Technology Multimedia

THIS PACKET CONTAINS:

1. Entry Requirements

2. Student Awards Program

3. Category Guidelines

4. Judging Criteria

GUIDELINES FOR TECHNOLOGY/MULTIMEDIA PROJECTS

Multimedia is the use of <u>computers</u> to present **a minimum** of two of the following forms of media: <u>text</u>, <u>graphics</u>, <u>video</u>, <u>animation</u>, and/or <u>sound</u> in an integrated, interactive way. The content for this category should include work from one or more of the following areas:

➢ Origin and/or Science of Coal

➢ Mining Method(s)

➢ Transportation Mode(s)

➢ Use(s) of Coal

➢ Economic and/or Employment impact of coal on local, state, or both levels

➢ Compare/Contrast Coal and Natural Gas <u>*or*</u> Coal and Oil as an energy source and/or the impact each has had on our region or state

➢ Computer aided, assisted, or controlled technology in the coal industry

➢ Future uses of coal, mining processes, and/or methods to reduce the environmental impact of mining or utilizing coal as an energy source

➢ A topic of your choosing that would have significant relevance to the coal industry

Technology/Multimedia Projects may include, but are not limited to the following listed suggestions as they relate to coal:

➢ Video Productions

➢ Computers Programs

➢ Computer-generated Mine Simulations (video graphics models)

➢ Computer-oriented Problem Solving Analysis

➢ Robotics, Hydraulics, or Pneumatics

Specifics for Certain Projects:

Length of Entry: Video Production

MAXIMUM	K-4	5-8	9-12
	5 minutes	8 minutes	10 minutes

A.   <u>VIDEO PRODUCTIONS</u> may be in black and white or color finish: edited or "documentary" type production style. Acceptable formats are ½" VCR format cassette tape or CD/DVD, flash drive recordable media (Labels need to provide information as to the type of player needed to view the CD/DVD or flash drive such as Quick Time or Real Player. Student is responsible for providing this software.) **Projects involving ROBOTICS <u>must include</u> a demonstration of the exhibit in <u>video format only</u>.**

B.   <u>COMPUTER PROGRAMS</u> may include any of the following scenarios:
➢ Computer Simulations—Computer graphics or 3-D images of an underground or surface mine. Animation is suggested.
➢ Computer Oriented Problem Solving Analysis—May include a program on coal production (the history of); a program showing the composition or chemistry of coal.

C.   **If a model is part of the exhibit, it cannot exceed 36" in any direction, including the base or other components.**

D.   Each Technology/Multimedia Project must include a **written description or explanation**.
      Double-spaced on 8½" x 11" paper
      Length Requirements: <u>K-4</u>   <u>5-8</u>   <u>9-12</u>
                                               1-2 pages   2-3 pages   3-4 pages

This explanation is to communicate the concepts and ideas of the project clearly and explain how and/or why the student used a technology or a multimedia format as a tool to present, investigate, or validate his/her research. Please observe all copyright laws. The written description should be in a clear-front presentation binder.

RECOMMENDATION: Students who submit a computer project should come to the gymnasium on the day of judging to demonstrate their program to the judges. CEDAR will provide a computer. If additional computer hardware/software is required, it will be the student's responsibility to provide. It is highly recommended the student focus on the content of the project with the technology/multimedia facilitating and/or enhancing the learning experience.   CEDAR is not responsible for unlicensed use of copyright material.

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

SCORING SHEET
TECHNOLOGY/MULTIMEDIA

PROJECT NO.

	Points Available	**Points Awarded**
RELEVANCE TO COAL	20	_____
CREATIVITY Project shows originality, creativity and enterprise Each aspect of project supports the theme	25	_____
STUDENT UNDERSTANDING Research appropriate, consistent and balanced Variety of resources Focus, depth of understanding of medium used	25	_____
APPEARANCE Neat and well organized Project is well stated and a conclusion is reached Data arranged coherently Quality of tape/CD/DVD or computer program	15	_____
ORGANIZATION Purpose, format appropriate Use of data Within time limit	15	_____

TOTAL POINTS AWARDED _____

REMARKS:

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