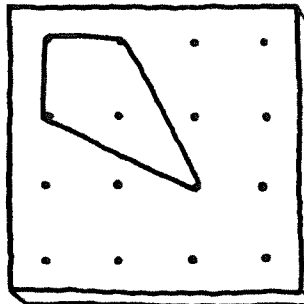


Kites and arrowheads

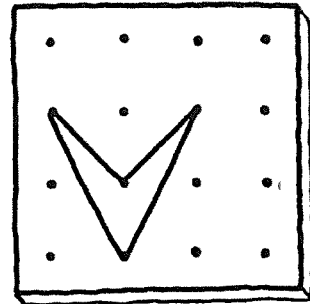
Here is a **kite** and an **arrowhead**.



Remember, kites and arrowheads are symmetrical.

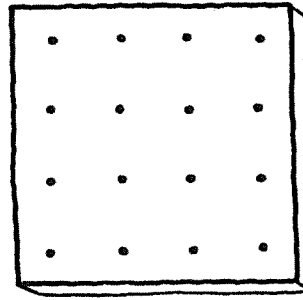
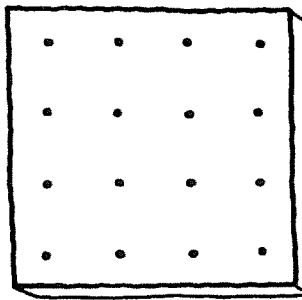
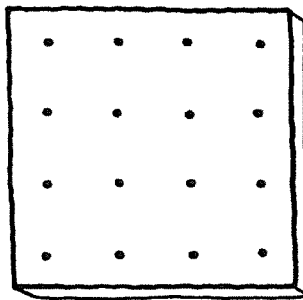
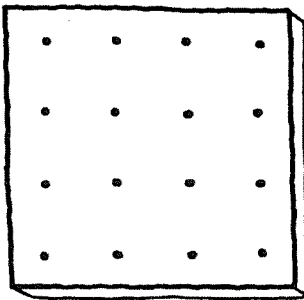


kite

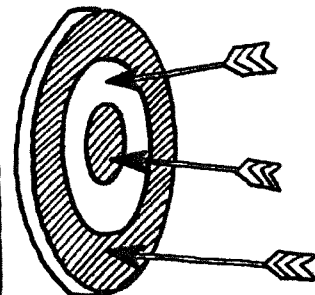
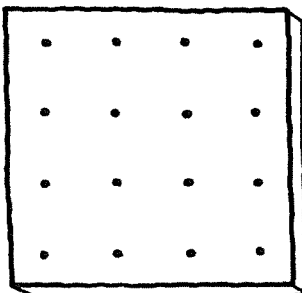
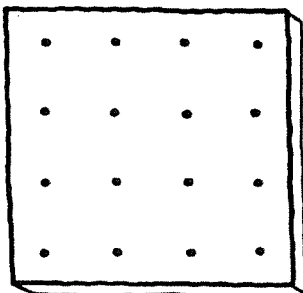
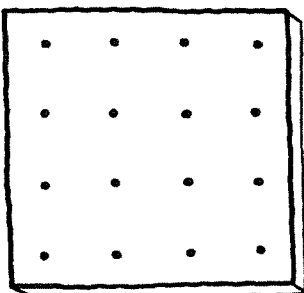
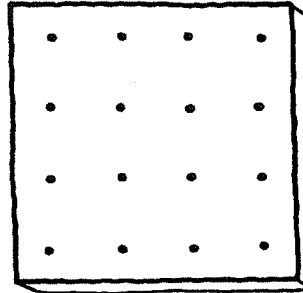
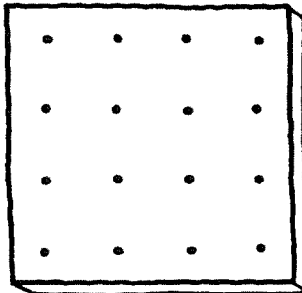
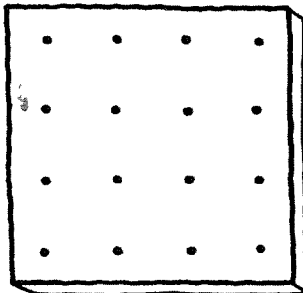
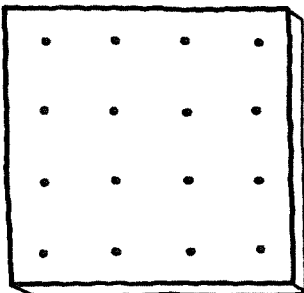


arrowhead

• Join the dots to make four different kites.



