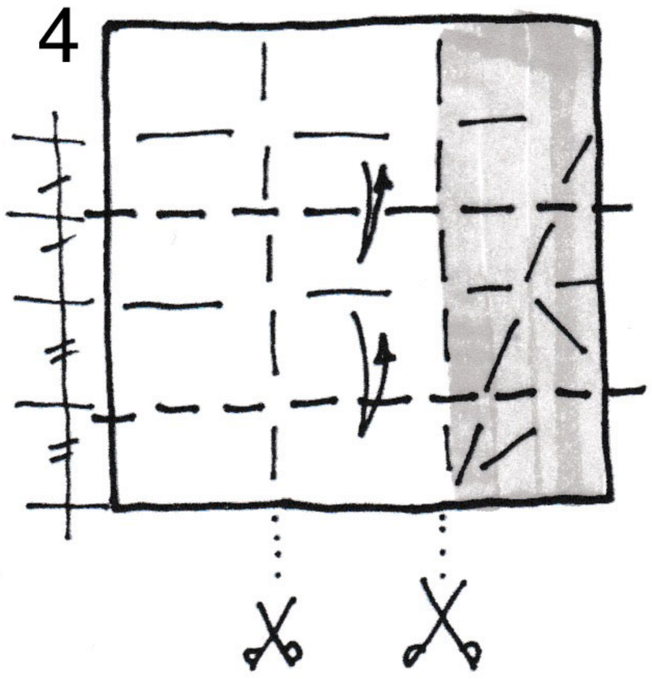


10

2x1

square



4

Precrease, then cut into 3.
The grey area will be
used for the hinges

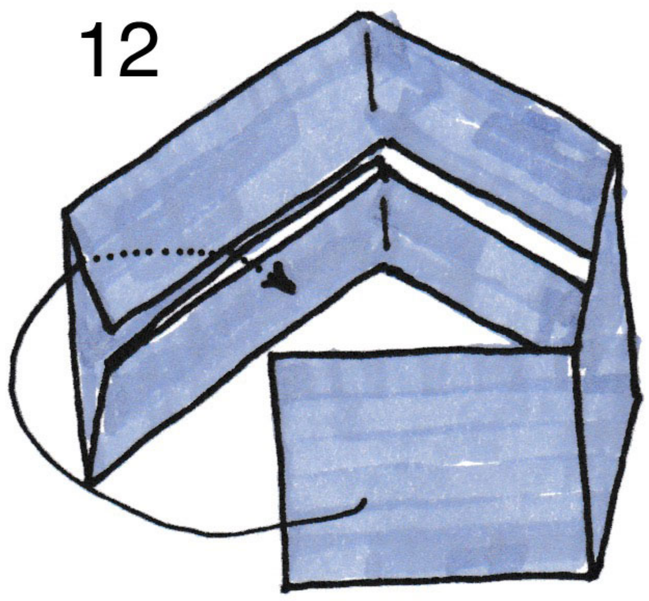
11

A

B

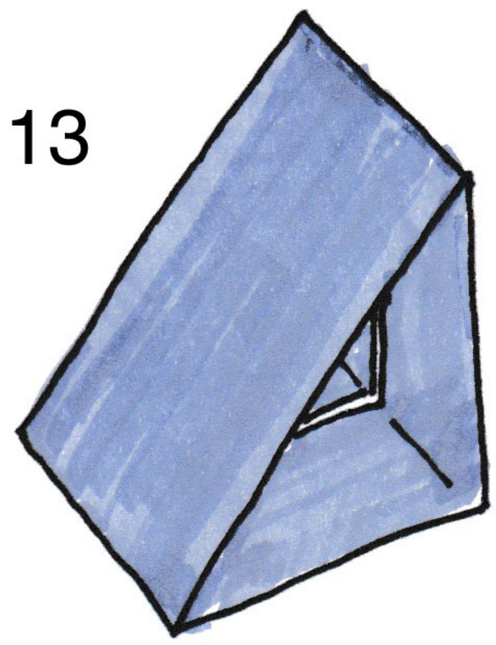
Cut as shown
to make 2 hinge types.

