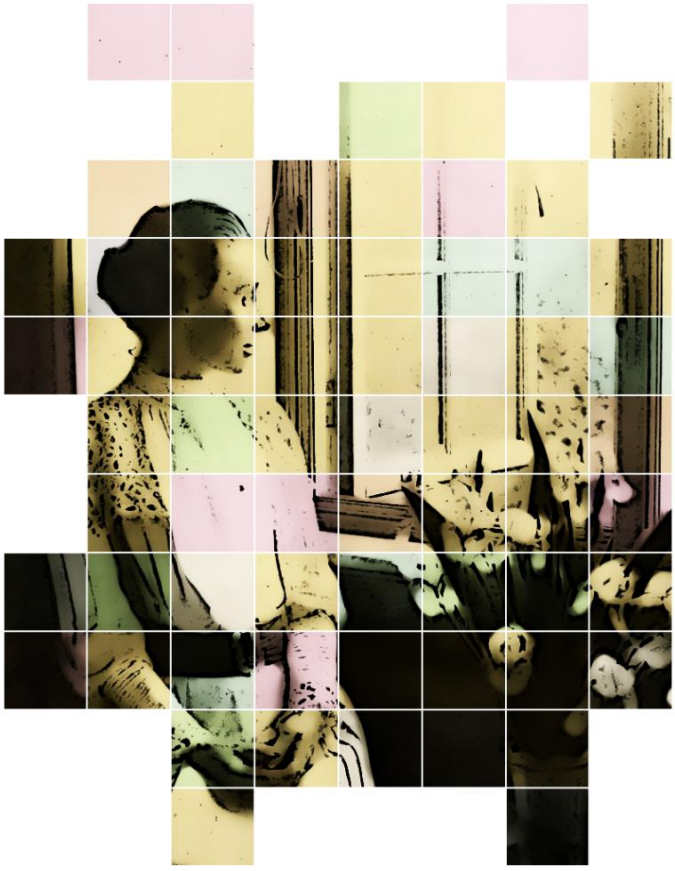
KS1 Work Book

Newnham College Family Day

Hello there! My name is Philippa Fawcett and I love Maths.

I was born a long time ago, on 4 April 1868. My mum helped found Newnham College when I was only three. I loved Newnham so much, I decided to go there when I was old enough and enjoyed studying Maths.



Would you help me solve some Maths problems? I have hidden the challenges around the wildflower garden with some Newnham teddy bears. As you go round, can you spot the secret code number on each challenge? When you put them together, come back to the Welcome Desk and we can give you a prize!

Challenge Number 1: Eggs in Baskets

Secret code number: _____

Eggs in Baskets

There are three baskets, a brown one, a red one and a pink one, holding a total of ten eggs.

The Brown basket has one more egg in it than the Red basket.

The Red basket has three eggs fewer than the Pink basket.

How many eggs are in each basket?

If you're stuck...

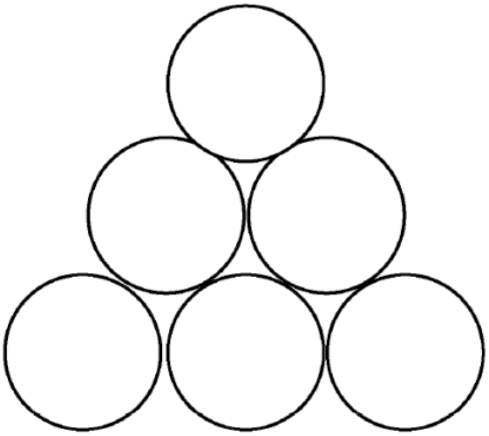
Start by imagining that the brown basket has one egg in it. How many would be in the red and pink baskets?

Try other numbers of eggs in the brown basket.

You might find it helpful to draw pictures or jot some things down on paper.

