

STEM (Science, Technology, Engineering & Math) Projects

*Denotes Project is Eligible for State Fair

Project	Age Division	Type of Evaluation	Materials to Bring to Judging	Special Notes
244* From Airedales to Zebras	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
245* All Systems Go	Junior Division (13 years old and younger) Senior Division (14 years and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
246* On the Cutting Edge	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
490* Science with Dairy Foods	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
493* Science Fun with Kitchen Chemistry	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
500* Science with Fun	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator
501* Rockets Away (Bottle Rocket)	Junior Division (13 and younger) Senior Division (14 and older)	Judges will evaluate participants on the following: <ul style="list-style-type: none"> Knowledge, skill and understanding of the project The quality of their project records in documenting project accomplishments Interview performance Dress professionally 	-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.	If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator At the state judging depending on local conditions, participants may be asked to launch their 2-liter bottle rocket. If a launch is conducted, all launch equipment will be provided.



<p>502* Science Fun with Flight</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator</p>
<p>503* Rockets Away (Solid Fuel Rockets)</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator</p>
<p>503M* Solid Fuel Rocketry Master</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator</p>
<p>507* Robotics 1: with EV3</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator In addition to the interview, contestants will demonstrate their LEGO EV3 robot's ability to complete three or more of the tasks identified in Activity 12 of the 4-H 507 project book in less than 10 minutes. Contestants are required to bring their own test surface on which to demonstrate their robot's completion of these tasks along with a printout of the program</p>
<p>508* Robotics 2: with EV3N More</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator Contestants are required to bring their own test surface to demonstrate their robot's completion of a task of their choosing (in less than 10 minutes) along with a printout of the program.</p>
<p>512M* Robotics Master</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display.</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator At the state competition contestants are required to bring their own test surface to demonstrate their robot's completion of a task of their choosing (in less than 10 minutes) along with a printout of the program.</p>
<p>550* Young Engineers in Solar Energy</p>	<p>Junior Division (13 and younger) Senior Division 14 and older)</p>	<p>Judges will evaluate participants on the following:</p> <ul style="list-style-type: none"> • Knowledge, skill and understanding of the project • The quality of their project records in documenting project accomplishments • Interview performance • Dress professionally 	<p>-Completed Project Book (based on the stated guidelines in the project book) -Be prepared to discuss your project with the judge -A display representing their learning experience of the current project. The youth must be able to maneuver his or her own display</p>	<p>If you are selected as a State Fair Delegate – additional information will be given to you by the 4-H Educator</p>

