



# CITY OF TAMPA

Pam Iorio, Mayor

Department of Arts & Cultural Affairs

Public Art Program



## Lights On Tampa Lesson Plan 6<sup>th</sup> Grade – 8<sup>th</sup> Grade

Lesson One: Pre-Visit

### I. Introduction

This lesson provides information about how to introduce the Lights on Tampa project in your classroom. By presenting an exciting way to learn about how light affects the way that we look at everyday objects, this lesson helps students understand the concepts of the newest public art project in Tampa! Through journal writing, class discussion, and the study of famous downtown Tampa landmarks, students will gain a greater understanding of the project before visiting each individual site.

### II. Objectives/Standards

Students will work together in small groups to identify the different waves of energy in the electromagnetic spectrum.

Students will recognize and identify the artistic style and motifs of the emerging artists for the Lights on Tampa project.

Students will learn about the Lights on Tampa project and how it will transform the downtown city atmosphere.

Students will experiment with the way that light creates shadows and figures on everyday classroom objects.

Students will become familiar with Tampa's downtown landmarks and learn about the artists who are participating in the Lights on Tampa project.

Students will respond in writing and drawing when asked to think cognitively about the ways that they experience Lights on Tampa.

### III. Materials

Computer with Internet access

Flip Chart

Markers

Class set of *Lights on Tampa* Journals

Postcards of downtown Tampa, FL during the day and at night

Map of downtown Tampa, FL

Flashlights

#### **IV. Vocabulary**

*Vocabulary terms from [www.gelighting.com](http://www.gelighting.com). To learn more, visit this website!*

**Gamma Rays:** Rays that carry a lot of energy. Outer space is the biggest gamma-ray producer!

**X-Rays:** These rays are used to take pictures of teeth, bones, and organs inside the body.

**Ultraviolet Rays:** These rays are found in sunlight and are absorbed by the earth's ozone layer, which protects humans.

**Visible Light:** The only part of the spectrum that humans can see. Different wavelengths of visible light create a rainbow of seven colors, which are always in the same order. Just remember the name ROY G. BIV – Red, Orange, Yellow, Green, Blue, Indigo, and Violet.

**Infrared Rays:** They carry the sun's heat to the earth and make human skin feel warm.

**Microwaves:** Rays that is short and easy to direct. The energy of microwaves is converted into heat, most commonly used to cook food.

**Radio Waves:** These waves carry music to your radio and are also emitted by stars and gasses in space.

#### **V. Procedures**

1) To begin the lesson, divide students into seven groups. Each group must take time in the library and computer lab to research one type of light ray from the above list. Student groups must complete a written assignment about the type of light ray they chose to study and where it can be found in our everyday life. Groups must present their reports to the class.

2) After learning about the different types of light rays, students will have a chance to learn about each individual artist from the Lights on Tampa project. Access the [www.lightsontampa.org](http://www.lightsontampa.org) website and project images for the class to see. Explain that each artist has chosen a different city site to create a beautiful light based art project on. Dividing the class in different groups, students must research each site for the Lights on Tampa project. Making a large-scale map of downtown, each group must detail their site and draw it on the downtown map.

3) Now that students have a clear understanding of the project's scope, they must decide which artist and piece they would like to focus their project on. Students will observe the installation downtown at three different times and record their findings in a journal. Conclude the lesson by having students choose which artist and site they want to focus on and have them write their first journal entry.

#### **VI. Assessment/Evaluation**

As well as ongoing assessment of student participation and progress, evaluate and assess the initial journal assignment and writing for sequential thought process, complete idea development, and connections made between subjects discussed. Students must also be evaluated on their participation and demonstrated understanding in group research projects and journal writing.

#### **VII. Extension Activities and Resources**

Students can take their journals home and sketch or draw their house at night and during the day. Focus again on the way that lights change the way we see our surroundings.

Students can take trips to downtown Tampa with their families and record individual experiences and observations in the journals. This can be extended to include homework assignments.

Students can visit other light based art projects on the web. For extra credit, students can write about how Lights on Tampa is similar or different to other light based public art projects.

