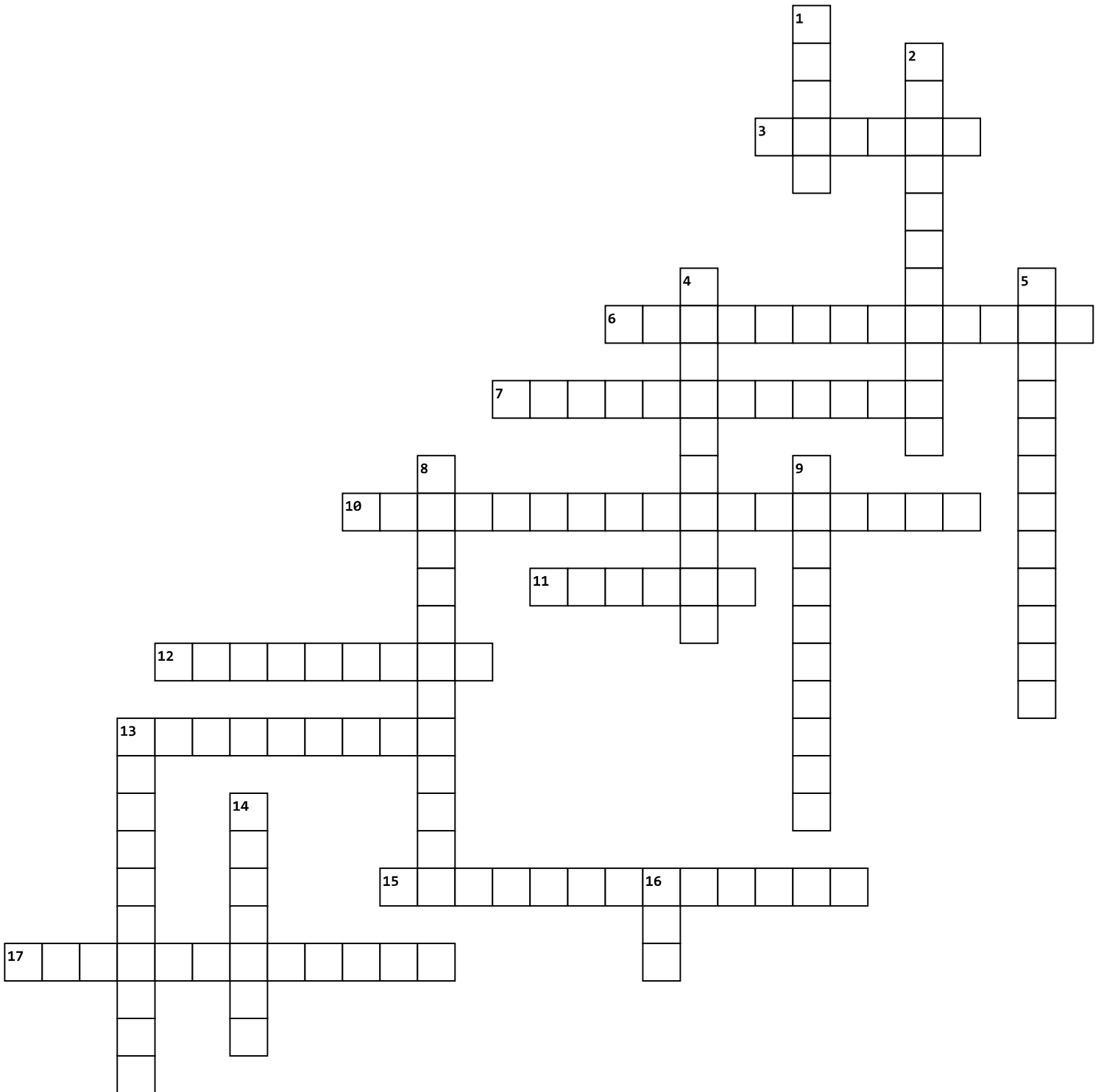


# Sets



## Across

3. Set The set of all subsets of a set  $A$ , including the empty set and  $A$  itself.
6. The set that contains all objects or elements under consideration, usually denoted by  $U$ .
7. A set with an infinite number of elements.

## Down

1. The set of all elements that are in either set  $A$  or set  $B$  or in both, denoted  $A \cup B$ .
2. The number of elements in a set.
4. A set with a finite number of elements.

**10.** The set of all ordered pairs obtained from two sets A and B, denoted  $A \times B$ .

**11.** - A set A is a subset of a set B if all elements of A are also elements of B, denoted  $A \subseteq B$ .

**12.** A set with no elements, denoted as  $\emptyset$  or  $\{\}$ .

**13.** Sets Two sets that have no elements in common, denoted  $A \cap B = \emptyset$ .

**15.** - A set A is a proper subset of a set B if all elements of A are in B, and B contains at least one element not in A, denoted  $A \subset B$ .

**17.** The set of elements that are common to two sets A and B, denoted  $A \cap B$ .

**5.** A diagram that shows all possible logical relations between a finite collection of different sets.

**8.** A pair of elements with order taken into account, usually written as  $(a, b)$ .

**9.** The set of all elements in the universal set that are not in set A, denoted  $A'$ .

**13.** The set of elements that are in set A but not in set B, denoted  $A - B$ .

**14.** An object that belongs to a set.

**16.** A collection of distinct objects, considered as an object in its own right.