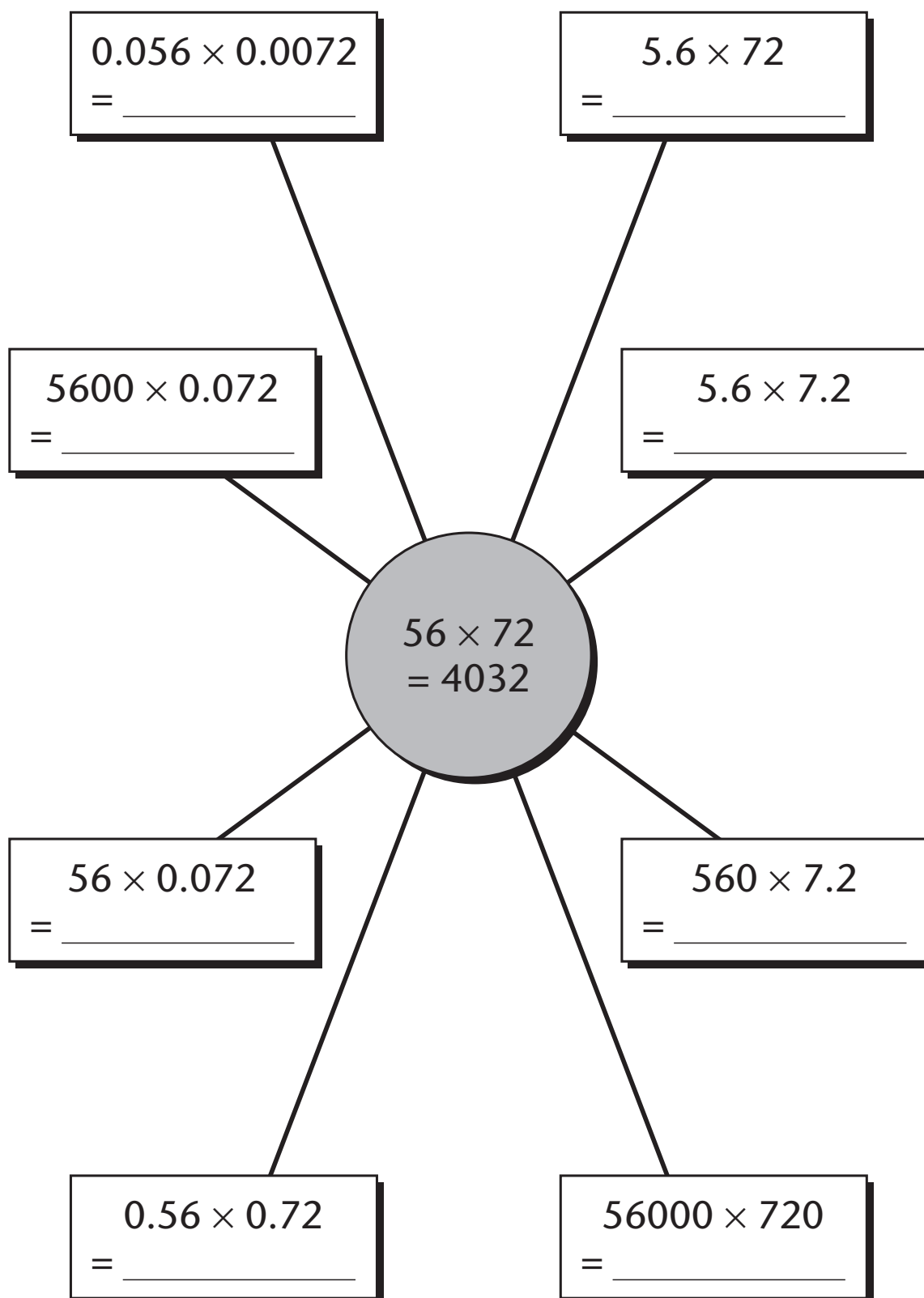


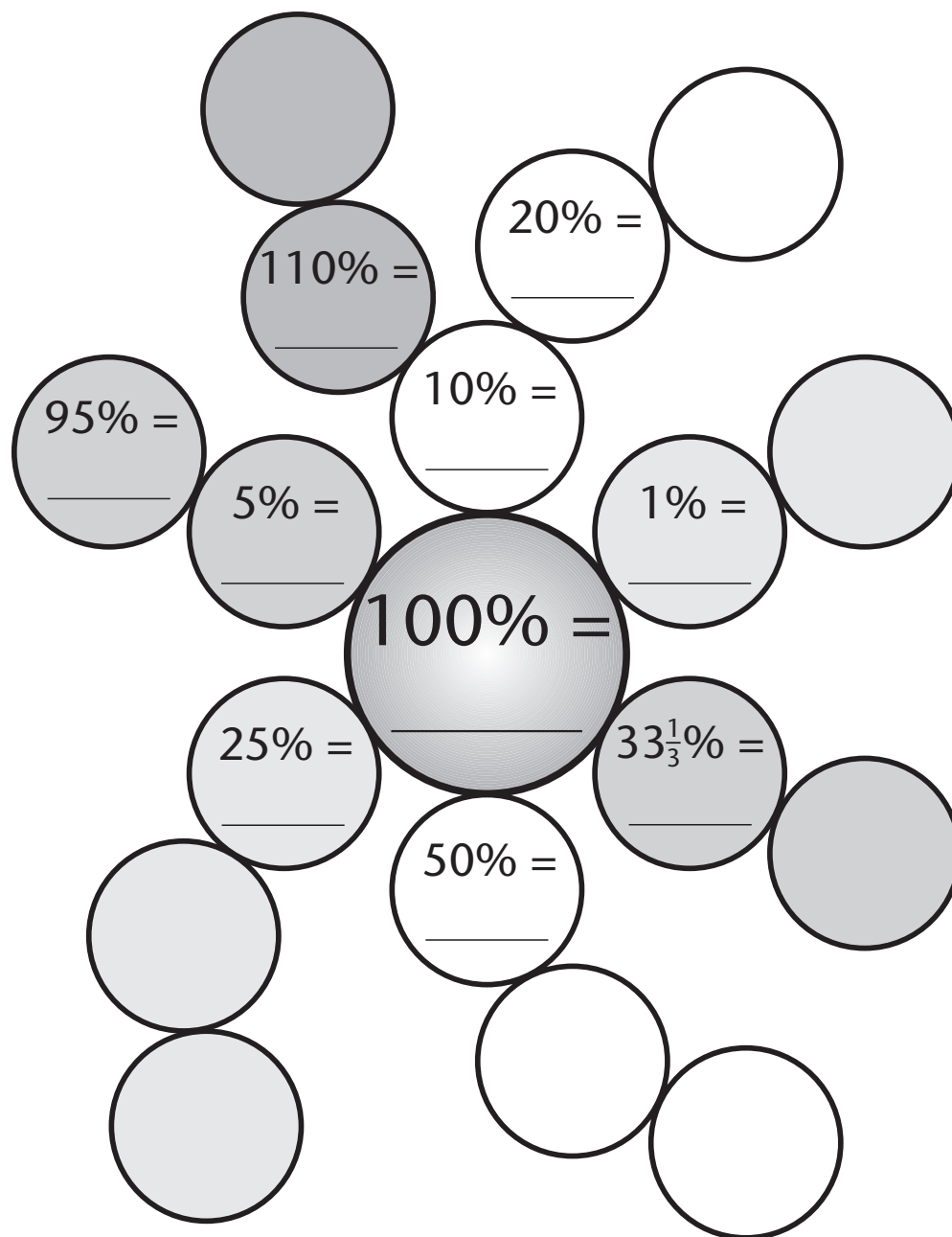
## Hundreds and thousands



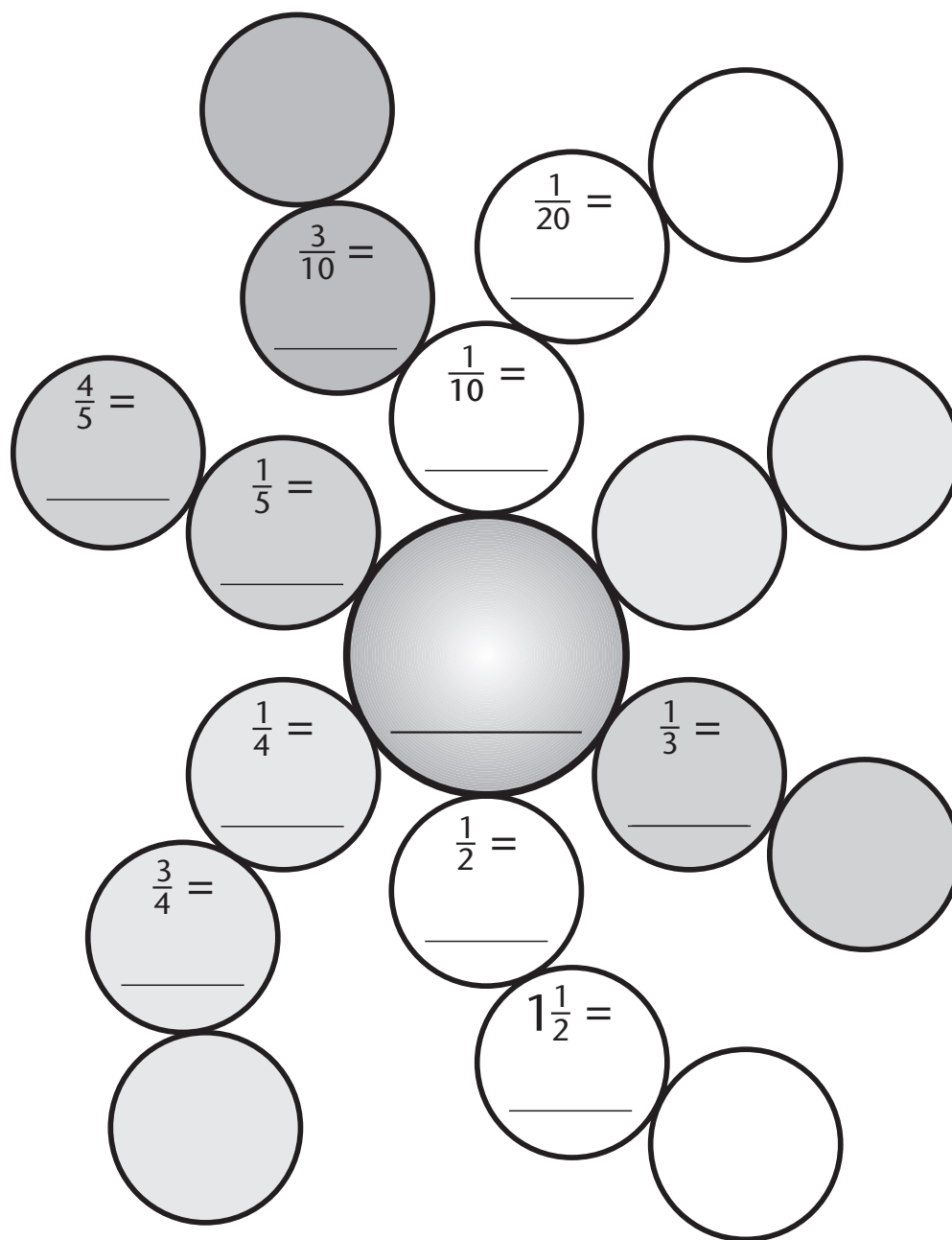
## Sports results

Javelin	Long jump	Pole vaulting
A 62.29 m	A 7.185 m	A 5.90 m
B 62.305 m	B 701.8 cm	B 5.095 m
C 62.3 m	C 7049 mm	C 500.9 cm
D 62.35 m	D 700.5 cm	D 5090.5 mm
E 62.285 m	E 7.108 m	E 0.005 945 km
1st _____	1st _____	1st _____
2nd _____	2nd _____	2nd _____
3rd _____	3rd _____	3rd _____
4th _____	4th _____	4th _____
5th _____	5th _____	5th _____