## Lesson Two: Post-Visit

### **I. Introduction**

After seeing the different sites of the Lights on Tampa project, students will have an opportunity to create their own light based art for a downtown Tampa building. Working individually, students will create their own art projects and give a written explanation for their concept and idea. Together, the students can display their own Lights on Tampa exhibition with detailed labels and text. Each student must select an artist to research and must design a project in the style of the artist they have selected.

### **II. Objectives/Standards**

Students will reflect on their experience with the Lights on Tampa project and how it transforms the downtown city atmosphere.

Students will become more familiar with Tampa's downtown landmarks and learn more about the artists who are participating in the Lights on Tampa project.

Students will respond in writing and drawing when asked to think cognitively about the ways that they experienced Lights on Tampa.

Students will demonstrate their understanding of the Lights on Tampa project by creating their own box building decorated with colors, materials, lights, and found objects that represent light based art in the style of a selected artist.

### **III. Materials**

Computer with Internet access

Flip Chart

Markers

Class set of *Lights on Tampa* Journals

Postcards of downtown Tampa, FL during the day and at night

Map of downtown Tampa, FL

Paper Boxes

Glue

Colored construction paper

Tape

Paint

Paintbrushes

Found objects (paper scraps, metal scraps, wood pieces, rubber, etc.)

### **IV. Procedures**

1) After visiting the Lights on Tampa exhibition as a class, or individually, have a brief discussion about the experience. Ask students to answer and discuss the following questions and ideas. Describe the lines, shapes, and colors that you see. What are they? What do they look like? How long do you think it took the artist to make this installation? If you could take one of the light projects home with you, where would you put it? Where would you use it? What part of the lights do you look at first? Why? Is this a quiet or a busy work of art? Do these lights make you think of a story? Why? Where is your eye drawn

first and where does it move next? Is there one part that stands out? What do you think of the work of art? Compare this with other art that you have seen.

2) After discussing the work, tell students that they will select an artist to study and research. Access the Lights on Tampa website at [www.lightsontampa.org](http://www.lightsontampa.org). Tell students to research the biography, style, and talent of their selected artist. Students must complete a writing assignment to show that they have demonstrated an understanding of the artists' individual style. In the writing, students must detail their own light based art project for a building of their choice. Have students do a short writing or sketch with the building they would like to decorate. Tell students to choose their favorite building from downtown.

3) After the writing assignment, students can share their ideas with the class and then begin their projects. Students can use art materials to assemble their building and then use paints and markers to decorate the buildings. Students can work together or separately for this project.

4) After the exhibition is assembled, students can make a final draft of their journal entry and tour other students around the room!

#### **V. Assessment/Evaluation**

As well as ongoing assessment of student participation and progress, evaluate and assess the final journal assignment and writing for sequential thought process, complete idea development, and connections made between subjects discussed. Students must also be evaluated on their participation and demonstrated understanding in group research projects and journal writing.

#### **VI. Extension Activities/Resources**

Students can work together in groups to research other public art programs that Tampa has to offer. As a class, students can submit a design or participate in one of the many public art components in Tampa.

Students can design their own light based art project for the school to exhibit.

## Sunshine State Standards for the *Lights on Tampa* Lesson Plans

### Language Arts

#### **Reading**

K-12

The student uses the reading process effectively. (LA.A.1.1-4)

The student constructs meaning from a wide variety of texts. (LA.A.2.1-4)

#### **Writing**

K-12

The student uses the writing process effectively. (LA.B.1.1-4)

The student writes to communicate ideas and information effectively. (LA.B.2.1-4)

#### **Listening, Viewing, and Speaking**

K-12

The student uses viewing strategies effectively. (LA.C.2.1-4)

#### **Literature**

K-12

The student responds critically to fiction, nonfiction, poetry, and drama. (LA.E.2.1-4)

### Mathematics

#### **Measurement**

K-12

The student measures quantities in the real world and uses the measures to solve problems. (MA.B.1.1-4)

The student estimates measurements in real world problem situations. (MA.B.3.1-4)

