### Introduction

#### Welcome to FIRST® LEGO® League Explore!

In FIRST® LEGO® League Explore, teams focus on the fundamentals of engineering as they explore real-world problems, learn to design and code, and create unique solutions made with LEGO® bricks and powered by LEGO® Education SPIKE™ Essential.

FIRST LEGO League Explore is one of three divisions by age group of the FIRST LEGO League program. This program inspires young people to experiment and grow their confidence, critical thinking, and design skills through hands-on learning. FIRST LEGO League was created through an alliance between FIRST® and LEGO® Education.









#### FIRST® DIVESM presented by Qualcomm and SUBMERGEDSM

Welcome to the *FIRST*® DIVE<sup>SM</sup> presented by Qualcomm season. This year's *FIRST* LEGO League challenge is called SUBMERGED<sup>SM</sup>.

This season, children will learn about how and why people explore the oceans. Our discoveries beneath the ocean surface teach us how this complex ecosystem supports a healthy future for the plants and animals that live there.

During each session, teams will experience the engineering design process. There is no set order for this process, and they may go through each step several times in a single session. This means that during a session, children will be exploring the theme and ideas, creating solutions, testing them, iterating and changing them, and then sharing what they've learned with others.

More than 80% of the ocean remains unexplored, offering curious minds deep opportunities to dive into expeditions.



#### **Working in Teams**

Children work together in teams of up to six members using pieces from the LEGO Education SPIKE™ Essential set and an Explore set. Teams will collaborate and communicate to build, learn, and play together.

Children should be encouraged in every session to work with their teammates, listen to each other, take turns, and share ideas and pieces.