12



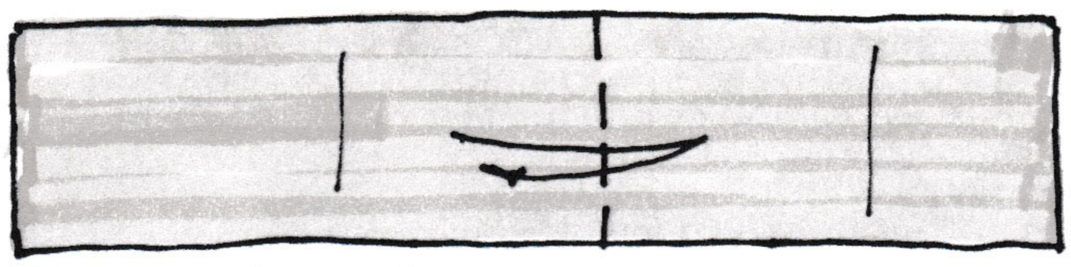
Tuck inside to complete the unit.

13



8 triangular units
like this are required

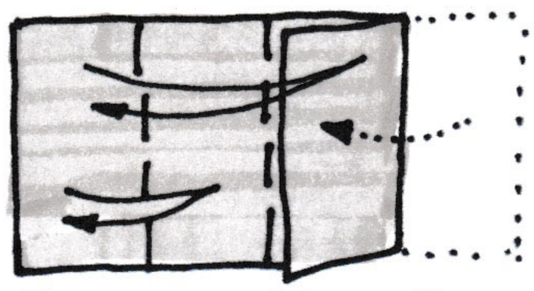
14



Precease hinge A

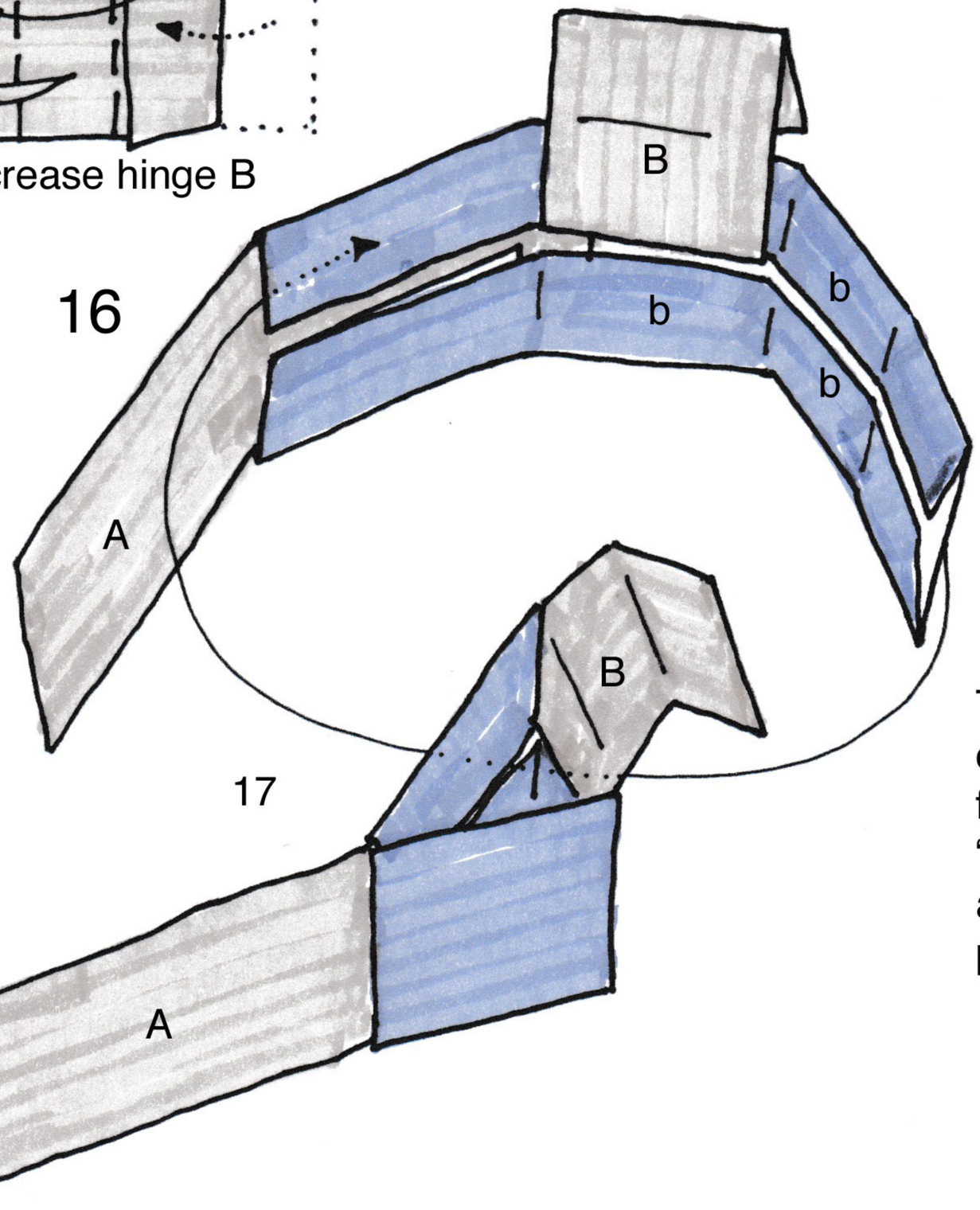
8 hinges are required,
but the number of
A and B units depends
on the orientation
of the triangular units