## Stepping stones to percentages

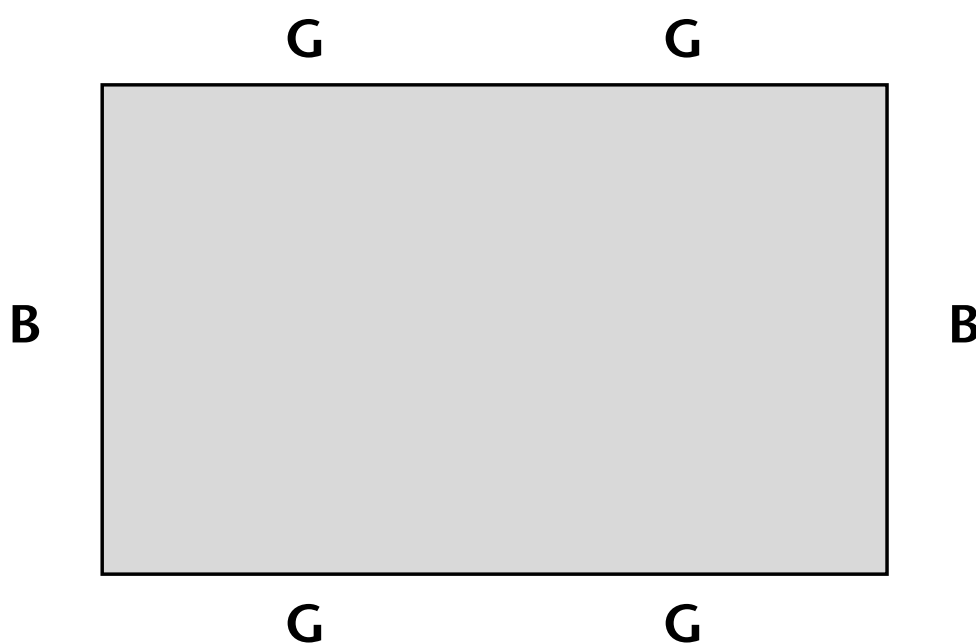


# Stepping stones to fractions



## Year 9 maths

At Kings School, all Year 9 forms have 24 pupils.  
In Form 9B maths lessons, pupils are grouped  
at tables like this.



## Year 9 maths

At Kings School, all Year 9 forms have 24 pupils.

In Form 9B, there are 2 boys to every 4 girls.

$$\text{number of boys : number of girls} = 2 : 4$$

In maths lessons, they are grouped at tables like this.

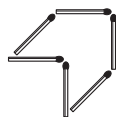


Complete this table for all Year 9 maths groups.

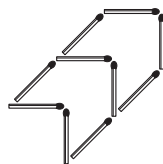
Form	Each table	No. of tables	Ratio G : B	Simplest ratio	Ratio B : G	Simplest ratio	No. of girls	No. of boys
9A	1G 1B							
9B	4G 2B		4 : 2	2 : 1				
9C	3G 1B							
9D	5G 3B							
9E	4G 8B							
9F								
9G								

# Arrows

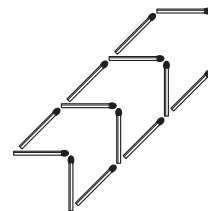
## Arrows 1



1 arrow  
needs \_\_\_\_\_  
matches.



2 arrows  
need \_\_\_\_\_  
matches.

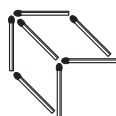


3 arrows  
need \_\_\_\_\_  
matches.

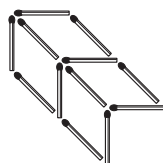
**Rule:  $m = 4a + 2$**

where  $a$  is the number of arrows  
and  $m$  is the number of matches

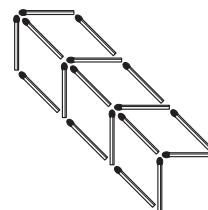
## Arrows 2



1 arrow  
needs \_\_\_\_\_  
matches.



2 arrows  
need \_\_\_\_\_  
matches.



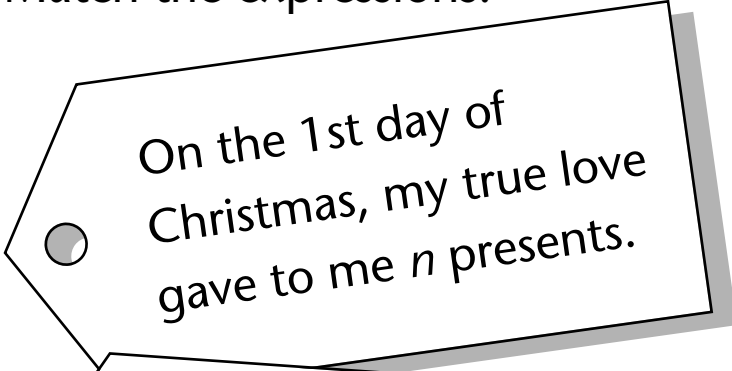
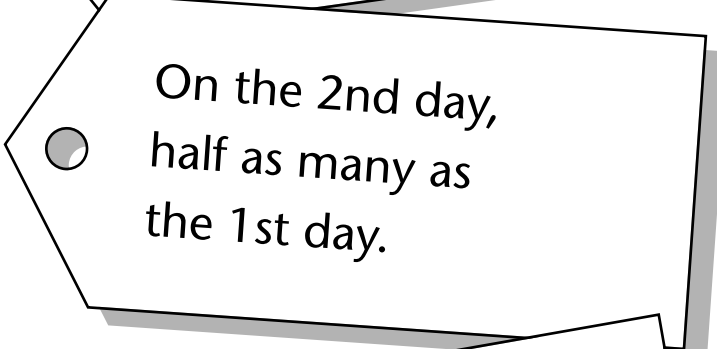
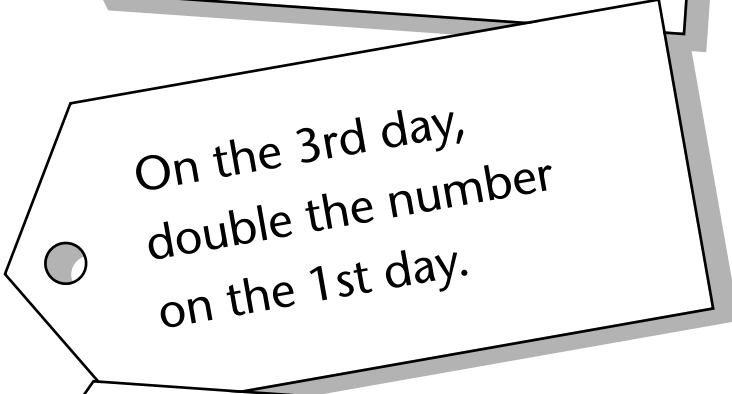
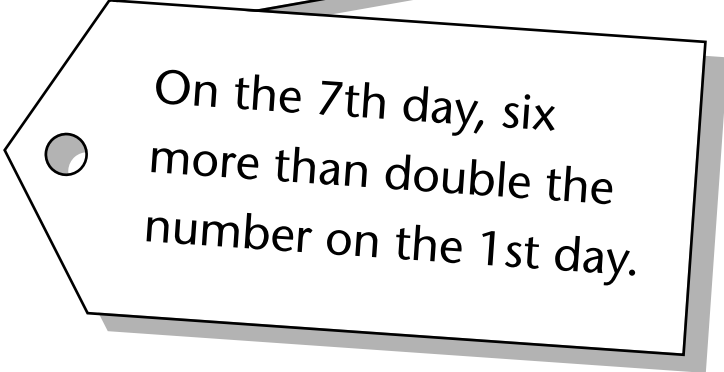
3 arrows  
need \_\_\_\_\_  
matches.

