



Multimedia Resources



***FIRST*[®] LEGO[®] League Challenge**

Multimedia Resources

Below is a session-by-session list of Multimedia Resources for the BIOGLOW™ season. These resources include links to websites, videos, building instructions, and other online tools related to the content of each session.

This document contains links to third-party websites which may contain articles, images, text, graphics, video, applications, software, and other content belonging to or originating from the content creators. While we conduct an initial review of such websites, *FIRST* is not responsible for any third-party content accessed through this guide, including its accuracy, appropriateness, completeness, offensiveness, opinions, reliability, privacy policies, or other practices of these sites. If you visit any of the sites listed in this guide, or share this third-party content with others, you do so at your own risk. You should review the applicable terms and policies, including privacy and data gathering practices, of any website to which you navigate.

You could share resources during sessions and/or encourage your students to explore them between sessions (with permission and supervision from a parent or guardian).

BIOGLOW Season Resources

[Season resources](#) page includes:

- Season Launch Resources
- Links to Season Videos
- Season Overview
- Challenge Welcome Letter
- Challenge Introduction
- Challenge Set Building Instructions
- Student Participation Certificates
- Individuals Session Slides
- Robot Game Rulebook
- Mission Building Instructions
- Challenge Related Rule Updates

- BIOGLOW Season video resources on [FIRST LEGO League YouTube Channel](#)

Go To Resources		
Email for General Support	FIRST LEGO League Challenge: How It Works	Getting Started with FIRST LEGO League Challenge video
FIRST LEGO League YouTube Channel	BIOGLOW General Resources	Teamwork Makes the Dream Work FIRST LEGO League Music Video
General Resources		
LEGO Education Support	FIRST LEGO League (global)	FIRST LEGO League (US)
Impact of FIRST Programs	Buying Replacement Parts	FIRST LEGO League Support Videos
Coach and Mentor Resources		
FIRST Youth Protection	FIRST Mentor Network	FIRST Volunteer Resources
Educator Resources		
Skills Progression	Standards Alignments	Scope and Sequence Options
FIRST Certified Professional Development	FIRST Education Philosophy	
LEGO Educator Resources		
Self-Guided Professional Development	LEGO Education Teacher Community	
Social Impact Resources		
Mentoring and Coaching with FIRST Video	Inclusive Recruitment & Enrollment Strategies	Additional Training & Resources

- [Season content](#) (logos, templates, graphics, posters, wallpapers)



Core Values Resources

Book Resources	
The Squirrels who Squabbled by Rachel Bright	Fiction book about conflicts
A Little SPOT of Teamwork: A Story About Collaboration and Leadership by Diane Alber	Fiction book about teamwork
Brave Irene by William Steig	Fiction book about perseverance
The Invisible Boy by Patrice Barton	Fiction book about inclusion
My Mouth is a Volcano! by Julia Cook	Fiction book about taking turns
The Little Red Pen by Janet Stevens	Fiction book about cooperation
Going Places by Paul and Peter Reynolds	Fiction book about creativity
The Squirrels who Squabbled by Rachel Bright	Fiction book about conflicts
A Little SPOT of Teamwork: A Story About Collaboration and Leadership by Diane Alber	Fiction book about teamwork
Brave Irene by William Steig	Fiction book about perseverance
The Invisible Boy by Patrice Barton	Fiction book about inclusion
My Mouth is a Volcano! by Julia Cook	Fiction book about taking turns
Web Resources	
Team-Building Games and Activities for Kids	We Are Teachers
Team Building for Kids: A Complete Guide	Venture Team Building
FIRST Family Engagement	A variety of free resources and links
FIRST Education STEM Activities	FIRST Education

