

Multimedia Resources

MASTERPIECE



FIRST[®] LEGO[®] League Explore Multimedia Resources

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

Some of the resources below are from third-party sites not developed or managed by *FIRST*[®] or LEGO[®] Education, but they're too great not to share! 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	FIRST LEGO League Explore: How It Works	Getting Started with FIRST LEGO League Explore video	
<u>FIRST LEGO League</u> YouTube Channel	MASTERPIECE General Season Resources	<u>Teamwork Makes the Dream</u> <u>Work <i>FIRST</i> LEGO League</u> <u>Music Video</u>	
	General Resources		
LEGO Education Support	FIRST LEGO League (global)	FIRST LEGO League (US)	
Impact of FIRST Programs	Buying Replacement Parts	<u>FIRST LEGO League</u> <u>Support Videos</u>	
Co	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		
LE	LEGO Education Resources		
<u>Self-Guided Professional</u> <u>Development</u>	<u>LEGO Education Teacher</u> <u>Community</u>	LEGO Education Additional Lesson Content for SPIKE Essential and WeDo 2.0	
Equity, Diversity, and Inclusion Resources			
FIRST Mentoring and Coaching with FIRST videos	Inclusive Recruitment & Enrollment Strategies	Additional Training & <u>Resources</u>	





MASTERPIECE Season Resources

Season resources page includes:

- \circ Season Launch Resources
- Links to Season Videos
- Explore Overview
- Explore Welcome Letter
- Explore Introduction

- Explore Set Building Instructions
- Student Participation Certificates
- Individuals Session Slides
- MASTERPIECE Season video resources on *FIRST* LEGO League YouTube Channel
- <u>Season content</u> (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		
FIRST at Home activities	A variety of free resources, activities and links	
FIRST Core Values through Social, Emotional Learning Activities	Part of <i>FIRST</i> at Home	
<u>33+ Awesome Team-Building Games and Activities for</u> <u>Kids</u>	We Are Teachers	
Team Building for Kids: A Complete Guide	Venture Team Building	





Robotics Resources

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 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

LEGO Education SPIKE Essential Resources

- Software Download
- FIRST LEGO League Explore Unit
- Getting Started with SPIKE Essential
- SPIKE Essential Unit Plans
- Product Support Resources





MASTERPIECE Resources

General STEAM Resources

Video Resources		
CURIOUS KIDS STEAM (Science- Technology-Engineering-Art-Math) (28:47)	Video by PBS sharing how all subjects are intertwined to solve a problem	
How are movies made? The movie making process explained (6:07)	Video by Movie University explaining the process of making movies	
Web Resources		
PBS Learning Media for Students	Search for "art", "music", "theater" and filter for your age, resource, length, and language	
Movie University	YouTube page with various videos about movies	
What Great Movies Look Like Without Special Effects	Clips of popular movies without their special effects	
Book Resources		
Questioneers Series by Andrea Beaty	Great series of books on STEAM topics	

MASTERPIECE Session Resources

Session 1: Hobbies and Interests

Video Resources		
200+ Hobby Ideas (Hobbies to Try from A to Z) (14:16)	Video covering over 200 examples of hobbies	
Hobbies & Interests for Kids (2:55)	Short video with examples of hobbies	
Web Resources		
<u>The Science Behind How Hobbies Can</u> Improve Your Brain Health!	Article from Mautushi Paul on how hobbies improve brain health	
Book Resources		
Bobby, Get a Hobby by Andrew G. Rosen	Picture book about a boy trying new hobbies	

Session 2: Behind the Scences

Video Resources		
Working Backstage at Aladdin The Musical (4:01)	Production manager interview of Aladdin about what all happens to make the show a success	
Kids Show & Tell Their Hidden Talents (6:22)	Video by HiHo Kids of students sharing their hidden talents	
Web Resources		
Careers in Art	A great source for learning about arts careers	
It's Not Just a Stage	An article covering details and parts of a stage	
Book Resources		
Bats in the Band by Brian Lies	Book about bats using empty stage for concert	

Session 3: Sound All Around

Video Resources		
What is Music? Young Explorers (2:38)	Video on music types and how people make it	
Elements of a Concert (5:46)	Explains the basics of one type of concert	
Career Connections Sound Engineer (5:38)	The responsibilities of a sound engineer and how to become one	
Web Resources		
Concert Facts for Kids	Kiddle Kids Encyclopedia Facts	