**Rule:  $m =$  \_\_\_\_\_**

where  $a$  is the number of arrows  
and  $m$  is the number of matches

## Twelve days of Christmas (1)

Match the expressions.

	$2n + 6$
	$2 + n$
	$2n$
	$2(n + 6)$
	$\frac{n}{2}$
	$n$



## Twelve days of Christmas (1)

On the 1st day, my true love gave to me ... $n$ presents.	$n^2$
On the 2nd day, my true love gave to me ... half as many as the 1st day.	$5 - n$
On the 3rd day, my true love gave to me ... double the number on the 1st day.	$2n + 12$
On the 4th day, my true love gave to me ... two more than the number on the 1st day.	$n$
On the 5th day, my true love gave to me ... two less than the number on the 1st day.	$2(n + 6)$
On the 6th day, my true love gave to me ... two subtract the number on the 1st day.	$6n + 4$
On the 7th day, my true love gave to me ... six more than double the number on the 1st day.	$5 + \frac{n}{2}$
On the 8th day, my true love gave to me ... six more than the number on the 1st day, times two (two expressions).	$n + 2$
On the 9th day, my true love gave to me ... the square of the number on the 1st day.	$2 - n$
On the 10th day, my true love gave to me ... three times the number on the 3rd day, plus four.	$\frac{n}{2}$
On the 11th day, my true love gave to me ... seven minus the number on the 4th day.	$n - 2$
On the 12th day, my true love gave to me ... five plus half of the number on the 1st day.	$2n$
	$2n + 6$

## Twelve days of Christmas (2)

Match the expressions.

On the 1st day of Christmas, my true love gave to me  $x$  presents

$5x$

On the 2nd day, a fifth of the number on the 1st day.

$x - 5$

On the 3rd day, five times the number on the 1st day.

$3 + \frac{x}{5}$

On the 7th day, five less than the number on the 1st day.

$\frac{x}{5}$

On the 12th day, three plus a fifth of the number on the 1st day.

