



Multimedia Resources



FIRST® LEGO® League Explore 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).

Go To Resources		
Email for General Support	Get Started with <i>FIRST</i> LEGO League	Getting Started with <i>FIRST</i> LEGO League Explore video
FIRST LEGO League YouTube Channel	BIOGLOW General Season Resources	Teamwork Makes the Dream Work <i>FIRST</i> LEGO League Music Video
General Resources		
LEGO Education Support	FIRST LEGO League (global)	FIRST LEGO League (US)
Impact of <i>FIRST</i> 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 Education Resources		
Self-Guided Professional Development	LEGO Education Teacher Community	
Social Impact Resources		
FIRST Mentoring and Coaching with FIRST Video	Inclusive Recruitment & Enrollment Strategies	Additional Training & Resources

BIOGLOW Season Resources

[Season resources](#) page includes:

- Season Launch Resources
- Links to Season Videos
- Explore Overview
- Explore Welcome Letter
- Explore Introduction
- Explore Set Building Instructions
- Student Participation Certificates
- Individuals Session Slides
- BIOGLOW Season video resources on [FIRST LEGO League YouTube Channel](#)
- [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
Web Resources	

Robotics Resources

FIRST Family Engagement	A variety of free resources and links
FIRST Education STEM Activities	FIRST Education
33+ Awesome Team-Building Games and Activities for Kids	We Are Teachers
Team Building for Kids: A Complete Guide	Venture Team Building

Team Management and Goal Setting 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 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 from Droid Robotics on staying organized
The 9 Best Online Tools For Student Collaboration	Article from Weareteachers.com with great tools for student collaboration digitally

Robot Design Resources

Technical Resources	Links to technical resources for Explore
Yoshihito Isogawa's YouTube Channel	SPIKE Essential building ideas from the author

Engineering Design Process, Design, and Computational Thinking

What is Computational Thinking?	Article by Teach Your Kids Code 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 from Teach Engineering.org
Design Thinking Resources for Educators	Article by Innovation Training for educators to understand design thinking
Design Thinking: A Problem Solving Framework (5:22)	Video from Edutopia providing examples of design thinking for educators

LEGO Education SPIKE Essential Resources

- [Software Download](#)
- [FIRST LEGO League Explore Unit](#)
- [Getting Started with SPIKE Essential](#)
- [SPIKE Essential Unit Plans](#)
- [Product Support Resources](#)

LEGO Education WeDo 2.0 Resources

- [Getting Started with WeDo 2.0](#)
- [Download WeDo 2.0 Software and View System Requirements](#)
- [WeDo 2.0 Product Support](#)
- [WeDo 2.0 Lessons](#)

BIOGLOW Session Resources

Session 1: Canopy Connections

Video Resources	
Wildlife Biologist - Career Spotlight (3:10)	Short video about working as a wildlife biologist
Explore the Rainforest! Ecology for Kids (4:07)	Engaging animated video that introduces the ecosystems and habitats of the rainforest
Why are rainforests so rainy? (6:42)	Mystery Science video about why rainforests are so rainy
Web Resources	
Biodiversity Vocabulary Words	A list of common words related to biodiversity
Rainforest Facts: The Ultimate Guide to Rainforests - Animals, Plants & People	Active Wild guide to rainforests and why they're so important
Book Resources	
"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.

Session 2: Creature Creators

Video Resources	
Rainforest Animals (3:41)	Animals of the rainforest and their habitats
Wild Kratts: Amazon Animals! (3:49)	Wild Kratts video about animals of the amazon
Web Resources	

National Geographic Kids: Rainforest Habitat	Discover rainforest habitats and animal profiles, including videos, quizzes, and wildlife news
San Diego Zoo Kids	Live animal cams, animal stories, habitat information and fun science activities
Book Resources	
"A is for Anaconda; A Rainforest Alphabet" by Anthony D. Fredericks	This alphabet book showcases the wonders of the rapidly diminishing rainforest.