Robotics Resources

Team Management Resources	
How to Do Goal Setting with Your Students This School Year	Article from Weareteachers.com about setting goals with your students
How To Set Goals (4 Easy Steps) (4:40)	Video from Rocket Kids about easy ways to set goals
LearnStorm Growth Mindset: How to write a SMART goal (2:52)	Video from Khan Academy about writing SMART goals
Keeping Organized	Tips and tricks from Droid Robotics on how to stay organized with tasks
Robot Design Resources	
Technical Resources	Links to resources for Challenge
Yoshihito Isogawa's YouTube Channel	SPIKE Prime building ideas from the author
Builderdude Robotics Tutorials	Builderdude, former <i>FIRST</i> LEGO League team
Mr. Hino's LEGO Robotics YouTube Channel	Various videos for <i>FIRST</i> LEGO League teams
Droid Robotics YouTube Channel	Video tutorials for <i>FIRST</i> LEGO League teams
Robot Design and Robot Game Prep Activities	Resources on building robots and preparing for the robot game from Droid Robotics
Engineering Design Process, Design, and Computational Thinking	
What is Computational Thinking?	Teach Your Kids Code article about coding
The Engineering Process: Crash Course Kids #12.2 (5:16)	Video by Crash Course Kids to explain the engineering design process to your students
Engineering Design Process Curriculum	Various lessons to practice the engineering design process from Teach Engineering.org
Design Thinking Resources for Educators	Innovation Training article on design thinking
Design Thinking: A Problem Solving Framework (5:22)	Video from Edutopia providing examples of design thinking for educators

LEGO Education SPIKE Prime Resources

- [Download Software](#)
- [SPIKE Prime Competition Ready Unit](#)
- [SPIKE Prime Supplementary Lessons](#)
- [SPIKE Prime Lessons](#)
- [SPIKE Prime Product Support Videos](#)

LEGO Education EV3 Resources

- [Download Software](#)
- [MINDSTORMS EV3 Product Support](#)
- [EV3 Robot Trainer Unit](#)
- [EV3 Supplemental Coding Activities](#)
- [EV3 Lessons Coding Tutorials](#)



Innovation Project Resources

Video Resources	
How to Pick a Project Topic and Conduct Research (40:10)	Share & Learn Webinar Series from Droid Robotics
Essential Google Search Tricks for Research (6:42)	Common Sense Media
Reading More Than One Source on a Topic (3:15)	Khan Academy
Writing Videos for Kids: How to Evaluate Sources for Reliability (3:48)	Teaching without Frills
How To Create Surveys (20:25)	Droid Robotics
Innovation Project for <i>FIRST</i> LEGO League: Create and Iterate your Prototype (13:46)	The Moment Makers, former <i>FIRST</i> LEGO League team from Pearland, TX
Schooled by Kids: Presentation Skills, Part 1 (1:44) Presentation Skills, Part 2 (1:31)	Green Ivy Schools
Web Resources	
Innovation Project Prep Activities	Resources compiled by Droid Robotics for the innovation project
USPTO Educational for Kids, Parents, and Teachers	United States Patent and Trademark Office
Expanding Students' Ideas About How to Give Presentations	Edutopia
How to Help Students Develop Interviewing Skills	Edutopia
How to Skype with an Expert in your Classroom	Class Tech Tips
There's Got to be a Better Way Developing a Product	Resources from Fun Kids –UK children's Radio Station

BIOGLOW Resources

General Resources

Video Resources	
Explore the Rainforest! Ecology for Kids (4:07)	SciShow Kids video introducing ecosystems and habitats of the rainforest
Inside the Enchanted Forests Full Episode (43:11)	Full episode by National Geographic Kids, featuring real rainforest footage and fascinating animal facts
Virtual Field Trip to the Amazon (16:26)	Take a virtual field trip to the Amazon with the World Wildlife Fund Wild Classroom
What is Biodiversity? (7:31)	Next Generation Science video about biodiversity
Web Resources	
Rainforest Facts: The Ultimate Guide To Rainforests - Animals, Plants & People	Active Wild guide to rainforests; learn all about rainforests and why they are so important
National Geographic Kids: Rainforest Habitat	Discover rainforest habitats and animal profiles, including videos, quizzes and wildlife news
Biodiversity Vocabulary Words	A variety of words and definitions associated with Biodiversity
Book Resources	
"National Geographic Kids: Little Kids First Big Book of the Rainforest" by Moira Rose Donohue	Great introduction to the rainforest, habitats, and animals that reside there
"The Great Kapok Tree: A Journey into the Heart of the Amazon" by Lynne Cherry	A beautifully illustrated story that transports children to the depths of the Amazon rainforest.
"Because of an Acorn," by Lola M. Shaefer and Adam Shaefer	Shows how one small acorn supports an entire forest ecosystem. A great introduction to interconnected habitats.