#### **Geometry and Spatial Sense**

K-12

The student describes, draws, identifies, and analyzes two- and three-dimensional shapes. (MA.C.1.1-4)

The student visualizes and illustrates ways in which shapes can be combined, subdivided, and changed. (MA.C.2.1-4)

The student uses coordinate geometry to locate objects in both two- and three-dimensions and to describe objects algebraically. (MA.C.3.1-4)

#### **Algebraic Thinking**

K-12

The student describes, analyzes, and generalizes a wide variety of patterns, relations, and functions. (MA.D.1.1-4)

#### **Data and Probability**

K-12

The student understands and uses the tools of data analysis for managing information. (MA.E.1.1-4)

## **Science**

### **The Nature of Matter**

K-12

The student understands that all matter has observable, measurable properties. (SC.A.1.1-4)

The student understands the basic principles of atomic theory. (SC.A.2.1-4)

### **Energy**

K-12

The student recognizes that energy may be changed in form with varying efficiency. (SC.B.1.1-4)

The student understands the interaction of matter and energy. (SC.B.2.1-4)

### **Force and Motion**

K-12

The student understands that types of motion may be described, measured, and predicted. (SC.C.1.1-4)

### **The Nature of Science**

K-12

The student uses the scientific processes and habits of mind to solve problems. (SC.H. 1.1-4)

## **Social Studies**

### **People, Places, and Environments**

K-12

The student understands the world in spatial terms. (SS.B.1.1-4)

The student understands the interactions of people and the physical environment. (SS.B.2.1-4)

### **Government and the Citizen**

K-12

The student understands the structure, functions, and purposes of government and how the principles and values of American democracy are reflected in American constitutional government. (SS.C.1.1-4)

The student understands the role of the citizen in American democracy. (SS.C.2.1-4)

### **Economics**

K-12

The student understands how scarcity requires individuals and institutions to make choices about how to use resources. (SS.D.1.1-4)

The student understands the characteristics of different economic systems and institutions. (SS.D.2.1-4)

## **Foreign Languages**

### **Culture**

K-12

The student understands the relationship between the perspectives and products of culture studied and uses this knowledge to recognize cultural practices. (FL.B.1.1-4)

### **Comparisons**

K-12

The student recognizes that cultures have different patterns of interaction and applies this knowledge to his or her own culture. (FL.D.2.1-4)

### **The Arts**

#### **Dance**

K-12

The student makes connections between dance and other disciplines. (DA.E.2.1-4)

#### **Music**

K-12

The student understands the relationship between music, the other arts, and disciplines outside the arts. (MU.E.1.1-4)

#### **Theatre**

K-12

The student acts by developing, communicating, and sustaining characters in improvisation and formal or informal productions. (TH.A.1.1-4)

The student analyzes, criticizes, and constructs meaning from formal and informal theater, film, television, and electronic media. (TH.D.1.1-4)

The student understands the role of theater, film, television, and electronic media in everyday life. (TH.E.1.1-4)

#### **Visual Arts**

K-12

The student understands and applies media, techniques, and processes. (VA.A.1.1-4)

The student creates and communicates a range of subject matter, symbols, and ideas using knowledge of structures and functions of visual arts. (VA.B.1.1-4)

The student understands the visual arts in relationship to history and culture. (VA.C.1.1-4)

The student assesses, evaluates, and responds to the characteristics of works of art. (VA.D.1.1-4)

The student makes connections between the visual arts, other disciplines, and the real world. (VA.E.1.1-4)

**Artist Biographies from [www.lightsontampa.org](http://www.lightsontampa.org)**

**Dan Corson** of Seattle, began his training in the theatre, and views his work not just about objects at a location, but as spaces and volumes to manipulate, and about the relationships and choreography between the environment and the public. Corson states, “And then there is me; the trickster, scientist, scenographer, educator and magician that loves to reveal or find the point of transformation of knowledge or perception ... that ‘ah ha’ moment where the non verbal link is made or felt.” Corson has steadily received public art commissions since 1990, has been granted numerous fellowships and awards

and has served as a lecturer on various professional panel discussions. Corson received his MFA in sculpture from the University of Washington in 1992.

