2nd Annual

# JUNEAU ROBOT JAMBOREE


## CLIMATE CONNECTIONS

**Sunday, November 23, 2008 * 10:30 am - 5:00 pm *Centennial Hall**

*Embark on an exploration of the earth's climate in the FIRST LEGO League's 2008 Climate Connections Challenge! Discover the links between science, people, resources and communities. Unearth how we learn about past climates and delve into questions surrounding our current and future climatic conditions. Join FLL teams in creating a global game plan as they make these Climate Connections!*

FLL
FIRST LEGO® League

JEDC Juneau Economic Development Council

SpringBoard

A•R•E•A
Alaska Robotics Education Association
P.O. Box 244794 • Anchorage, Alaska • 99524-4794
akrobotics.org

# Robot Missions

**Carbon Sequestration:** Move carbon dioxide (the gray balls) to the underground reservoir. 5 points each.

**Construct Levees**: Move levee blocks to low-lying shores while being careful not to damage the ones that are already in scoring position. Upright blocks touching low-lying shores on the mat are worth 5 points touching red and 4 points touching green.

**Test Levees:** See how levees survive when a storm approaches. The activation of the wheel is worth 15 points, but no points are awarded if the wheel is blocked by a strategically placed object.

**Raise the Flood Barrier**: The barrier in the up position (red lever down) is worth 15 points.

**Study Wildlife**: Move the polar bear and/or the snowmobile to the research area.The scoring bear is worth 15 pts upright, or 10 pts "sleeping" (on its side), and the scoring snowmobile is worth 10 pts.

**Telecommute & Research**: Move the computer to the green grid area for 10 pts.

**Ride a Bicycle**: Move the bicycle to the green grid area for 10 points.

**Elevate the House**: The house in the up position (put the lever) is worth 25 points.

**Turn off the Lights**: The window showing black is worth 20 points.

**Open a Window**: The window all the way open is worth 25 points.

# GENERAL SCHEDULE

| | |
|---|---|
| 10:30-11:00 | Opening Ceremony |
| 11:00-1:00 | Matches & Judging Sessions Begin |
| 1:00-1:30 | Lunch Break |
| 1:30-3:30 | Matches & Judging Sessions Continue |
| 3:30-4:00 | Alliance Rounds |
| 4:00-5:00 | Closing Ceremony & Awards Presentation |

| Robot Matches | | | | |
|---|---|---|---|---|
| # | Start | End | Side 1 | Side 2 |
| Practice Round (Not Scored) | | | | |
| 1 | 11:10 A | 11:14 A | Envirobotics-Green | Storm of Minds |
| 2 | 11:16 A | 11:20 A | Envirobotics-Blue | Extreme Team |
| 3 | 11:22 A | 11:26 A | Floyd Droids | Dryden Impact 2.0 |
| 4 | 11:28 A | 11:32 A | Riverbend Robotics | RoboPros |
| 5 | 11:34 A | 11:38 A | Robotic Bears | Alaska Ice Bears |
| 6 | 11:40 A | 11:44 A | Legonators | Auke Bay Climate Kids |
| 7 | 11:46 A | 11:50 A | Meltdownz | Elgoog |
| 8 | 11:52 A | 11:56 A | Auke Bay Snow Troopers | |
| Round 1 | | | | |
| 1 | 12:00 P | 12:04 P | Legonators | Riverbend Robotics |
| 2 | 12:06 P | 12:10 P | Meltdownz | Alaska Ice Bears |
| 3 | 12:12 P | 12:16 P | Dryden Impact 2.0 | RoboPros |
| 4 | 12:18 P | 12:22 P | Elgoog | Auke Bay Snow Troopers |
| 5 | 12:24 P | 12:28 P | Envirobotics-Blue | Auke Bay Climate Kids |
| 6 | 12:30 P | 12:34 P | Floyd Droids | Storm of Minds |
| 7 | 12:36 P | 12:40 P | Extreme Team | Envirobotics-Green |
| 8 | 12:42 P | 12:46 P | Robotic Bears | |
| Round 2 | | | | |
| 9 | 12:48 P | 12:52 P | Riverbend Robotics | Storm of Minds |
| 10 | 12:54 P | 12:58 P | Floyd Droids | Dryden Impact 2.0 |
| 11 | 1:30 P | 1:34 P | Envirobotics-Green | Alaska Ice Bears |
| 12 | 1:36 P | 1:40 P | Auke Bay Climate Kids | Legonators |
| 13 | 1:42 P | 1:46 P | Envirobotics-Blue | Meltdownz |
| 14 | 1:48 P | 1:52 P | Robotic Bears | Extreme Team |
| 15 | 1:54 P | 1:58 P | RoboPros | Elgoog |
| 16 | 2:00 P | 2:04 P | Auke Bay Snow Troopers | |
| Round 3 | | | | |
| 17 | 2:06 P | 2:10 P | Auke Bay Climate Kids | Envirobotics-Blue |
| 18 | 2:12 P | 2:16 P | RoboPros | Robotic Bears |
| 19 | 2:18 P | 2:22 P | Extreme Team | Envirobotics-Green |
| 20 | 2:24 P | 2:28 P | Auke Bay Snow Troopers | Meltdownz |
| 21 | 2:30 P | 2:34 P | Riverbend Robotics | Floyd Droids |
| 22 | 2:36 P | 2:40 P | Alaska Ice Bears | Legonators |
| 23 | 2:42 P | 2:46 P | Storm of Minds | Elgoog |
| 24 | 2:48 P | 2:52 P | Dryden Impact 2.0 | |
| Alliance Round | | | | |
| 1 | 3:30 P | 3:34 P | Red | Blue |
| 2 | 3:40 P | 3:44 P | Green | Yellow |
| 3 | 3:50 P | 3:54 P | Orange | |