• Join the dots to make seven different arrowheads.



• Draw a **line of symmetry** on each shape.

Teachers' note Clarify the difference between the two shapes, namely that a kite is convex and an arrowhead is concave, i.e. it contains a reflex angle. Suggest that the children work in pencil first, or use a geoboard.

Developing Numeracy
Measures, Shape and Space
Year 6
© A & C Black 2001

Name _____

Shape anagrams



Rearrange the letters to make the name of a shape.

1 quaser _____

2 buce _____

3 tracengle _____

4 oxhagen _____

5 drincley _____

6 shurbom _____

7 repesh _____

8 lapmelgrolara _____

9 glantier _____

10 once _____

11 buodic _____

12 tagponen _____

13 contago _____

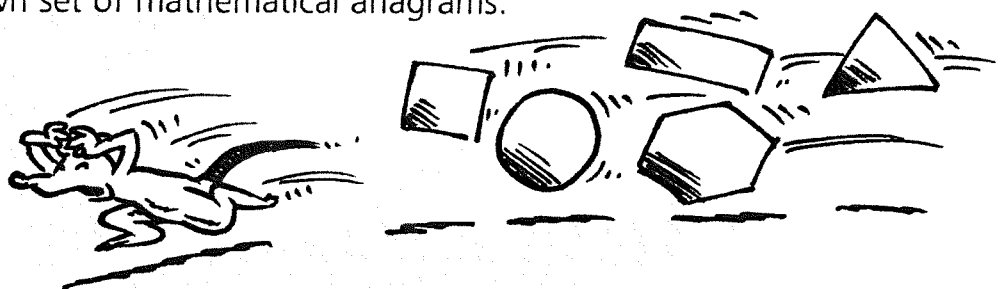
14 smirp _____

15 lericc _____

16 draimpy _____



Invent your own set of mathematical anagrams.



Name _____

N11 N12

Consecutive addition

18 can be made by adding consecutive numbers in two different ways.

$18 = 3 + 4 + 5 + 6$
 $18 = 5 + 6 + 7$



Find two ways of making these numbers by adding consecutive numbers:

9	25	50	36
2 + 3 + 4			

Find three different ways of making these numbers by adding consecutive numbers:

21	15	33	60

Can you find four ways of making these numbers?

45	63	75



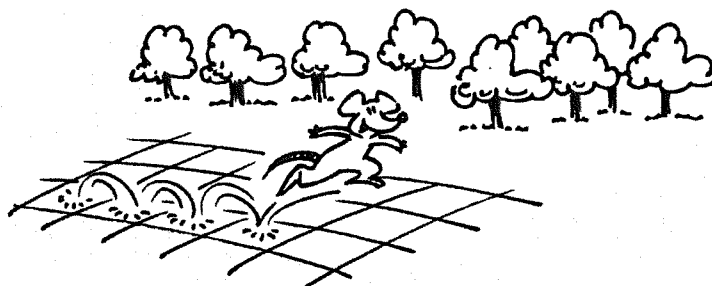
What other numbers can be made by adding consecutive numbers? Which numbers cannot be made? Can you see any patterns?

Name _____

Common multiples

In each box, write the lowest common multiple of the row heading and the column heading.

	2	3	4	5	6	7	8	9	10	11
2			4							
3										
4						28				
5			20							
6		6								
7										
8										
9										
10										
11										

