

# THE CHALLENGE

## THINK ABOUT IT

Every day, people, animals, and things move from place to place. You travel to school. You travel to the park. You travel to visit friends and family. The books you read move from where they were made to you. The toys you play with move from the factory to the store to the places where you play. The food you eat moves from the farm to you. The things we use every day travel:

- ◆ over highways
- ◆ on paths and trails
- ◆ along railroad tracks
- ◆ up and down rivers
- ◆ across oceans
- ◆ over mountains and deserts
- ◆ along the streets where you live

Now, think about your favorite shirt. It travelled!

- ◆ Seeds travelled to a farm.
- ◆ Parts of the plants travelled to be made into threads.
- ◆ The threads travelled to be made into cloth.
- ◆ The cloth travelled to be made into a shirt.
- ◆ The shirt travelled to a warehouse.
- ◆ The shirt travelled to a store.
- ◆ The shirt travelled to you.
- ◆ Each day you wear it, the shirt will travel again.

How did it get to all those places? Your challenge is to discover how people, animals, and things move to get to you.

## LEARN ABOUT IT

Begin by making a list of the ways that people, animals, and things move to get to you. Be creative. Be silly. Be serious. Think about everything that gets moved, including yourselves! Think about the things that move your friends and your family. Think about the things that move animals. Think about the things that move medicine, clothes, toys, books, and food. Think about planes, boats, trains, cars, trucks, skateboards, rollerblades, bicycles,

donkeys, llamas, camels, and feet. There are many more. Can you think of them?

When your list is done, pick one thing and learn about how it moved!

What will your team pick: a banana? a toothbrush? a ball? a book? a piece of candy? a shoe? a doll? a pet? a glass of juice? a crayon? a video game? some really yucky-tasting medicine? Some of the most boring things move to the most interesting places—in the most interesting ways. It's your pick!

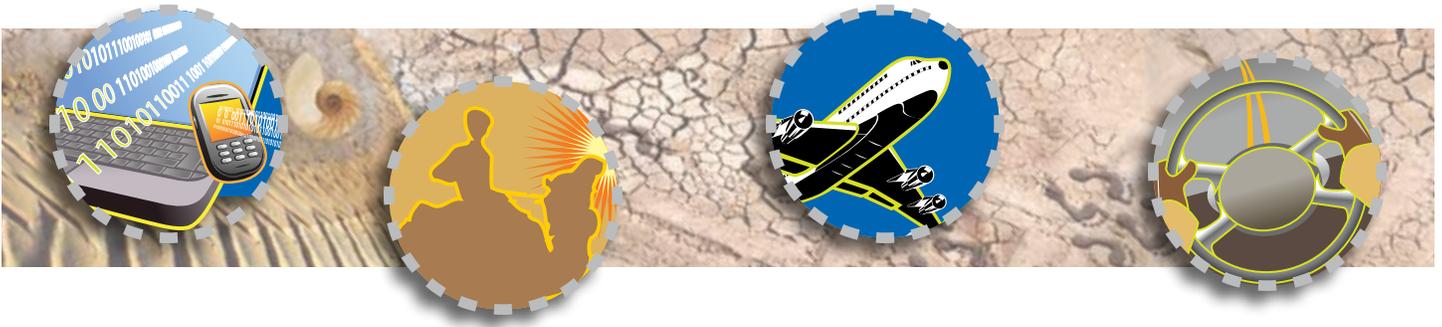
Now, hunt for the answers. Where did it travel? What moved it? Ask everybody you know—your family, teachers, and friends. Read books. Look at Web sites. Ask people who move things in and around your town. Go on a field trip. Write letters. Ask the people who pick where to put airports, bridges, railroad stations, and docks. Who makes or sells your thing? What can they tell you? Be ready to share where you hunted and what you learned.

## BUILD IT

Time to build your model. Can you show where and how your thing moved? Show all or part of its travel. Make something in your model move. Here are the rules:

- ◆ The model must be no bigger than 15-inches x 15-inches—a LEGO baseplate or other premeasured footprint makes it easier to keep the model the right size.
- ◆ The model should be made of LEGO parts—you can use any LEGO bricks, figures, or moving parts you need except DUPLO bricks.
- ◆ The model must have at least one piece that can move—it can move by hand or using a motor like the one available in the optional Jr. FLL base kit.
- ◆ The model should include one simple machine—you can build it using any LEGO ramps, levers, pulleys, gears, wheels and axles, screws, or wedges; you can find many of these items in the optional Jr. FLL base kit.
- ◆ You cannot paint or decorate the LEGO parts; you cannot use other art or craft materials in your model.





## SHOW IT

Make a Show Me! poster.

Show your team and tell something nice about each member. Show the thing you picked. Show how it moved to you. Show how you learned about it. Show how others can learn more. Here are the rules:

- ◆ Use a 22-inch x 28-inch flat poster board or a 36-inch x 48-inch tri-fold presentation board—no bigger!
- ◆ You can use words, drawings, photos, and small objects attached to the poster to tell about what your team learned.
- ◆ Tell about your team—your team name, your team members (remember to make space to share something special about each one), and your coach.
- ◆ Tell about the places you hunted for answers, the people you asked.
- ◆ Tell about your thing and show its travels—what it is, where it went, and how it got to each place.
- ◆ Tell about your model and your machine—what is moving, where, and how.

And remember, the most important thing is to have fun while you show your thing's Smart Move.

## SHARE IT

Now, share what you learned. You decide how to share what you've learned. Invite parents, teachers, people who helped you find answers, team sponsors, and other kids to see your poster and your model. Get permission and put your poster up at school, the library, or another public building. Tell the story. Answer questions. Sing a song. Put on a play. Be serious. Be funny. But find a way to share what you know! If you attend a Jr. FLL event, reviewers will visit with you for 5 to 10 minutes. Be prepared to:

- ◆ Listen to the reviewers and answer their questions
- ◆ Tell the reviewers about your team
- ◆ Tell the reviewers about the thing you picked and your hunt for answers
- ◆ Tell the reviewers about your poster
- ◆ Show the reviewers how your model works
- ◆ Tell the reviewers about how you shared what you learned

Be sure you have lots to share; the reviewers are looking forward to learning from you!

## NEED HELP GETTING STARTED?

This season's Jr. FLL Challenge builds an understanding of the complex network of transportation required to bring even the simplest items to us. The most mundane items may bring the biggest surprises. The sheer scope can be mind-boggling, even for adults, but the Challenge lays the groundwork for understanding larger issues, such as energy dependence and global markets, as the team members grow. The *Junior FLL Coaches' Handbook* contains more information about FIRST LEGO® League, community events and awards, along with hints for a successful season, as well as scheduling and activity suggestions. The *SMART MOVE Coach's Resources* contains discussion topic ideas and a wide variety of age-appropriate Web resources.

Information and resources are also available online.

- ◆ At <http://www.usfirst.org/jrfl> you will find the *Event Guide* and other helpful information.

If you have more questions, e-mail [jrflteams@usfirst.org](mailto:jrflteams@usfirst.org) for support.

[www.usfirst.org](http://www.usfirst.org) ◆ [www.firstlegoleague.org](http://www.firstlegoleague.org) ◆ FLL is the result of an exciting alliance between FIRST and the LEGO® Group.

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