Session 3: Animal Alarm

Video Resources	
Virtual Fieldtrip to the Amazon (16:26)	Join the World Wildlife Fund Wild Classroom on a virtual fieldtrip to the Amazon
What Animals Live in the Rainforest (3:03)	Short video by Twinkl Educational Publishing about animals that live in the rainforest
Web Resources	
Rainforest Foundation US; Kids Corner	Discover the fascinating secrets of the Amazon and support the animals, plants, and communities that call it home
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.
"Secrets of the Rainforest" by Carron Brown	Shine a light book; Wonderful introduction to the environment of the rainforest with see-through pages

Session 4: Treehouse Camp

Video Resources	
Rainforests for Kids: Learn all about the two types of rainforests (9:00)	Learn Bright video that explains tropical and temperate rainforests and introduces rainforest layers including what animals live in each layer
Web Resources	

Tropical Rainforests for Kids: Fun Facts, Layers, and Why They Matter	Explore the tropical rainforests in this kid-friendly guide. Learn about their layers, animals, and why they are important to the planet.
Book Resources	
"Way up High in a Tall Green Tree" Jan Peck	The main character wishes good morning to all the creatures of the rain forest as she climbs a tall, tall tree
"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

Session 5: Science Helpers

Video Resources	
Science for Kids - Learn about the types of Scientists! (3:45)	Let's learn about scientists and what they do
What is a Scientist? (3:14)	In this KidsMathTV video we'll explore what scientists do and why their work is so important
Web Resources	
TREE Foundation Forest Resources	Features books and information about real canopy scientist Margaret Lowman and how she studies rainforest treetops.
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.

Session 6: Research Tools

Video Resources	
What's It Like To Be A Zoologist (2:36)	NBC Connecticut Kids Connection
Inside the Enchanted Forests Full Episode (43:11)	National Geographic Kids full episode featuring real rainforest footage and fascinating animal facts
Web Resources	

National Wildlife Federation Kids	Explore animal facts, wildlife habitats, and conservation activities
World Rainforest Information for Kids	Helping children learn about the rainforest

Session 7: Dream Treehouse

Video Resources	
Biologists! Scientists Who Love Life! (3:47)	Who wants to be a biologist? Learn all about scientists who study life -- where they do their jobs, the questions they ask, and the tools they use!
Book Resources	
"My Rainforest Adventure: An Interactive Exploration" by Susan Canizares	This book invites children to explore the rainforest through a fun, hands-on approach that includes flaps to lift and textures to feel.

Session 8: Team Model

Video Resources	
Recap of the 2019 FIRST LEGO League World Festival in Houston (1:10)	*Have your students watch for examples of team models in the video
Science of Innovation: What Is Innovation? (6:56)	Video from NBC News Learn about innovation and the process for improving
Designing and Building the LEGO Model & Creating the Team Poster (30:24)	Coach webinar from <i>FIRST</i> in Texas
Web Resources	
There's Got to be a Better Way – Developing a Product	Resources from Fun Kids – UK children's Radio Station on how to develop a product and share it

Session 9: Team Poster

Video Resources	
Sessions 10 & 11 - Poster (0:42)	Video of <i>FIRST</i> LEGO League Explore Poster. This session was formerly numbered 10 & 11 but is a part of this season's session 9.
Recap of the 2019 World Festival (1:10)	*Watch for example team posters in the video

Web Resources	
6 tips to create awesome science posters	Fizzics Education
Team Poster - Explore	Tips from the IET in the United Kingdom

Session 10: Prepare for Event

Video Resources	
How to Prepare for your Festival (1:39)	Video by IET on the basics of hosting an event
Celebrate - GoNoodle Dance Song (2:34)	Video & Song to play for students to dance along
Presentation Skills, Part 1 (1:44) Presentation Skills, Part 2 (1:31)	Videos from Green Ivy Schools to teach students how to give a great presentation
Web Resources	
Customizable Student Certificates	Printable certificates to award to each student
Event Introduction	Overview of <i>FIRST</i> LEGO League Explore events
Reviewing Sheet	Reviewing questions, rubric, and awards

Career Resources

General Career Resources	
Visit the Learning Lab and search careers	PBS Learning Media
Career Exploration Lesson Plans	Nebraska Department of Education
Career Exploration	Profiles from the US Bureau Labor & Statistics
Career Exploration Kahoot Course	Kahoot Courses for learning about careers
X-STEM All Access	YouTube Playlist with STEM interviews

Additional Resources



Extension Activity Resources	
What is a Robot?	Lesson plan from PBS Learning Media
Wild-Inspired Robotic Arms	Activities from PBS Learning Media
Engineering for Good	Project-based Unit from PBS Learning Media
Books on Inventors	Keem 'Em Thinking
Invention Education Curricula	Links to invention lesson plans from Invent Ed
Drawing Designs in Detail	Hands-on activities from teachengineering.org