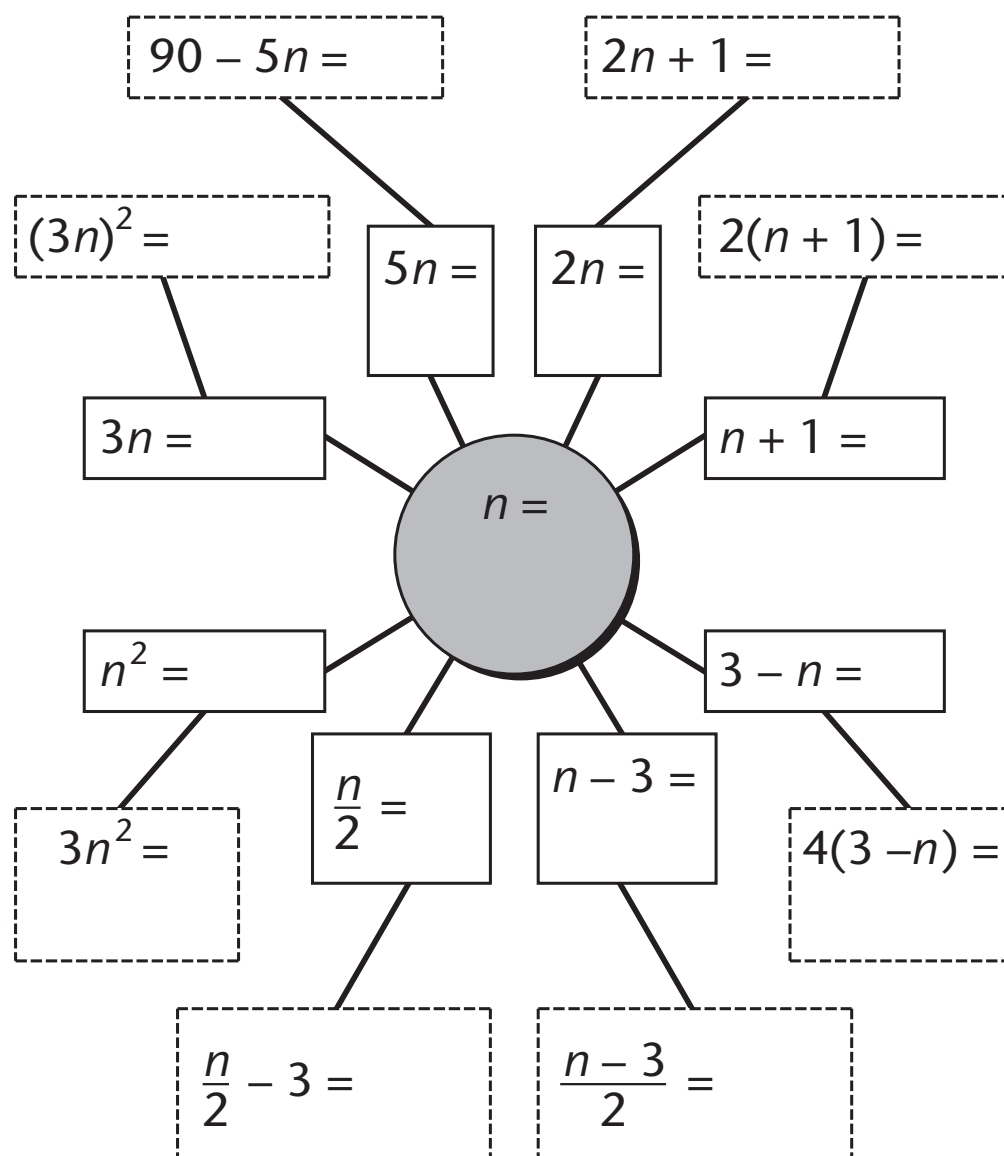
$x + 5$

$x$

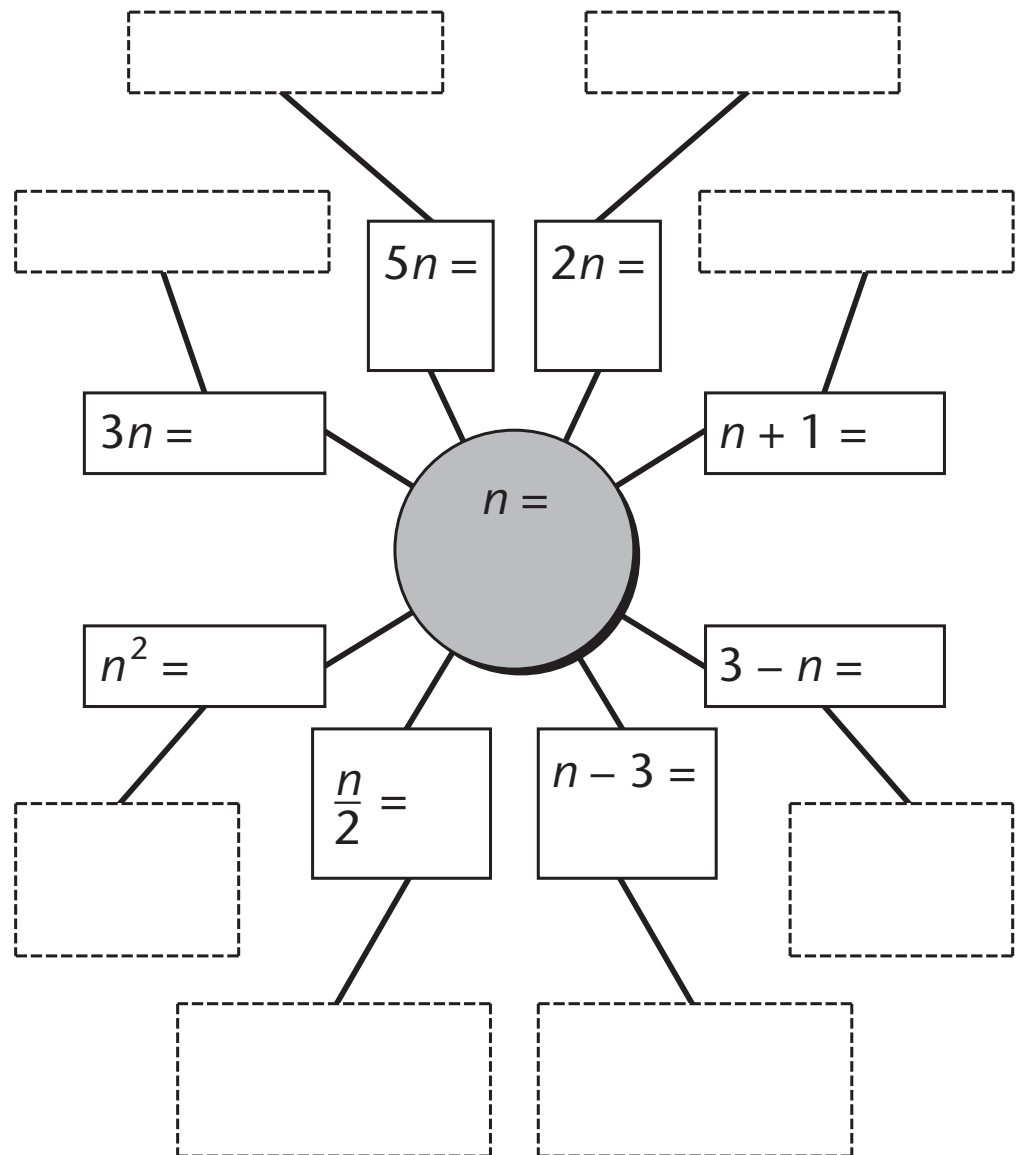
## Twelve days of Christmas (2)

On the 1st day, my true love gave to me ... $x$ presents.	$x + 5$
On the 2nd day, my true love gave to me ... a fifth of the number on the 1st day	$20x - 6$
On the 3rd day, my true love gave to me ... five times the number on the 1st day.	$x$
On the 4th day, my true love gave to me ... five more than the number on the 1st day.	$2x^2$
On the 5th day, my true love gave to me ... five less than the number on the 1st day.	$4x + 10$
On the 6th day, my true love gave to me ... fifteen subtract the number on the 1st day.	$\frac{x}{5}$
On the 7th day, my true love gave to me ... ten more than four times the number on the 1st day.	$15 - x$
On the 8th day, my true love gave to me ... ten more than the number on the 1st day, times four (2 expressions).	$5x$
On the 9th day, my true love gave to me ... twice the square of the number on the 1st day.	$3 + \frac{x}{5}$
On the 10th day, my true love gave to me ... four times the number on the 3rd day minus six.	$4(x + 10)$
On the 11th day, my true love gave to me ... sixteen minus the number on the 4th day.	$11 - x$
On the 12th day, my true love gave to me ... three plus a fifth of the number on the 1st day.	$x - 5$
	$4x + 40$

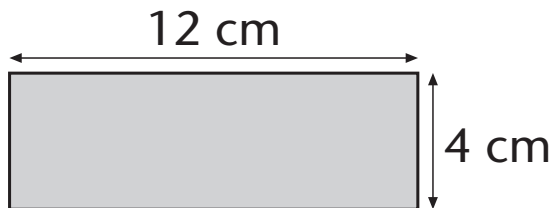
## Substitution spider (1)



## Substitution spider (2)



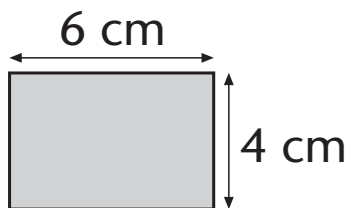
# Halving rectangles



Area? Perimeter?



Cut in half



Area? Perimeter?



Area? Perimeter?



