

# How to Utilize the Activity Books

## Purpose

The activities presented in this book are intended to prepare your team for the design phase of the Idaho TECH program. Although these activities are considered an **optional** component of Idaho TECH, we **strongly recommend** that you complete as many activities as possible before you receive your Lego® kits. Please refer to the recommendations below when choosing activities to complete with your team.

## Categories

The activities have been placed in a specific order to ensure maximum educational benefit. We highly recommend that you complete the activities in the order they are presented so the activities will build upon each other as intended. They are divided into two general categories:

### (1) Teambuilding Activities

These activities focus on communication, cooperation, taking on roles, and group decision-making skills. Teams with strong teamwork skills tend to progress through the Idaho TECH program well and are extremely successful at competition.

### (2) Mars Exploration Activities

These activities focus on specific characteristics of Mars and the process of space exploration. The information that students will gain from these activities will help them design their Rover by introducing ideas regarding what NASA must consider when planning to explore the surface of another planet.

## Minimum Recommendations

**At the minimum, we recommend that teams complete the following activities to prepare for specific Idaho TECH program requirements:**

- ★ Several teambuilding activities to strengthen teamwork skills early
- ★ **Earthling Exploration of Mars** to complete the timeline requirement for the notebook
- ★ **3-2-1 Pop! – An Effervescent Race** to learn about the Engineering Design Process, the Lab Notebook, the Rover Display, and Presentation competition events
- ★ **Copy Cat** to learn about the Blind Driving competition event

## Activity Book Layout

- ★ Each activity includes a **Teacher Version** and a **Student Version**
- ★ The **Teacher Version** of each activity contains:
  - Full directions for activities designed to be teacher-led
  - Useful tips and suggestions for the teacher/parent
  - Questions to stimulate post-activity discussion with the students
- ★ The **Student Version** of each activity contains:
  - Full directions for activities designed to be student-led
  - Background information
  - Simplified Directions
  - Worksheets