

## Physics and Art

Date:

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Name:

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### I. Topic

- Combining knowledge and applying that to art.
- A connector to physics and art

### II. Objectives / Expected Learner Outcomes:

The students will look through their science textbooks and create a work inspired by what they find. The students will look at works done by Ned Khan, Richard Deacon and Tim O'Riley, and discuss their meaning and their connection to science. The student will create a 3D piece or apply a 3D aspect to their work. Combining Physics elements and art to represent or interpret an aspect of life. This can be a theory of physics in parallel to a real life situation or emotion. They could learn that inspiration and creativity lies within what we know (knowledge) student could open their mind, creatively and use what they know to in the creation of their pieces.

### III. Standards of Education

- Related National Standards for Visual Arts Education:
  - AIII.4 the student will use technology to create the works of art that integrate electronic and traditional media
  - AIII.6 the student will develop skill, confidence and craftsmanship in the use of media, techniques and processes to achieve desired intention in works of art.
  - AIII.8 the student will demonstrate initiative, originality, fluency to tasks, and openness to new ideas in the creation of works of art.
- Related Virginia Visual Arts Standards of Learning
- Related Virginia Standards of Learning for Math, Science, Language Arts, and History and Social Science

### IV. Student Group Targeted

- Grade Level 11 Group Art III (normal)
- Prerequisite skills/knowledge: Science/ physics. Laws of physics, elements of nature

### V. Time Required

Number of sessions: 5 Length of sessions: 1hr 45min.

### VI. Materials and Resources

This includes but is not limited to:

Paint, wood, PVC pipe, and adhesives (students)  
Images of the works done by the artist mentioned above  
Science (physics) textbook

### VII. Itinerary and Strategies

- Key terms/vocabulary to be introduced: aesthetic expression, 3d design, and laws of physics
- Motivation and explanations:
  - Motivational activity- making a cardholder for an office using only office supplies. Discuss the parallel to the fact that you can you your environment to be inspired to create a piece of work.
- Questioning strategies/discussion:
  - Discussion of artist works and their works, why they were done, what they say, and what were the influences.

- Demonstration/guided practice: show the works done by the artist mentioned.
- Student independent practice/activity: Brain storming worksheet (attached)
- Checking for understanding:
  - Participation in the discussion of works and ideas and the brainstorming worksheet.
- Transitions between separate parts of the lesson: between the 3<sup>rd</sup> and 4<sup>th</sup> session there will be an in-progress critique.
- Time flow
- Closure:
  - Final critique about what was gained in their own philosophy of the inspiration of ideas concepts and opinions. How they may use this in the future and if they gain a broader sense of why it is important to learn (even those subject we will “never” use).

VIII. Evaluation Strategies:

Participation in the discussion of the artist works

The completion of the Brain storming worksheet

Participation in the in-progress critique

Final project

Participation in the final critique of what each gained and took from the lesson.