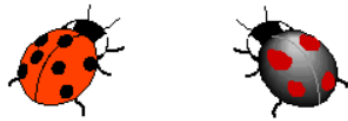
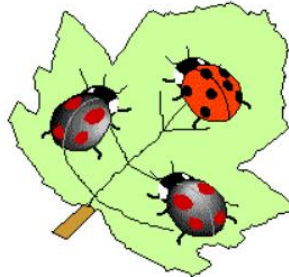


Maths – Ladybird puzzle

In Sam and Jill's garden there are two sorts of ladybirds. There are red ladybirds with seven spots and black ladybirds with 4 red spots.



Sam and Jill look at a leaf with three ladybirds on it.



"One Seven-Spot ladybird," said Sam, "and two Four-Spot ones."

"That's 15 spots altogether! Said Jill.

"I wonder if we could find ladybirds whose spots add up to other numbers. I know how to do 16"

"And 14 is easy too" added Sam.

How would you make 16 and 14 spots with the seven-spot and the four-spot lady birds?

What other numbers can you get adding 4s and 7s?

Can you get all the numbers from 4 to 35?

Are there some numbers you cannot make?

TIP from Ms Page:

I had a go at this puzzle myself. I have written down the answers and they will be on the school website on the "Mark your own work" page, next week.

Here is a tip that I think you might find helpful – Start with the smaller numbers and use these solutions to help you with the bigger numbers.

E.g. I am looking for 27. If I take off one 4 spot lady bird I get 23.... I can look through my list as see if I found a solution for 23. If I did not find an solution for 23, I could try taking off 7 instead, which would give me 20 and look to see if I had a solution for this.

If you write your answers in a systematic way and as clearly as possible, this will help you.