Science in the Arts Challenge

Science and art are everywhere, and the interdependence of the subjects is undeniable. The *Science in the Arts Challenge* has been created to encourage high school students to consider, research, and present information about relationships between the two seemingly different subjects. This year's *Science in the Arts Challenge* will be held during the West Virginia Science and Engineering Fair**.**

High school students may submit an entry for a visual arts product which they have created to represent *Science in the Arts*. Students may prepare a display that shows a timeline or tells the story of the artwork being created. The display should act as a story board and include evidence of the student creating the visual artwork. It may be used to explain the science process used to create an artwork and/or demonstrate an understanding the science of the materials used to create the artwork. During the presentation, the student should explain why the piece was selected to represent *Science in the Arts*, what the piece means to the student personally, and how science was used to create the art or the materials used to create the artwork; see the ***Science in the Arts Challenge Rules*** and ***Science in the Arts Challenge Rubric*.**

Examples of acceptable entries include but are not limited to:

- A piece of welded artwork may be submitted, and the student might explain the science of the welding process or the physics of forces (balance or center of gravity) which keeps the piece from falling over.
- A photograph may be submitted, and the student might explain the science of developing photographs, the optics associated with the lenses, or how the light impacts photography.
- A piece of pottery may be submitted, and the student might demonstrate an understanding of the science behind earthenware, stoneware, or porcelain, the geology of the material's place of origin, or the science of the glazing process.
- A painting may be submitted, and the student might explain the science of the paints or the fabric on which the image is painted.
- An airbrush image may be painted, and the student might explain the physics of an airbrush.

In each of the examples, the student would explain the science of the processes used to create the artwork or the science of the materials used to create the artwork. A painting of flowers and an explanation of the

photosynthesis process would ***not*** be an example of an appropriate entry for the *Science in the Arts* Challenge, because it would not address the science of the processes used to create the artwork or the science of the materials used to create the artwork.

Students are strongly encouraged to use the *Science in the Arts Challenge Rubric* as they decide what artwork to enter, how to research the science of the artwork, and what to include on their displays. Judges may only award points if a criterion for a category is represented in the artwork, on the display, or during the presentation at the Civic Center. Teachers are encouraged to assist students in using the rubric. If you have questions about the rubric or artwork, please contact WVDE Science Coordinator, Erika Klose at eklose@k12.wv.us.

The rubric has three categories-
The Artwork- How well does the artwork exemplify technique, craftsmanship, originality, and personal expression?
The Science- How well does the student demonstrate an understanding of the sciences, processes, or materials used to create the work of art?
Communicating About the Science in the Art- How well does the student communicate about the art, the science, and the interdependence between science and the arts.

Examples of past *Science in the Arts Challenge* winners, see Science the Arts: Fused Glass, Science in the Arts DNA, Hidden Attraction: Ferrofluid and Paint.

An **online application must be submitted by 4:00 p.m. on Tuesday, February 22, 2022.**

The *Science in the Arts Challenge* winner will be announced during the awards presentation of the WV Science and Engineering Fair.

The *Science in the Arts Challenge Rubric* will be used to score the visual arts piece, science information, display, and presentation. A total of 96 points may be earned on the rubric and a minimum of 67 points *must* be earned for a participant to be awarded first place.

A $100 prize will be awarded to the student who wins the *Science in the Arts Challenge*. The art teacher and the science teacher of the winning student will each receive a $100 grant to be used to purchase supplies for his or her classroom.

Visit the *Science in the Arts Challenge* webpage at http://wvde.us/scienceinthearts for more information. If you have questions about the please contact WVDE Science Coordinator, Erika Klose at eklose@k12.wv.us, or Art Coordinator Dr. Raymond Lowther at ray.lowther@k12.wv.us.