Challenge number 2: Find the Difference

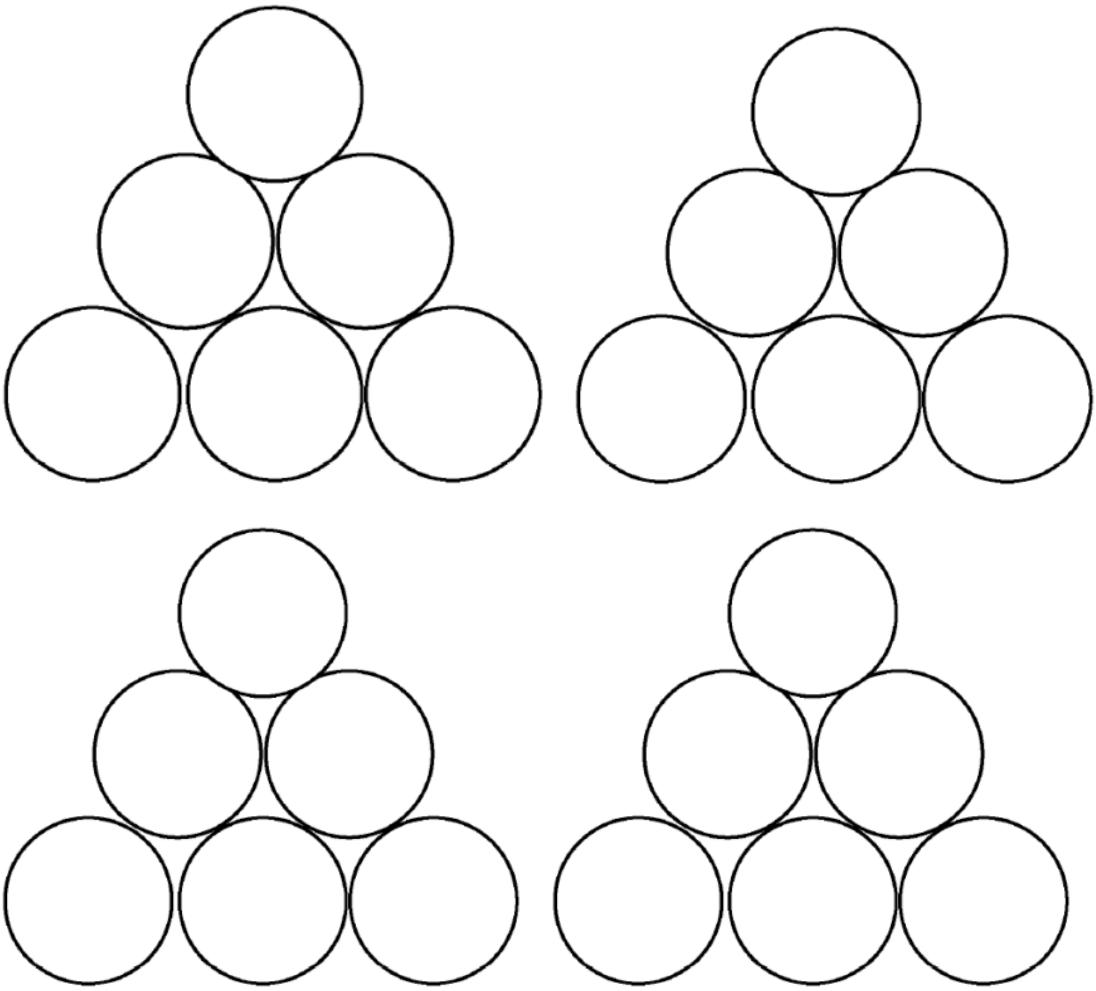
Secret code number: _____



Place the numbers 1 to 6 in the circles so that each number is the difference between the two numbers just below it.

For example:

5 - 2 = 3



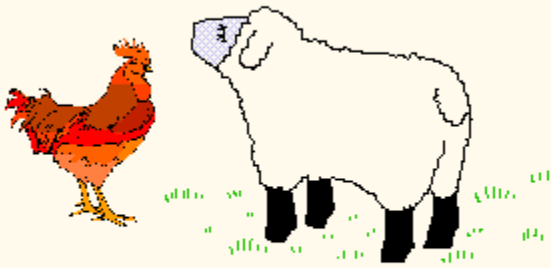
If you're stuck...

Where might the largest number go?

Challenge number 3: Heads and Feet

Secret code number: _____

Heads and Feet



On a farm there were some hens and sheep.

Altogether there were 8 heads and 22 feet.

How many hens were there?

If you're stuck...

How many legs would eight hens have?

How many legs would eight sheep have?

What could you try next?

Challenge number 4: The Brown Family

Secret code number: _____

The Brown Family

Sally Brown has an equal number of brothers and sisters.

Mark Brown, her older brother, has twice as many sisters as brothers.

How many children are there in the Brown family?

If you're stuck...

Start by imagining that Sally has one sister and one brother.

How many brothers and sisters does this mean Mark has?

Try other numbers of brothers and sisters for Sally.

Answers:

Challenge 1: Eggs in Baskets

brown basket - 3 eggs

red basket - 2 eggs

pink basket - 5 eggs

Challenge 2: Find the Difference

```
    1
  4   3
6   2   5
```

Or

```
    2
  5   3
6   1   4
```

Or

```
    3
  1   4
5   6   2
```

Challenge 3: Heads and Feet

Answer = 5 hens.

5 hens would have 10 feet.

3 sheep would have 12 feet.

10+12= 22

Challenge number 4: The Brown Family

Answer:

There are seven children in the Brown family: three boys and four girls.

Secret Code

Can you work out the secret code to win a prize?

Collect your prize from the welcome desk!

Well done and thank you for helping me!

Philippa Fawcett

Newnham College Family Day

July 2023