15



Precrease hinge B

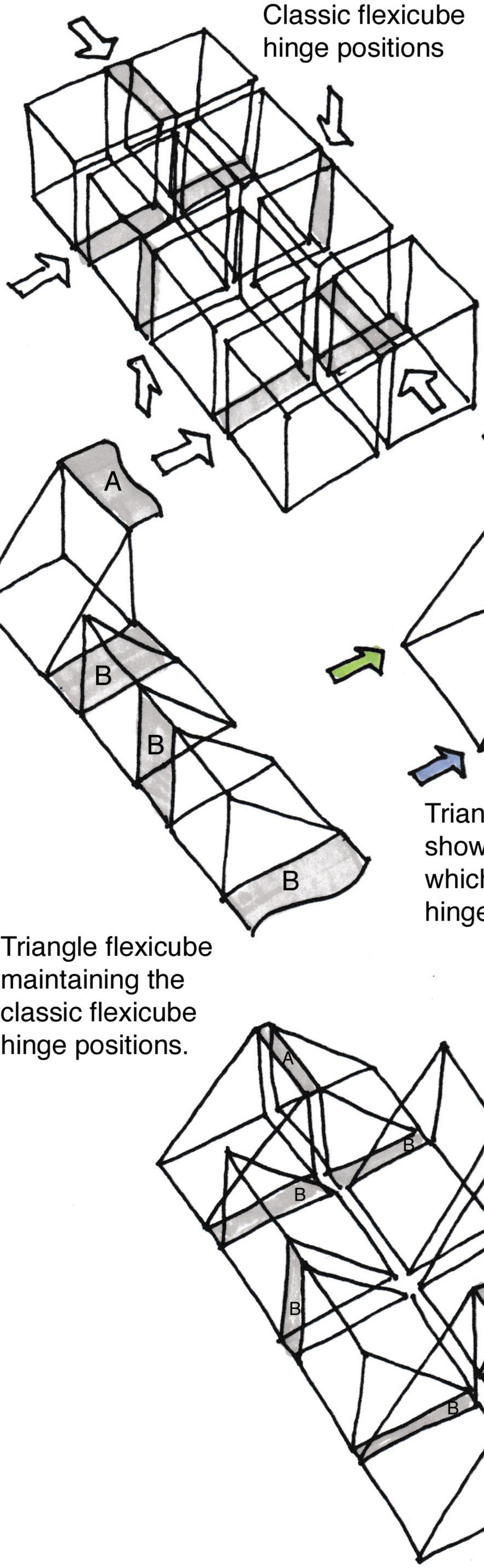
16

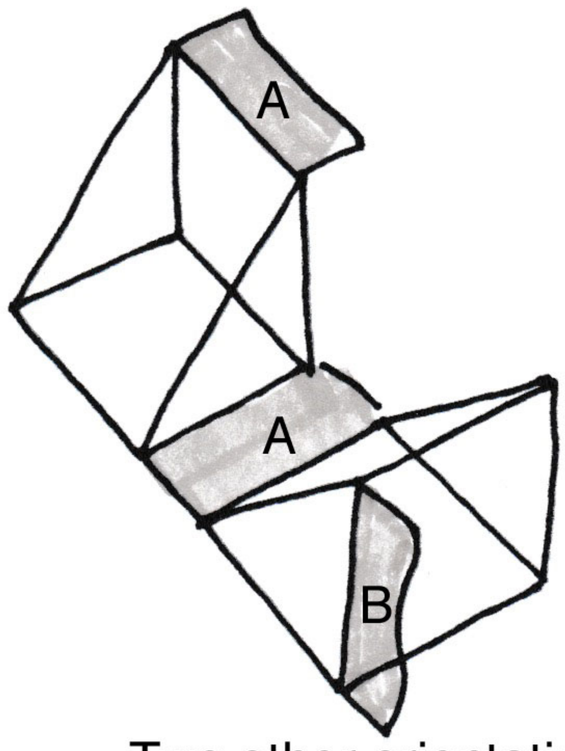


This shows
one position
for hinge B;
“b” shows
alternative
positions

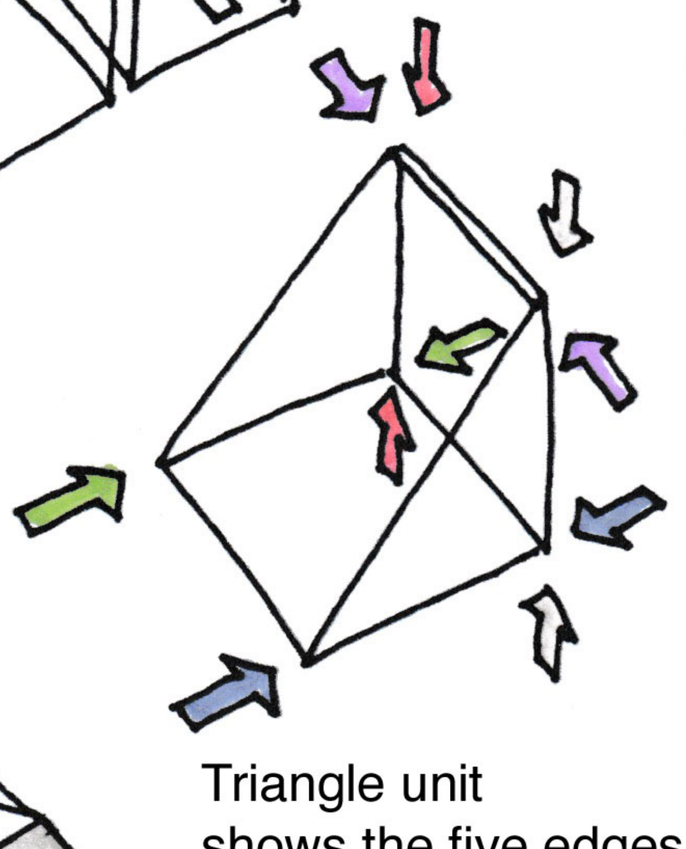
Ideas for the orientation of the triangular units

