CEDAR, Inc.

FUTURE of WORK in APPALACHIA

STUDENT FAIR PROGRAM ENTRY REQUIREMENTS

Must be a student in a private or public school system located in one of the following counties:

Breathitt Floyd Harlan Johnson Knott Lawrence Leslie Letcher Magoffin Martin Perry Pike

- Social and/or Economic Development in Eastern Kentucky must be the theme or focus of the project and must connect to one or more of the Seven Pillars of the SOAR (Shaping our Appalachian Region) Blueprint, as listed below. A brief description of each Pillar is attached, and includes examples of possible topics.
- 3. Individual Students/Teams are allowed to enter one (1) category only.
- 4. Team participation is permitted; however, a team can consist of no more than five students: a "team captain" and up to four "team members". If a team is the recipient of a prize, the award will go to the team captain who will be responsible for sharing it with the team members.
- 5. Each entrant is responsible for the delivery and set-up of the project at the Regional Fair; however, Fair personnel will assist in setting up.
- 6. If a project is chosen to represent the school, the school's Fair Coordinator will provide the student with detailed information for entering and submitting the project for participation in the Regional Future of Work in Appalachia Student Fair. Once submitted, it will be considered an official Regional Fair Entry and will not be allowed to be altered thereafter.

SEVEN PILLARS of SOAR BLUEPRINT

(SEE ATTACHED FOR BRIEF DESCRIPTION AND TOPIC EXAMPLES FOR EACH OF THE FOLLOWING)

- 1. BROADBAND
- 2. 21st CENTURY WORKFORCE
- 3. ENTREPRENEURSHIP IN THE DIGITAL ECONOMY
- 4. HEALTHY COMMUNITIES
- 5. INDUSTRIAL DEVELOPMENT
- 6. REGIONAL FOOD SYSTEMS
- 7. TOURISM and DOWNTOWN REVITALIZATION

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STUDENT FAIR PROGRAM SUGGESTED TOPICS (by SOAR PILLAR)

Following is a brief description of the Seven Pillars of the SOAR (Shaping our Appalachian Region) Blueprint. FWA Fair projects must connect to one or more of these pillars. Examples of possible topics are in italics, but you can also choose a topic of your own as long as it connects to at least one of the Seven Pillars of the SOAR Blueprint. To learn more about the SOAR Initiative, please visit www.soar-ky.org.

- <u>1. BROADBAND</u> Increase the availability of affordable high-speed broadband, through fiber, to businesses and residents; and increase adoption rates throughout the SOAR region: *1) On-Line Business; 2) Website Design; 3)Technology's role in conducting business, past and present.*
- 2. 21st CENTURY WORKFORCE Develop our regional workforce to be competitive in the digital economy and other emerging industries: 1) Career exploration relative to various community jobs and needs; 2) Jobs and careers involved with the economic development process; 3) Various types of jobs created by economic development projects.
- 3. ENTREPRENEURSHIP IN THE DIGITAL ECONOMY To create more and expand existing small businesses within the region by taking full advantage of the digital economy: 1) What is an Entrepreneur; 2) Traits of an Entrepreneur; 3) Entrepreneurship Types a) Innovation Driven Enterprise; b) Small and Medium Enterprise; 4) Identify local Entrepreneurs; 5) Economics; 6) Marketing; 7) Profits/Loss; 8) Small Business/Start Ups; 9) Create a "Class Business"; 10) Prototypes; 11) Explore brownfields/greyfields/greenfields/previously mined sites, as possible sites for new business location; 12) Develop new use for coal.
- <u>4. HEALTHY COMMUNITIES</u> To reduce the physical and economic impact of obesity, diabetes, and substance use disorder: *1) Create an App that promotes healthy living; 2) Educational program;*3) Medical innovations.
- 5. INDUSTRIAL DEVELOPMENT Increase the amount of industrial employment which includes manufacturing, natural resources, processing, and distribution by expanding existing companies and attracting new ones: 1) Products & Services; 2) Budgeting & Finance; 3) Differences between Needs & Wants; 4) Relationship between Supply & Demand; 5) How to recruit business; 6) How to retain business; 7) Create a future city showing a well balanced offering of businesses meeting the community wants/needs; 8) Coal Camps revitalize, repurpose, restore.
- <u>6. REGIONAL FOOD SYSTEMS</u> Create a local foods movement by connecting local producers to markets for their products both within and outside the region: 1) How to grow plants through traditional methods (School Gardening); 2) Vermiculture Worm Farming; 3) Composting; 4) Seed Production; 5) Soil quality; 6) Mushroom farming; 7) Pollinators; 8) Aquaponics, hydroponics, aquaculture; 9) Herbs; 10) Fruit orchards; 11) Vineyards; 12) Where does our food come from.
- 7. TOURISM and DOWNTOWN REVITALIZATION Establish Kentucky's Appalachian region as a tourism destination: 1) Adventure tourism; Cultural appropriation vs. cultural appreciation a) Food; b) Coal; c) Quilting; d) Folk Art; e) Music; f) Stories.

