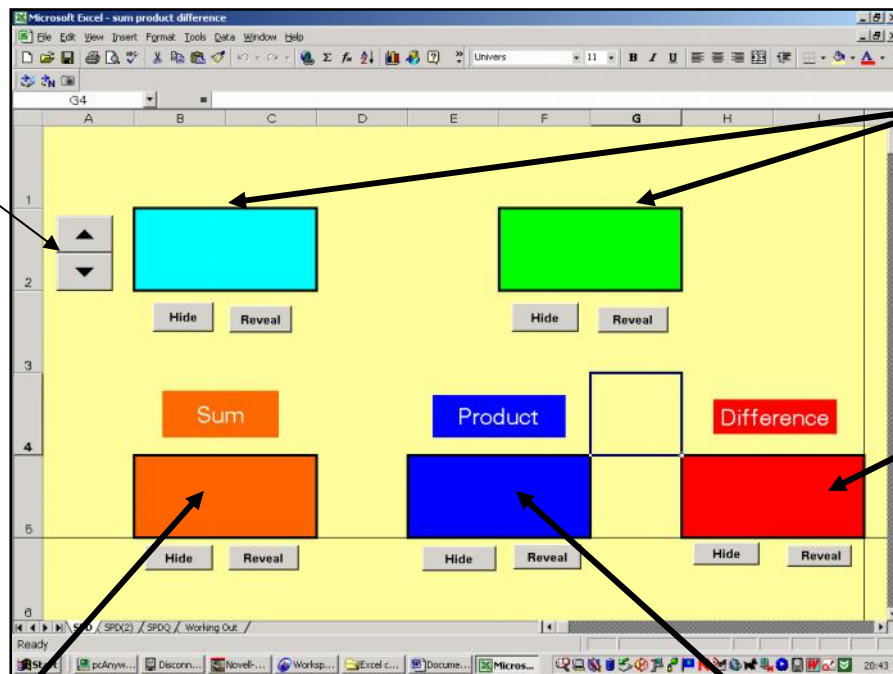


Sum, Product, Difference and Quotient



These spinner will change the hidden numbers and thus change the sum, product and difference of the numbers.

These boxes contain two hidden numbers. They are both under 12. Use the hide and reveal buttons under them.

This box is hiding the difference of the two hidden numbers. Use the hide and reveal buttons to show the hidden difference.

This box is hiding the sum of the two hidden numbers. Use the hide and reveal buttons to show the hidden sum.

This box is hiding the product of the two hidden numbers. Use the hide and reveal buttons to show the hidden product.

Key Questions

- Reveal the sum/difference or product
 1. What could the two missing numbers be? Reveal one of the missing numbers and ask do you need to change your answer? Why? What could the two numbers be now?
 2. What could the two missing numbers be? Reveal the difference. Ask do you need to change your answer? Why? What could the two numbers be now?
- This can be repeated by changing the numbers you are working with by pressing the spinner arrows.
- Challenge can be added by changing what is revealed e.g. product and difference.
- Open the SPD workbook on sheet 1, sum product difference. Hide all of the numbers, press spinner to generate a new problem, and then ask the pupils which out of the sum, product or difference they would like to see. Respond accordingly and ask pupils to begin to think about and justify possibilities for the pair of original numbers. Ask them for a second number they would like to be revealed, and then to predict the two hidden numbers. Are they sure about the solution? Discuss the strategies used – this is a combination of recalling facts and applying them. Try again for different questions, revealing different numbers.
- Open the second sheet, 'sum product difference quotient', and challenge pupils to calculate the possible starting numbers given different information, for example the difference and the quotient. Discuss all of the strategies they are using: listing possibilities, using knowledge about facts and number patterns, odd and even numbers and multiples.