Classic flexicube
hinge positions

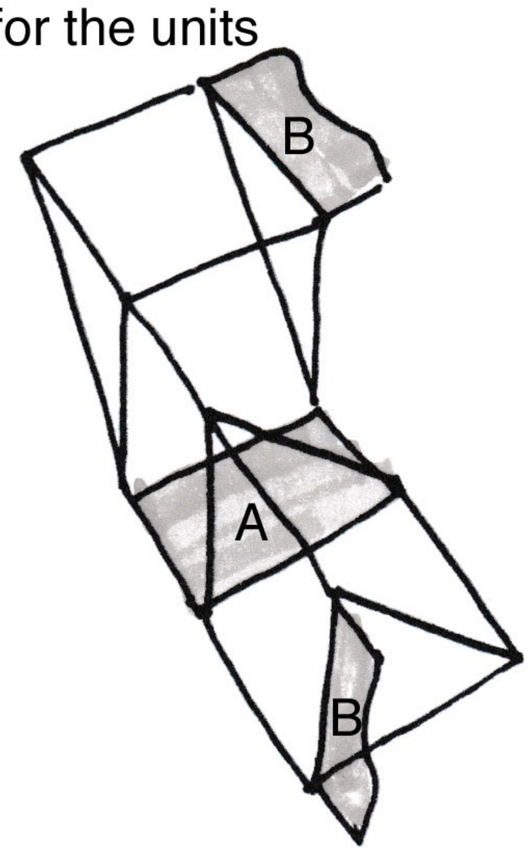




Two other orientations
for the units



Triangle unit
shows the five edges
which will accept
hinges



Triangle flexicube
maintaining the
classic flexicube
hinge positions.

Triangular Flexicube transformations