<http://www.corsonart.com/>

**Wendy Babcox** was trained as a photographer, but in recent years has completed many works that incorporate video projection. Her video works have been exhibited at the Tampa Museum of Art and at the USF Contemporary Art Museum. Babcox grew up on a tourist town in the south west of England and this geographical and cultural memory has had a profound impact on her artwork. “In recent years, my work has been imbued with the seductive nature of tourist culture especially prevalent here in the Tampa Bay area.” Babcox proposes to incorporate video projection in downtown Tampa featuring favorite Floridian tourist attractions. Babcox is a resident of Tampa and is an Assistant Professor of Photography and Intermedia at the University of South Florida.

<http://www.wendybabcox.com/>

**Janet Echelman**, teamed with Leni Schwendinger, will produce Echelman’s expertise, shaping urban space through sculptural interventions utilizing 3-dimensional sculptural scrimms with Schwendinger’s experience using theatrical and public art lighting. Janet Echelman builds sculptural interventions, which respond to environmental forces like wind and water. Recent commissions include the 1.6 million dollar waterfront wind sculpture in Porto, Portugal, and selection of her artist team’s design for September 11th Memorial for Hoboken (NJ) which will be a free-standing island in the Hudson River. Originally from Tampa, Janet graduated from Harvard College, Harvard University, with Highest Honors in Visual and Environment Studies, and received a Masters of Fine Arts from the Bard College. Her work was honored by the Public Art Network as one of the highlights of the 2004 Year in Review. In 2005, she was elected to the National Council of the Public Art Network through 2008.

<http://www.echelman.com/>

<http://www.lightprojectsllc.com/>

Born in Austria, **Erwin Redl** has worked and lived in New York since 1993. Redl works with LED lights, but arranges them in a square grid with only a few inches apart. In his “fade” series, the LED lights slowly transition from red to blue. People have described his installations as “mesmerizing”. Redl states: “My work reflects upon the condition of art making after the ‘digital experience.’ The formal and structural approach to various media I employ, such as installation, CD-ROM, internet and sound, almost requires binary logic, because I assemble the material according to a narrow set of self-imposed rules which often incorporate algorithms, controlled randomness and other methods inspired by computer code.”

<http://www.paramedia.net>

**Jorge Orta** (Rosario, Argentina 1953) lives in Paris Artist and architect, Jorge Orta has been working on large-scale ephemeral works since 1973. Protagonist of an urban and social poetic language, he has developed many new and alternative forms to communicate: using mail art, video installations and performance in the early 70's, to large scale projections in the 80's. Over the last 20 years he has devised a polysemic alphabet of signs and symbols which allow him to address very diverse publics, and more



recently he has been exploring the symbol "Heart" to consolidate art, mythology and science. Jorge's light projection work took on its veritable dimension in 1992 when he projected giant mobile images inside the Pompidou Centre in Paris and when he embarked on a human experience to project his signs on Machu Picchu Mountain in Peru. Since, he has covered the facades of the Venetian palaces at the 1995 Venice Biennale, and more obsolete places such as Capadocia in Turkey, Cuenca in Spain, Aso volcano in Japan, Chartres and Evry cathedrals and many more.

<http://studioorta.free.fr>

### **Hellmuth, Obata + Kassabaum**

**Yann Weymouth**, Director of Design, is an international architect with over 35 years of experience in design, project management, client relations and engineering. His projects include the Louvre Museum in Paris, the new Salvador Dali Museum, Robert Kennedy's Gravesite and the National Gallery of Art's East Wing in Washington, DC.

Architectural Designer **Brent Cutshall** focus on architecturally relevant computer programs allows him to produce project scenarios including dramatic lighting schemes. His projects include the Moffitt Center Pedestrian Bridge, the Cleveland Clinic, and the Lake Erie College of Osteopathic Medicine.