Cut in half

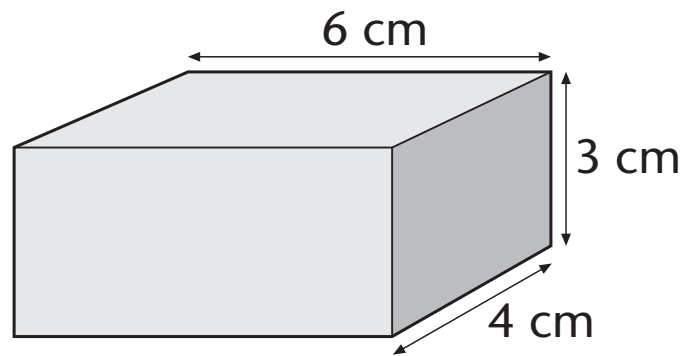


Cut in half

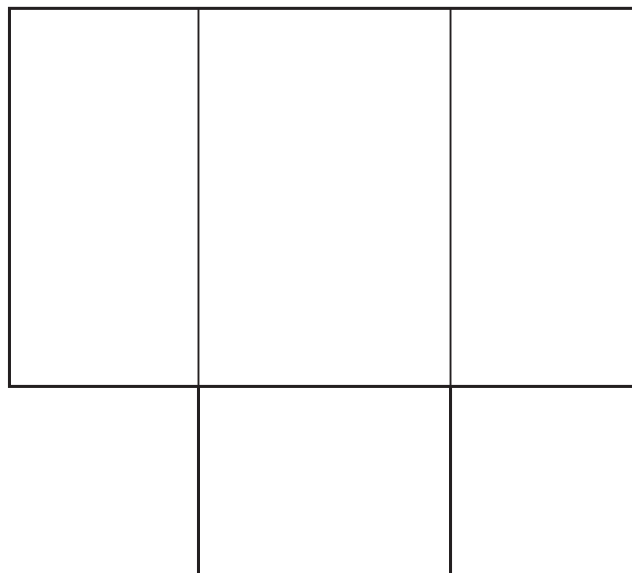


Areas? Perimeters?

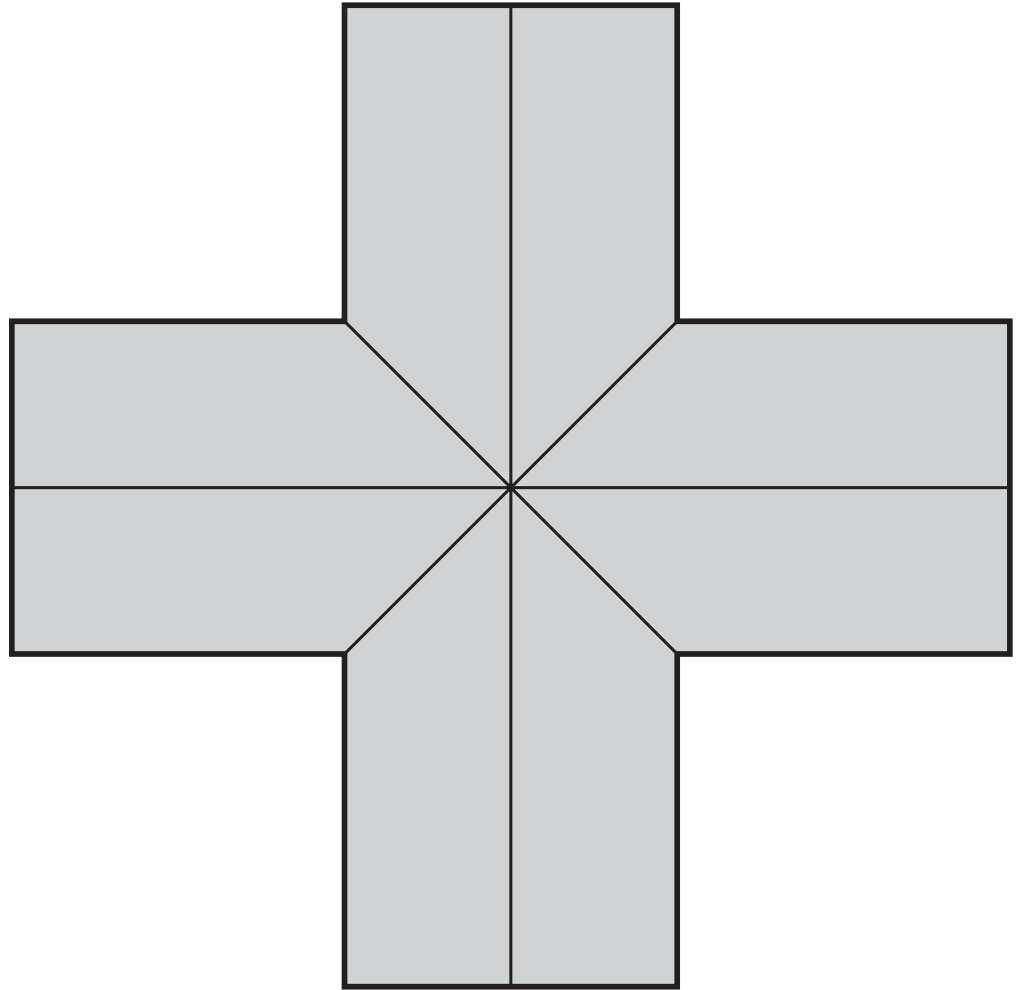
## Nets of cuboids



Complete its net below.