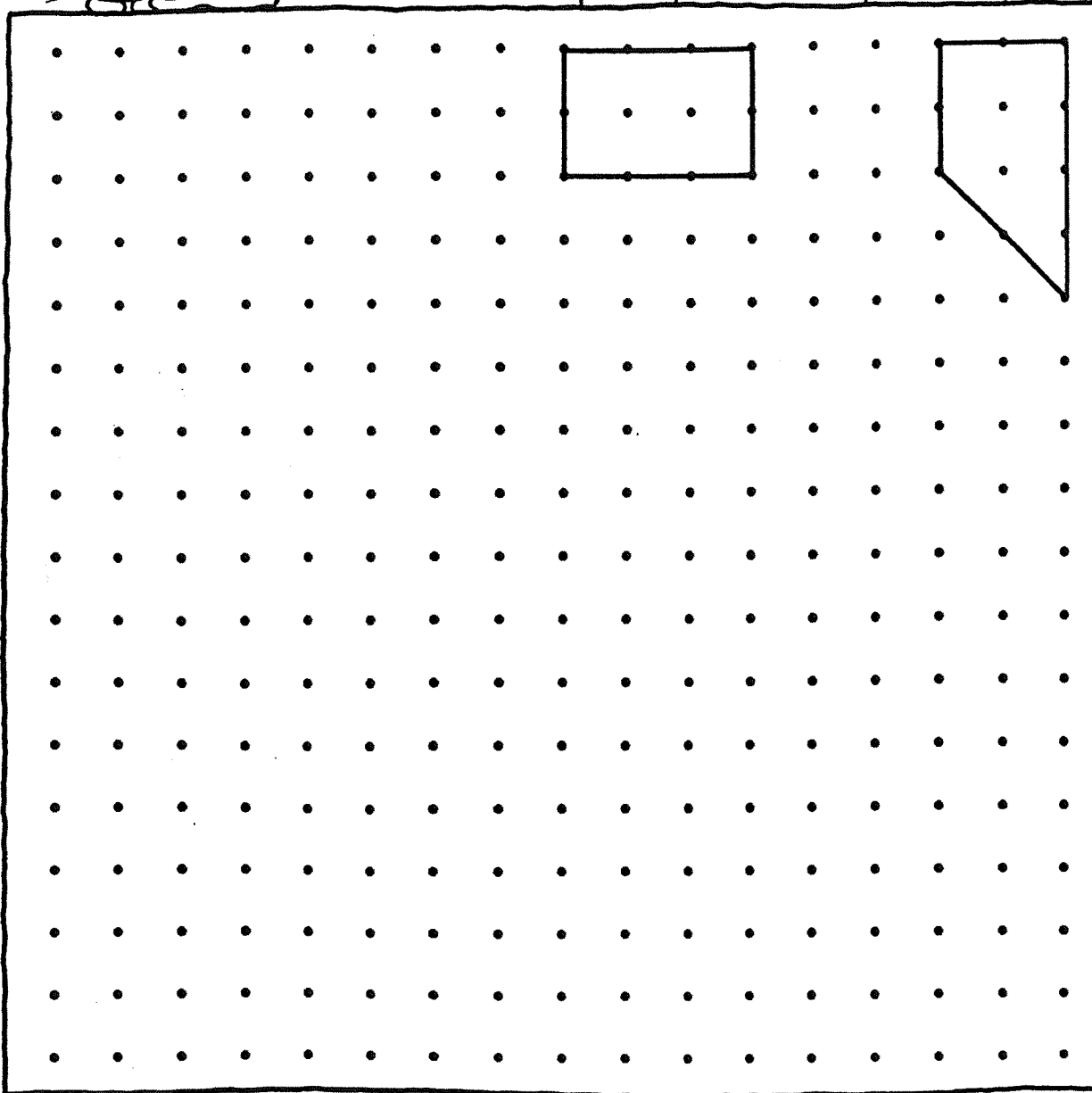
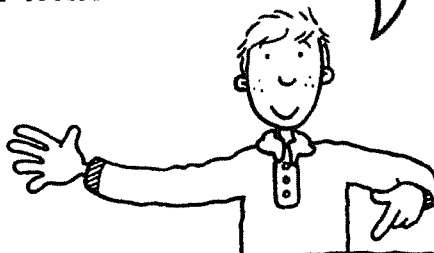


Same area, different shape

- Draw as many different shapes as you can with an area of 6 cm^2 .

My shape has an area of 6 cm^2 .

No, my shape has an area of 6 cm^2 !



- Write the name of each shape you have drawn.

Teachers' note One strategy for this exercise is to start with any given shape whose area is 6 cm^2 , then imagine taking a piece off and sticking it somewhere else on the shape.

Developing Numeracy
Measures, Shape and Space
Year 6
© A & C Black 2001

Name _____

Divisibility by 7



Rachel says she has discovered a test for divisibility by 7, for numbers greater than 100.

For example, for 245, Rachel says:

double the hundreds digit	double 2 is 4
add this to the remaining part of the number	$4 + 45 = 49$
is this number divisible by 7?	

So, 245 is divisible by 7.



Now try Rachel's method on 725.

double the hundreds digit	double 7 is 14
add this to the remaining part of the number	$14 + 25 = 39$
is this number divisible by 7?	

So, 725 is not divisible by 7.



Check Rachel's method to see if it works.

Check these numbers for divisibility by 7.

- | | | | |
|-------|-------|-------|-------|
| 1 483 | 2 257 | 3 468 | 4 728 |
| 5 371 | 6 645 | 7 539 | 8 294 |

Can you discover a method which works for 4-digit numbers?

© 2004 by The Math Learning Center. All rights reserved. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike license.