### **Dear Productions**

**Tracey Dear's** career as a designer of architectural lighting began in 1998 with the largest project of its kind in the world - the lighting of the Chicago Bridges - 11 movable bridges spread out over a mile in length. Years of lighting design experience in many other areas prepared Dear to tackle this astonishing and extraordinarily successful debut assignment and move his company to the forefront of the field of architectural lighting design.

<http://www.dearproductions.com/>

<http://www.hok.com/>

Whether intimate or monumental, **Archer's** light sculptures attract viewers with their brilliant colors and vitality transformed into a unique and dramatic visual focal point. The light emanating from the work energizes the environment, integrating the artwork into its surroundings. Two-dimensional, three-dimensional, bas-relief, suspended or free-standing innovative light sculptures and architecturally integrated designs harmonize fiber optics and/or neon with a variety of materials. Through collaborations with architects, designers and community agencies, and after research into the site's cultural history, environment and physical, functional and aesthetic character, Tobey creates site-sensitive, relevant, engaging artworks. Her award-winning artwork is found in museum, public and private collections.

<http://www.tobeyarcher.com/>

The major influences in **Stephen Knapp's** career have not been a particular school or series of teachers. Instead, it has been curiosity, history, books, museums, and the world around him. He is strictly self-

taught and has been greatly influenced by the journey from photographic art to murals in metal, stone and ceramic, kiln formed glass walls, mosaic, sculpture in glass and steel and marble, and installation pieces in mixed media. Kiln formed glass has become a prime focus for Stephen because he finds it an unrivaled receptor for color. Light, color, movement - all seem to migrate to and play across the surface of the glass, making it a kinetic, vibrant medium. "By weaving abstract designs in glass, I am able to let the viewer bring more of themselves into what they see. Watching people run their hands over the textured glass surface in amazement continues to remind me of one of the prime roles of an artist - to touch others with mystery and magic. When people tell me what they see in an installation or work of mine - night sky, fossils, movement, archaeology, technology - all different, all varied, bringing their own perspective to my work, then I have succeeded."

<http://www.stephenknapp.com/>

**Bay Stage Lighting**, The Bay Area's most experienced entertainment lighting organization has been featured throughout the United States, Central America and Caribbean. A family run organization for over 45 years; Bay Stage Lighting has been the company behind the scenes on a plethora of events impacting the entertainment world. Responsible for the, sound, video and lighting extravaganzas of such local social events as Ye Krewe of Gasparilla's Debutant, Tea Dance and Coronation Ball for many years, The Tampa Museum's Pavilion Ball and Ringling Museum's social fundraiser. As well, numerous events where their services are contracted to assure an event reaches the criteria required to insure total satisfaction of corporate clients. Bay Stage Lighting has achieved the respect of their customers ranging from Oprah Winfrey's National "Live Your Best Life" Tour to lighting events for the 2002 Winter Olympics in Utah, Maximum Magazine Super Bowl events and Super Bowl pregame and half time shows. Bay Stage Lighting has proven to offer unparalleled service and satisfaction to its customers over the past five decades and has worked effortlessly towards positioning itself to continue their demanding and strict attention to detail and to provide this same product for many years to come.

<http://www.baystagelighting.com>

Jeff Whipple is an artist, playwright and filmmaker based in Tampa, Florida. He has won awards for painting, sculpture, video and playwriting in professional competitions. He has had more than 65 solo exhibitions in galleries, universities and museums throughout the USA. He has participated in dozens of group exhibitions across the country and won numerous top awards in art competitions. His videos have been regularly featured in film festivals and last year he wrote, directed and acted in a video called "[Chicken Feet](#)", which won Best Narrative Comedy at the Ybor Festival of the Moving Image. Whipple won fellowships for visual art from the Illinois Arts Council in 1985 and 1990 and from the Florida Arts Council in 1982 and 2006. In 1996, he won a Florida artist fellowship for playwriting. In 2001, he was the first recipient of the Fulton Ross Award for Artists, a \$10,000 grant based on career achievements.

Whipple received a MFA from the University of South Florida in 1980. He has taught at several colleges including Arizona State University and Northern Illinois University. He currently teaches at the University of Tampa.

[www.jeffwhipple.com](http://www.jeffwhipple.com)