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STUDENT FAIR AWARDS PROGRAM

1. JUDGING WILL BE DIVIDED INTO THREE GRADE LEVELS:

KINDERGARTEN - FOURTH GRADES FIFTH - EIGHTH GRADES NINTH - TWELFTH GRADES

2. JUDGING WILL BE PERFORMED IN EACH OF THE FOLLOWING SEVEN ENTRY CATEGORIES:

SCIENCE

MATH

ENGLISH/LITERATURE

ART

MUSIC

TECHNOLOGY/MULTIMEDIA

SOCIAL STUDIES

- 3. EACH GRADE LEVEL WILL HAVE A FIRST, SECOND, AND THIRD PLACE WINNER IN EACH OF THE SEVEN CATEGORIES.
- 4. EACH WINNER WILL RECEIVE A CASH AWARD BASED ON THE AVERAGE PERCENT OF TOTAL POINTS EARNED VERSUS TOTAL POINTS POSSIBLE ON THE CURRENT SCORING SYSTEM. AWARDS WILL BE BASED ON THE FOLLOWING:

FIRST PLACE: \$1.00 per point SECOND PLACE: \$0.75 per point THIRD PLACE: \$0.50 per point

- 5. ALL FIRST-PLACE CATEGORY WINNERS IN EACH OF THE THREE GRADE LEVELS WILL BE GROUPED TOGETHER AND JUDGED TO DETERMINE THE OVERALL FIRST, SECOND, AND THIRD PLACE WINNERS FOR EACH OF THE THREE GRADE LEVELS.
- 6. PRIZES FOR OVERALL GRADE-LEVEL WINNERS WILL BE BASED ON THE AVERAGE PERCENT OF TOTAL POINTS EARNED VERSUS TOTAL POINTS POSSIBLE ON THE CURRENT SCORING SYSTEM:

FIRST PLACE: \$3.00 per point \$2.00 per point THIRD PLACE: \$1.00 per point

7. A GRAND PRIZE, AWARDED TO THE STUDENT HAVING THE SINGLE BEST PROJECT IN THE REGIONAL FWA STUDENT FAIR, WILL BE A **\$1,000 CASH AWARD**.

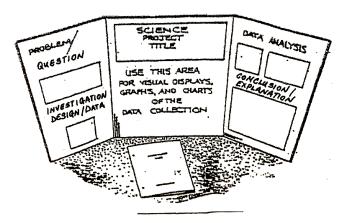
IF THE GRAND PRIZE IS AWARDED TO A TEAM, THE \$1,000 CASH AWARD WILL BE IN THE NAME OF THE TEAM CAPTAIN WHO WILL BE RESPONSIBLE FOR DIVIDING IT WITH THE TEAM MEMBERS.

GUIDELINES FOR SCIENCE PROJECTS

- 1. Any scientific concept(s) are acceptable that would show, explain, or apply the way science or science and engineering practices can be used to spur social and/or economic development in the Eastern Kentucky region. Entrants can pick one or more areas to demonstrate. Science projects can take a variety of forms such as, but not limited to: investigate a proposed business site to identify environmental issues; e.g. air, soil and water quality, gasses, sewage/waste containment, and potential remediation solutions/costs; investigations that focus on the development of <u>future</u> uses of coal, mining processes, or methods to reduce the environmental impact of mining or utilizing coal as an energy source; conduct experiments to improve methods of growing or harvesting crops; design a new product to improve a current safety or health issue. Entrants are encouraged to use their imagination and to be as creative as possible.
- 2. Visual representations, such as experimental design, physical models, graphs, tables, diagrams or pictures should accompany the scientific concepts the student wishes to represent and should be mounted in such a way that they are self-standing and self-contained.
- 3. All scientific work should be shown as neatly as possible and a written explanation must accompany the work. This explanation is to communicate the concepts and ideas of the project clearly and explain how the student used the science and engineering practices as a tool to investigate their chosen phenomenon. The written explanation may be in the form of an engineering proposal, lab journal, or written abstract and should be placed in a clear-front presentation folder.

(Judges will be looking for science and engineering practices and concepts.)

- 4. The entrant should also include within the written explanation, all the tools and how they were used to help them convey their concepts; for example, the type tools used in the investigations to help reach the conclusion and calculations used in measurement, if any.
- 5. Specifications for project components:
 - If a model is part of the project, it cannot exceed 36" in any direction, including the base.
 - CEDAR will require a freestanding, three-sided display that is no larger than 48" wide, 48" high, and 30" deep. Display boards may be purchased from a local educational or office supply store. The display may also be constructed out of plywood or fiberboard hinged together or may be constructed from folded, corrugated cardboard of reinforced poster board and should be covered with white or colored paper. The exhibit should be organized according to the following arrangement:



NOTE: The information for each step should be neatly printed on paper and fastened below the appropriate heading. Construction paper may be used as backing for the information.

Projects that do not meet all guideline limitations will not be considered for the awards program. (Guideline limitations are shown in bold print.)

SCIENCE SCORING SHEET

PROJECT NO.

	Points <u>Available</u>	Points <u>Awarded</u>
SCIENTIFIC THOUGHT/DESIGN Use of science and engineering practices Research is relevant and reliable Investigation uses appropriate tools, design and mo Data Analysis is based on evidence	25 odels	
RELEVANCE TO INNOVATION AND	20	
SOCIAL AND/OR ECONOMIC DEVELOPMENT		
ABSTRACT Shows depth of understanding Problem or question is stated Explanation or Conclusion is based on evidence Neat, organized and grammatically correct Completion of adequate research	30	
DISPLAY Self-explanatory Shows creativity and professionalism Data arranged coherently Originality of science and social and/or economic investi	25 gation	
TOTAL POINTS AWARDED		
NOTES:		