Activity 2 (Pair/ Group work):

Factorisation of quadratic expressions $x^2 + bx + c$ using algetiles

Ensure that x^2 tile is always at the top left corner of the arrangement of algetiles representation

Coefficient of x^2 is **1** and b > 0

Algebraic Expressions	Algebra Tiles Representation (Fill in missing dimensions)	What do you see?	Rectangle Diagram (dimensions as factors)	Factorised form
(a) $x^2 + 3x + 2$				
:				
(b) $x^2 + 5x + 6$				
(c) $x^2 + 7x + 10$				
(d) $x^2 + 8x + 15$				

For $x^2 + bx + c$, where b > 0, c > 0, what is the relationship between b and c such that $x^2 + bx + c$ can be factorized?

Test your conjecture: Can these expressions be factorised?

- (a) $x^2 + 7x + 9$
- (b) $x^2 + 8x + 10$