



A Venn diagram illustrating the union of two sets,  $A$  and  $B$ , within a universal set  $S$ . The universal set  $S$  is represented by a green rectangular border. Inside, two overlapping gray circles represent sets  $A$  and  $B$ . The entire area covered by both circles is labeled with the expression  $A \cup B$  in a black serif font.

$$A \cup B$$

$S$