

Code Breaker: The AND and OR Rules *ANSWERS*

The Maths Habit

CRACK THE CODE

AND means multiply. OR means add. Work out each probability and simplify your answer. Look your answer up in the **Code Box** and write the letter it unlocks in the white box. Collect all thirteen letters in the strip, then unscramble them to find the answer.

13 CLUES



1 $\frac{1}{2}$ AND $\frac{1}{6}$ N	2 $\frac{1}{2}$ AND $\frac{1}{2}$ A	3 $\frac{1}{6}$ AND $\frac{1}{6}$ L	4 $\frac{1}{3}$ AND $\frac{1}{5}$ S
5 $\frac{2}{5}$ AND $\frac{1}{2}$ B	6 $\frac{3}{4}$ AND $\frac{2}{3}$ O	7 $\frac{1}{4}$ AND $\frac{1}{4}$ L	8 $\frac{1}{6}$ OR $\frac{1}{6}$ O
9 $\frac{3}{10}$ OR $\frac{4}{10}$ W	10 $\frac{1}{8}$ OR $\frac{5}{8}$ R	11 $\frac{2}{9}$ OR $\frac{5}{9}$ E	12 $\frac{1}{5}$ OR $\frac{2}{5}$ A
13 $\frac{2}{3}$ AND $\frac{2}{3}$ T	YOUR LETTERS N A L S B O L O W R E A T UNSCRAMBLE Clue: a summer garden game (5, 8) <u>WATER BALLOONS</u>		

CODE BOX

$\frac{1}{2} = O$	$\frac{1}{3} = O$
$\frac{2}{3} = M$	$\frac{1}{4} = A$
$\frac{3}{4} = R$	$\frac{1}{5} = B$
$\frac{3}{5} = A$	$\frac{4}{9} = T$
$\frac{7}{9} = E$	$\frac{7}{10} = W$
$\frac{9}{10} = N$	$\frac{1}{12} = N$
$\frac{1}{15} = S$	$\frac{8}{15} = D$
$\frac{1}{16} = L$	$\frac{2}{25} = I$
$\frac{3}{25} = P$	$\frac{1}{36} = L$
$\frac{5}{64} = U$	$\frac{10}{81} = H$



Code Breaker: The AND and OR Rules *ANSWERS*

The Maths Habit

CRACK THE CODE

AND means multiply. OR means add. Work out each probability and simplify your answer. Look your answer up in the **Code Box** and write the letter it unlocks in the white box. Collect all thirteen letters in the strip, then unscramble them to find the answer.

13 CLUES



1 $\frac{1}{2}$ AND $\frac{1}{6}$ N	2 $\frac{1}{2}$ AND $\frac{1}{2}$ A	3 $\frac{1}{6}$ AND $\frac{1}{6}$ L	4 $\frac{1}{3}$ AND $\frac{1}{5}$ S
5 $\frac{2}{5}$ AND $\frac{1}{2}$ B	6 $\frac{3}{4}$ AND $\frac{2}{3}$ O	7 $\frac{1}{4}$ AND $\frac{1}{4}$ L	8 $\frac{1}{6}$ OR $\frac{1}{6}$ O
9 $\frac{3}{10}$ OR $\frac{4}{10}$ W	10 $\frac{1}{8}$ OR $\frac{5}{8}$ R	11 $\frac{2}{9}$ OR $\frac{5}{9}$ E	12 $\frac{1}{5}$ OR $\frac{2}{5}$ A
13 $\frac{2}{3}$ AND $\frac{2}{3}$ T	YOUR LETTERS N A L S B O L O W R E A T UNSCRAMBLE Clue: a summer garden game (5, 8) <u>WATER BALLOONS</u>		

CODE BOX

$\frac{1}{2} = O$	$\frac{1}{3} = O$
$\frac{2}{3} = M$	$\frac{1}{4} = A$
$\frac{3}{4} = R$	$\frac{1}{5} = B$
$\frac{3}{5} = A$	$\frac{4}{9} = T$
$\frac{7}{9} = E$	$\frac{7}{10} = W$
$\frac{9}{10} = N$	$\frac{1}{12} = N$
$\frac{1}{15} = S$	$\frac{8}{15} = D$
$\frac{1}{16} = L$	$\frac{2}{25} = I$
$\frac{3}{25} = P$	$\frac{1}{36} = L$
$\frac{5}{64} = U$	$\frac{10}{81} = H$