Session 4: Theater Technology

Video Resources		
Annie on Broadway: What Do Stage Managers Do? (3:29)	The responsibilities of a stage manager are discussed	
What is Theater? Young Explorers (2:14)	Video on the parts of theater – cast and crew	
Web Resources		
Theatre Facts for Kids	Fun facts related to theater history from Kiddle	
Shakespeare's Theater	History of theater from Shakespeare's time	





Book Resources	
The School Play (Little Critter) by Mercer Mayer	A short picture book about performing in a school play

Session 5: Museum Exhibit

Video Resources	
Different Kinds of Museums (15:00)	Video talking about the different museum types
Museum Inside Out: The Exhibition Designer (2:04)	Video of a museum exhibit designer talking about what he has to plan for with a new exhibit
Web Resources	
8 Top Technology Trends for Museums	Article on technology helping to change the way the audience interacts with museum exhibits
Virtual Children's Museum Visits	A list of 10 children's virtual museums
Virtual Art & History Museum Tours	A list of 20 art and history virtual museums
Book Resources	
Simon at the Art Museum by Christina Soontornvat	Picture book about a boys first visit to an art museum and how his perspective changed

Session 6: Visual Effects

Video Resources		
Camera Movement (and why it matters!) (2:44)	Video on the 7 basic camera movements and why they are important	
How Does a Green-Screen Work? (1:56)	Short video explaining how a green-screen works	
<u>The Making of Star Wars — Pioneering</u> <u>Special Effects, VFX, and Sound Design</u> (13:03)	Video explaining how the making of Star Wars was the first of its kind in special/visual effects and sound design	
Web Resources		
VFX – Everything You Need To Know	Resources on visual effects and when to use	
Working in the Visual Effects Industry	Article and series of short videos on the skills needed to work in visual effects and animation	





Session 7: Setting the Stage

Video Resources		
Working Backstage at Aladdin The Musical (4:01)	Production manager interview of Aladdin about what all happens to make the show a success	
Web Resources		
Setting the Stage (average video length is 5:00)	A 12 part video series highlighting STEAM-based professionals who create the live performances	
Book Resources		
Pete the Cat Talent Show Trouble by Kimberly and James Dean	Children's book about Pete the Cat performing in the town's local talent show	

Sessions 8 & 9: Team Model

Video Resources		
Recap of the 2019 <i>FIRST</i> 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 Show-Me-Poster (30:24)	Coach webinar from <i>FIRST</i> in Texas	
Web Resources		
<u>There's Got to be a Better Way –</u> <u>Developing a Product</u>	Resources from Fun Kids – UK children's Radio Station on how to develop a product and share it	

Sessions 10 & 11: Team Poster

Video Resources		
Sessions 10 & 11 - Poster (0:42)	Video of FIRST LEGO League Explore Poster	
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 12: 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 what the event will look like	
Reviewing Sheet	Reviewing questions, rubric, and awards	

Career Resources

General Career Resources		
Visit the Learning Lab and search careers	PBS Learning Media	
Amazon Future Engineer Class Chat	Amazon	
Career Exploration Lesson Plans	Nebraska Department of Education	
Career Resources for Elementary Grades	Workforce Solutions	
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	
MASTERPIECE Career Resources		
Music Career Resources	Learn about the various careers in music and the experience you need for each job	
Music Career Resources and Tools	Learn about certain music careers	
Working in Theater	Videos on jobs you can have working in theater	





Film School & Careers in Film: How to Become a Filmmaker	Article covering the ways to work in the film industry including the schooling opportunities
MUSEUM CAREERS 101 Types of Museums (14:37)	Video giving an overview of the various careers in museums
Highest Paid Museum Careers Part 1 Museum Career Ideas (7:59)	Video discussing the skills and interests for those who want to work in museums

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	Inventive Kids	
Invention Education Curricula	Links to invention lesson plans from Invent Ed	
Drawing Designs in Detail	Hands-on activities from teachengineering.org	



LEGO, the LEGO logo and the SPIKE logo are trademarks of the LEGO Group. ©2023 The LEGO Group. All rights reserved *FIRST*[®], the *FIRST*[®] logo, and FIRST[®] IN SHOWSM are trademarks of For Inspiration and Recognition of Science and Technology (*FIRST*). LEGO[®] is a registered trademark of the LEGO Group. *FIRST*[®] LEGO[®] League and MASTERPIECESM are jointly held trademarks of *FIRST* and the LEGO Group. ©2023 *FIRST* and the LEGO Group. All rights reserved.