## THE FOUR CATEGORIES OF FLL COMPETITION

**ROBOT PERFORMANCE** (Robot Matches)- Each team is given three opportunities to perform on the official playing field which is officiated by FLL referees. Two teams play simultaneously at the double table, located in the Competition Area. Rounds last 2 1/2 minutes as teams try to complete as many of the Robot Missions as possible. Teams will have the opportunity to make robot and program modifications in "The Pit" between rounds. Scores are not cumulative; The highest score for each team will be counted towards the Robot Performance Award. One practice round in the morning will not be scored.

**RESEARCH PRESENTATION** - FLL teams are given an annual challenge that asks them to identify an existing problem related to the climate in their area and find an innovative solution to that problem. Teams prepare a 5 minute creative presentation to share their work and perform for a panel of judges at the tournament. Their performance is followed by a brief Q&A session with the judges. Teams are assessed on how well they demonstrate their solution and the research behind it.

**TEAMWORK INTERVIEW** - Teamwork is judged on a team's ability to show partnership, respect for their teammates and persistence while tackling a challenge. Teams will be presented with a task which they then have 5 minutes to accomplish. This will be followed by a 5 minute Q&A session about the strategies they used (then and throughout the season) to work together to achieve a common goal.

**TECHNICAL JUDGING** - Teams demonstrate their understanding of robot design and programming in an interview format. Questions asked cover both the tournament day and the entire season.

***NOTE FOR SPECTATORS: Judging Sessions (Research, Teamwork & Technical) are NOT open to the public. Videos of some sessions will be available from team coaches.*

| Research Presentation | | |
|---|---|---|
| Start | End | Team |
| 11:10 A | 11:20 A | Auke Bay Snow Troopers |
| 11:25 A | 11:35 A | Auke Bay Climate Kids |
| 11:40 A | 11:50 A | Dryden Impact 2.0 |
| 11:55 A | 12:05 P | Floyd Droids |
| 12:10 P | 12:20 P | Storm of Minds |
| 12:25 P | 12:35 P | Robotic Bears |
| 12:40 P | 12:50 P | Envirobotics-Blue |
| 1:30 P | 1:40 P | Elgoog |
| 1:45 P | 1:55 P | Alaska Ice Bears |
| 2:00 P | 2:10 P | Legonators |
| 2:15 P | 2:25 P | Riverbend Robotics |
| 2:30 P | 2:40 P | RoboPros |
| 2:45 P | 2:55 P | Envirobotics-Green |
| 3:00 P | 3:10 P | Meltdownz |
| 3:15 P | 3:25 P | Extreme Team |