Animals of the Rainforest

Video Resources	
Explore the Rainforest! Ecology for Kids (4:07)	SciShow Kids video introducing ecosystems and habitats of the rainforest
Inside the Enchanted Forests Full Episode (43:11)	Full episode by National Geographic Kids, featuring real rainforest footage and fascinating animal facts
Web Resources	
San Diego Zoo Kids	Live animal cams, fun animal stories and facts

National Wildlife Federation	Animal facts, wildlife habitats and conservation activities
Book Resources	
“Rainforest Animals: An Illustrated Guide to Biodiversity” by Patricia Lauber	Offers a detailed look at the incredible variety of wildlife that inhabits rainforests. This informative book is perfect for children who are curious about animals, as it provides facts and colorful photographs that bring each species to life.
“Tree of Wonder: The Many Marvelous Lives of a Rainforest Tree” by Kate Messner	From macaws and toucans to vipers, bats, and howler monkeys, this gorgeous story introduces kids to the almendro tree, home to more than 1000 organisms
“Animalium” by Jenny Broom and Katie Scott	A beautifully illustrated book that takes readers on a tour of the animal kingdom as if they were walking through a natural history museum

Jobs and Tools

Video Resources	
Wildlife Biologist - Career Spotlight (3:10)	Short video by USAGov about working as a wildlife biologist
Biologists! Scientists Who Love Life! (3:47)	SciShow video about rainforests, why they're important, and the amazing variety of plants and animals that live there
Guardians of the Rainforest: Meet the Mighty Protectors (3:00)	Introduces rainforest conservation and explains why the Amazon has incredible biodiversity
Web Resources	
TREE Foundation Forest Resources	Features books and information about real canopy scientist Margaret Lowman and how she studies rainforest treetops
How Scientists are Uncovering the Secrets of Life in the Rainforest Canopy	Smithsonian Magazine; National Zoo and Conservation Biology Institute
Book Resources	
“The Leaf Detective” by Heather Lang	Tells the true story of canopy scientist Margaret Lowman, who climbed into rainforest treetops to discover new species and learn how forests work.

Event Preparation Resources

Event Resources	
Events Page	firstlegoleague.org
Spotlight on Judging	FIRST LEGO League Judging Video
Judging Session Flow Chart, Rubrics, and Awards List	These resources are found on the Challenge Season Resources page
The Tournament Experience (1:55)	Video by LEGO Education on the basics of the tournament experience for a team
Customizable Student Certificates	Printable certificates to award to each student
Tournament Tips	FLL Tutorials Coaches Corner Tips

Career Resources

General Career Resources	
Visit the Learning Lab and search careers from A-Z	PBS Learning Media
Career Awareness Resources	Explore real-world STEM roles
O*NET Online	United States Department of Labor
Career Exploration Lesson Plans	Nebraska Department of Education
Career Exploration	Career profiles from the United States Bureau for Labor and Statistics
Career Exploration Kahoot Course	Kahoot Courses for learning about careers and how <i>FIRST</i> prepares you for your future
X-STEM All Access	YouTube Playlist with one-hour long video interviews with various STEM professionals

Extension Activity Resources	
What is a Robot?	Lesson plan from PBS Learning Media
Wild-Inspired Robotic Arms	Video, background reading, and lesson plan from PBS Learning Media
Engineering for Good	Project-based Unit from PBS Learning Media
Project Management Fiction Books for Youth Ages 10-12	Project Management Institute Educational Foundation
Invention Education Curricula	Links to invention-focused lesson plans from Invent Ed
Drawing Designs in Detail	Hands-on activity plan from teachengineering.org