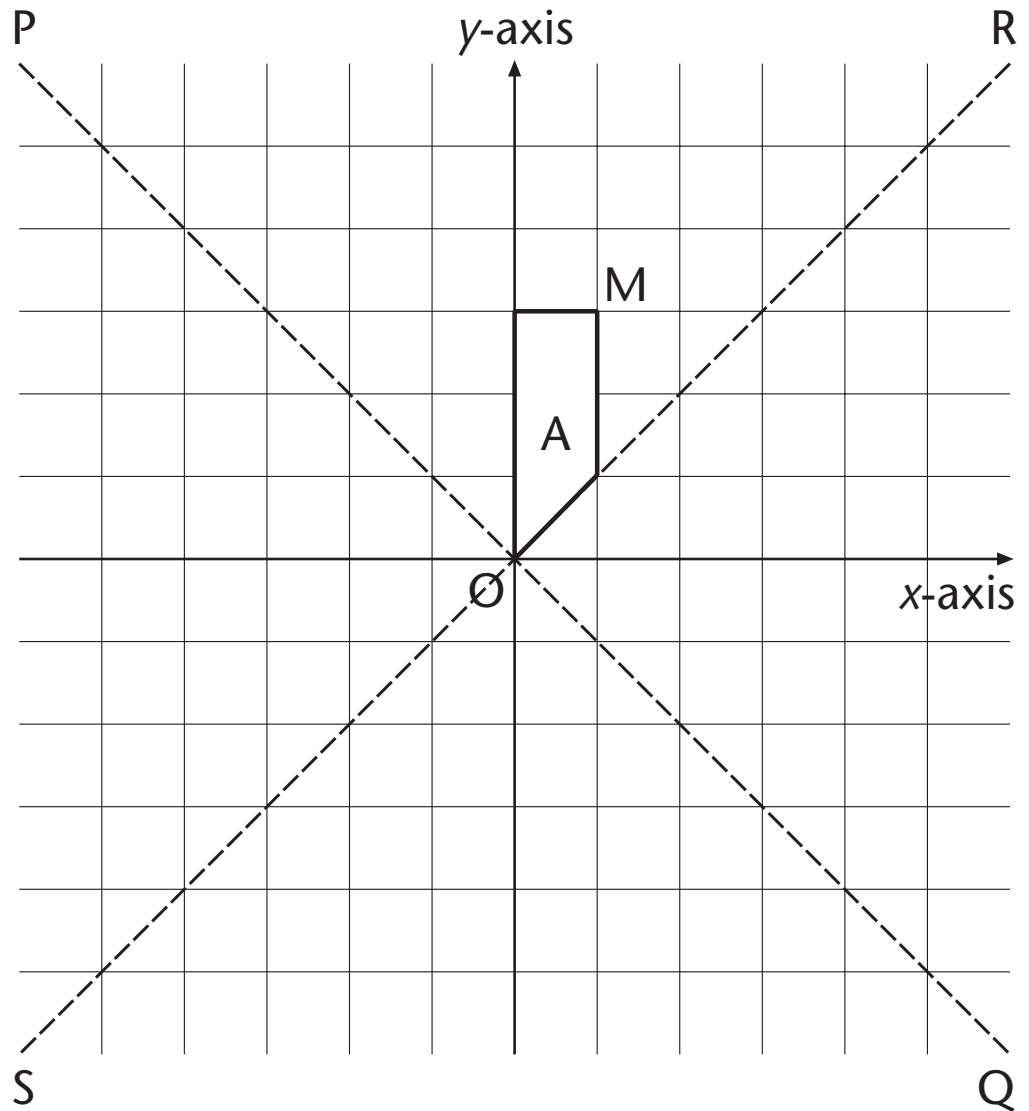


# Angles and transformations

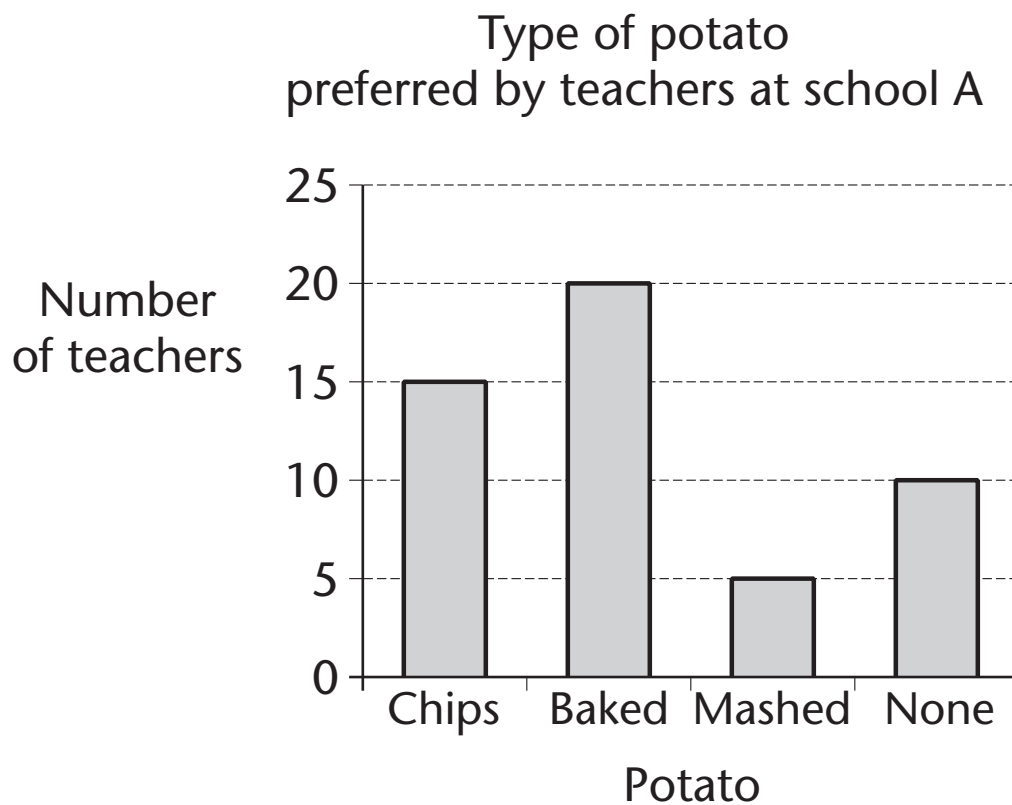




# Transformations

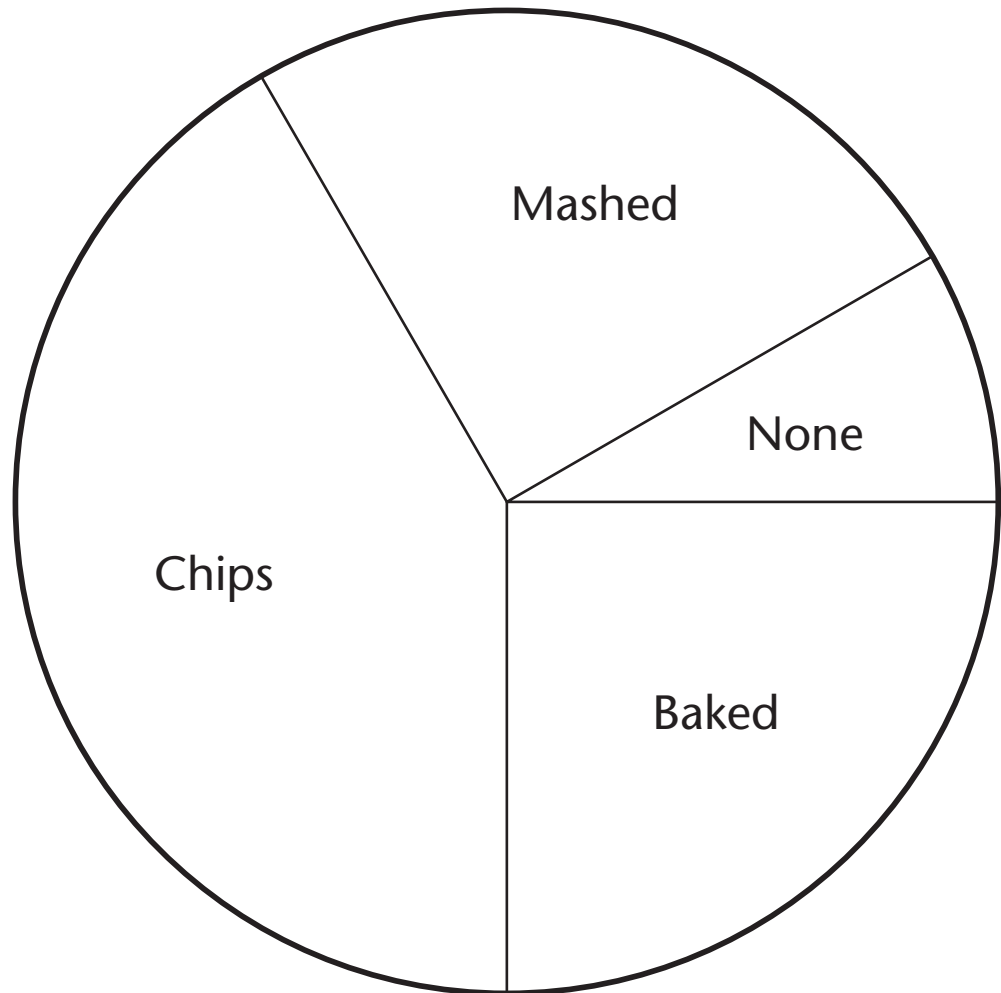


## Potato bar chart

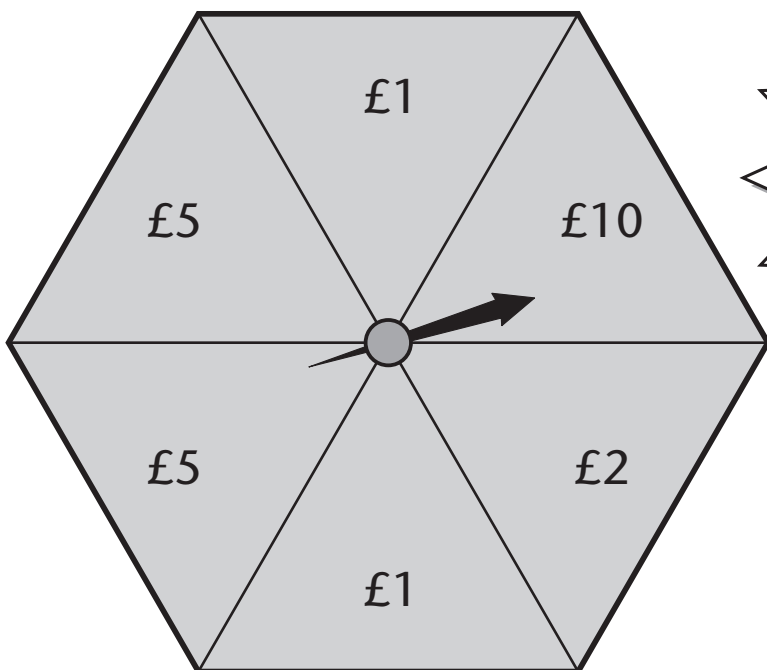


## Potato pie chart

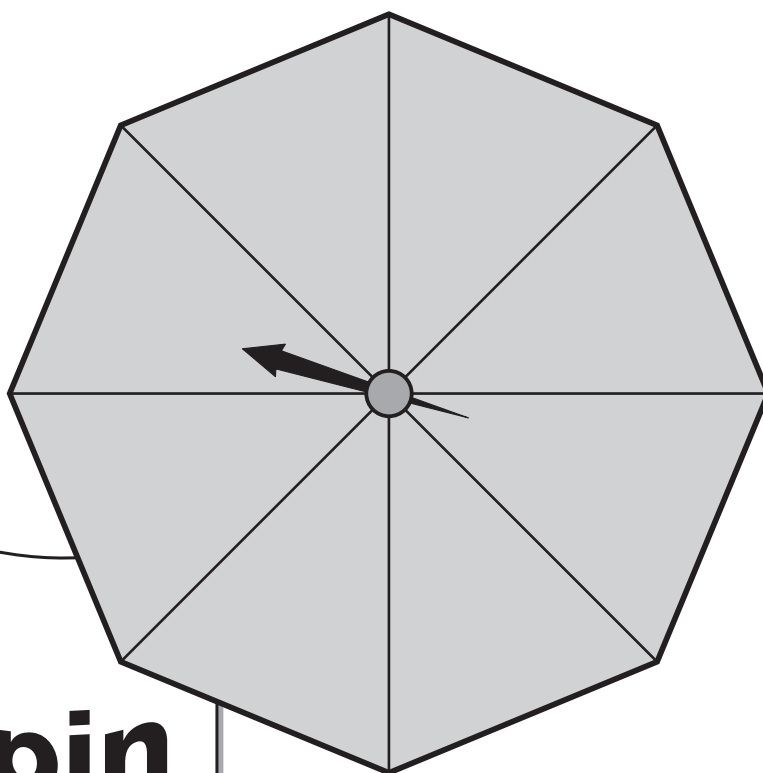
Type of potato  
preferred by teachers at school B



# Fairground games



**Hex-a-Spin**  
£1 a go



Only £1 a go  
**Oct-a-Spin**

# Mean maths 1

Mr Cullen	Form 9W
<b>Maths test 1</b>	

Amdeep	5
Bill	9
Colin	6
Debbie	1
Ellis	9

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## Mean maths 2

Mr Cullen	Form 9W
<b>Maths test 2</b>	

Amdeep	
Bill	
Colin	
Debbie	
Ellis	

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