| Technical Judging | | |
|---|---|---|
| Start | End | Team |
| 11:10 A | 11:20 A | Auke Bay Climate Kids |
| 11:25 A | 11:35 A | Meltdownz |
| 11:40 A | 11:50 A | Riverbend Robotics |
| 11:55 A | 12:05 P | RoboPros |
| 12:10 P | 12:20 P | Legonators |
| 12:25 P | 12:35 P | Alaska Ice Bears |
| 12:40 P | 12:50 P | Elgoog |
| 1:30 P | 1:40 P | Robotic Bears |
| 1:45 P | 1:55 P | Storm of Minds |
| 2:00 P | 2:10 P | Floyd Droids |
| 2:15 P | 2:25 P | Envirobotics-Blue |
| 2:30 P | 2:40 P | Envirobotics-Green |
| 2:45 P | 2:55 P | Extreme Team |
| 3:00 P | 3:10 P | Auke Bay Snow Troopers |
| 3:15 P | 3:25 P | Dryden Impact 2.0 |

| Teamwork Interview | | |
|---|---|---|
| Start | End | Team |
| 11:10 A | 11:20 A | Alaska Ice Bears |
| 11:25 A | 11:35 A | Legonators |
| 11:40 A | 11:50 A | RoboPros |
| 11:55 A | 12:05 P | Dryden Impact 2.0 |
| 12:10 P | 12:20 P | Extreme Team |
| 12:25 P | 12:35 P | Riverbend Robotics |
| 12:40 P | 12:50 P | Auke Bay Climate Kids |
| 1:30 P | 1:40 P | Storm of Minds |
| 1:45 P | 1:55 P | Auke Bay Snow Troopers |
| 2:00 P | 2:10 P | Envirobotics-Green |
| 2:15 P | 2:25 P | Floyd Droids |
| 2:30 P | 2:40 P | Robotic Bears |
| 2:45 P | 2:55 P | Envirobotics-Blue |
| 3:00 P | 3:10 P | Elgoog |
| 3:15 P | 3:25 P | Meltdownz |

# Robot Missions

**Get People Together:** 3 or more red/white citizens touching the pink area is worth 10 pts. 3 or more bleu/gray leaders touching the green mountain/city is worth 10 pts. 3 or black/white scientists touching the research area is worth 10 points.

**Find Agreement**: Alignment of both yellow arrows is worth 40 pts for both teams, no matter which direction the alignment faces and no matter if one or both robots helped.

**Fund Research or Corrective Action**: Move money (the yellow ball) to the research area or to the underground reservoir. The scoring money is worth 15 pts.

**Deliver an Ice Core Drilling Maching**: Move the core drilling machine to the research area. The scoring machine is worth 20 pts. The drill assembly raised completely vertical is worth an additional 10 pts.

**Extract an Ice Core Sample**: The ice core pulled completely from its hole is worth 20 points. The ice core in Base is worth an additional 10 points.

**Deliver an Ice Buoy**: Move the ice buoy to the research area. An upright ice buoy is worth 10 pts.

**Insulate a House**: Move both insulation blocks to the green grid area for 10 points.

**Beat the Clock**: At the end of the match, if the robot is in/on the research area it's worth 15 pts. If it is in the yellow grid area, it's worth 10 points.

## TEAMS [Number, Name, Affiliation, Coaches, Members]

#404 RIVERBEND ROBOTICS (Riverbend Elementary, Juneau); *Sheryl Wittig, Tim Frawley;* Ashlee Carella, Clarite Velazquez, Hunter Combs, Owen Mendoza, Paris Russel, Roel Yadao, Ryan Frawley, Trevor Perov, Zeke Thompson #1064 ROBOTIC BEARS (Glacier Valley Elementary, Juneau); *Gerianne McLeod;* Mattison Smith, Wyatt Nicholson, Andrea Lakeman, Briana Sievenpiper, Michael Kahklen, Colten Bell, Caleb Jensen, Edwin Meyer, Malcolm Lumba, Andrew Hooten #2166 ENVIROBOTICS-BLUE (Skagway City School); *Karl Klupar;* Riley Westfall, Taylor Carlson, Rosalie Westfall #3860 STORM OF MINDS (IDEA Homeschool, Juneau); *Kim Laird, Andrew Keeffe, Ed Sinclair;* Thomas Keefe, Finn Sinclair, Kyle Fagerstrom #5192 ROBOPROS (Boys and Girls Club, Hoonah Clubhouse); *Ben McLuckie, Jill Meserve;* Edwin Erickson, Truman Gray, Tristin Harris, David Hinchman, Jordan McLuckie, Torsten Skaflestad, Morgan Stevenson #6120 ELGOOG (Dzantik'i Heeni MS, Juneau); *Patty Ware, Armando Deguzman, Pamela Wells;* Keegan Brown, Luke Sewell, Vaughn Ecklund, Nathan Klein, Ellis Notmeyer, Trace Mitchell, Johnny Connolly, Abram Leigh #6219 ENVIROBOTICS-GREEN (Skagway City School); *Karl Klupar;* Trevor Cox, Aidan Klupar, Zoe Wassman #6565 EXTREME TEAM (Mendenhall River Community School, Juneau); *Kathy Iliev;* Allen Cook, Elena Bryson, Sedona Herding, Drake Timothy, Sho Martin, Tiana Horvath, Cody Weldon #6591 AUKE BAY SNOW TROOPERS (Auke Bay Elementary, Juneau); *Amy Jo Meiners, Pat Carroll;* Finn Cole, Ricky Worl, Calvin Wade, Andrew Ringle, Tommy McCarthy, Max Suzuki, Ron Hansen, James Cheng, Sam Bluett, Garrett Andersen #7130 METDOWNZ (Harborview Elementary, Juneau); *Liz Agnew, Greg Smith, Julie Staley, Megs Testarmata;* Keanu Cruz, Johnny Elliott, Brian Holst, Forest Kobayashi, Anton Rieselbach, Duncan Smith, Timothy Staley #7131 ALASKA ICE BEARS (Harborview Elementary, Juneau); *Liz Agnew, Megs Testarmata;* Coleman Cosgrove, Kane Ginter, Thomas Hazel, Makoa Iha, Cameron Jardell, Tim McKenna, Ian Scholl, Eric Schumacher, Marco Shiply-Pacheco #7210 LEGONATORS (Floyd Dryden MS, Juneau); *Bill Hill;* Stiles Pickle, Griffin Young, Jamie Barnhill, William Solberg, Mac Herding #7211 FLOYD DROIDS (Floyd Dryden MS, Juneau); *Rebecca Farrell;* Dennis Barril, Mary Hale, Melissa Paradis, David Caldwell, Rebecca Erikson, Kelsey Johnson, Jessica Casulucan #7212 DRYDEN IMPACT 2.0 (Floyd Dryden MS, Juneau); *Chirs Heidemann, Anne Kurland;* Ed Kelley, Sam Kurland, Isaac Christensen, Veronica Busness, Jahbril Flores, Toby Lyons #8005 AUKE BAY CLIMATE KIDS (Auke Bay Elementary, Juneau); *Amy Jo Meiners, Pat Carroll;* Katie Buchanan, Annie Carroll, Dunya Hermann, Rebecca Hassler

## What is FIRST?

FIRST, For Inspiration and Recognition of Science and Technology, was founded in 1989 by inventor Dean Kamen to inspire young people's interest and participation in science and technology. FIRST is a 501(c)3 not-for-profit public charity, and is supported by a strong network of sponsors and volunteers.

FIRST provides the FIRST Robotics Competition and the FIRST Tech Challenge for high-school students, the FIRST LEGO League for 9 to 14 year-olds, and the Junior FIRST LEGO League for ages 6 to 9.

*OVERALL IMPACT OF FIRST:*
** Over 194,000 students*
** 17,425 teams*
** 16,225 robots*
** 53,000 mentors*
** 33,000 event volunteers*
** 44 countries*

*THANK YOU for being part of this amazing experience! To find out more ways to support FIRST activities in Southeast Alaska, please contact the Juneau Economic Development Council at 523-2334 or rparks@jedc.org.*

## Stay Informed!

Check back on the JEDC website for more STEM events and information. See photos and results from today's tournament!

Upcoming Events:
- Girls Rock Science (Feb 2009)
- Summer Science Camps
  - Marine Science
  - Video Game Programming
  - Robotics
- Professional Development
  - SeaPerch (Underwater Robotics)
  - HOW (History of Winter)

www.jedc.org

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## THANKS TO OUR SPONSORS!!!



## THANK YOU TO ALL OUR VOLUNTEERS!

"Volunteers are not servants. Volunteers are partners working together for improving America's future."
– Mayor Richard Daly