

TEACHER GUIDE TO THE  
2018-2019 Every Student Initiative Field Trips

7th Grade

1930 - 1960

THE GOLDEN AGE OF  
**DISNEY**

THE COLLECTION OF STEVE SPAIN

OCT 20, 2018 - JAN 20, 2019

Sponsored by Visionary Society & Illinois Arts Council Agency



**Included in this Packet:**

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# Introduction

**Please read through this document at least once before arriving at the museum for your field trip.**

## Every Student Initiative

The Every Student Initiative (ESI) is an ambitious new program to bring every student in Central Illinois to the Peoria Riverfront Museum every year. With hands-on learning through objects, a Giant Screen Theater, Dome Planetarium, and rotating exhibits, the Peoria Riverfront Museum is a great place for students to learn in a new environment. ESI supports the museum's mission to encourage life-long learning in students of all ages while connecting them to their community at large.

The Every Student Initiative is privately funded, allowing donors to help their communities by sponsoring field trips to the Peoria Riverfront Museum.

With the Peoria Public Schools, the Barton Family Foundation has sponsored curriculum-related field trips for every student in grades K-8. The field trips are scheduled throughout the year to coincide with the curriculum the Museum can match best. Each trip includes a visit to the Giant Screen Theater or Planetarium and a guided gallery tour. The specific show and gallery are picked based on the current curriculum during that quarter.

This is an excellent opportunity for students to explore what their community has to offer and experience their classroom curriculum in a unique way.



If you have any questions, comments, or concerns, please contact:

Holly Johnson

Every Student Initiative/Group Tours Coordinator

(309) 863-3013

[hjohnson@peoriariverfrontmuseum.org](mailto:hjohnson@peoriariverfrontmuseum.org)

# Museum Policies & Expectations

## About this guide:

- This guide is intended to help give an overview of your grade level's specific field trip along with pre and post visit activities to help integrate the trip into the classroom.
- Please review this guide prior to your scheduled field trip to ensure a smooth experience.

## Arrival/Check-In:

- Please **confirm your final numbers** (students & chaperones) with Holly Johnson **5 days prior** to your visit.
- Do your best to **ARRIVE ON TIME!** Tours are carefully scheduled, and arriving on time makes the day go easier for both you and your students.
  - "On Time" is defined as arriving **5-10 minutes before your first scheduled program** to allow for transition time (e.g.: check-in, bathroom breaks, etc.)
- Upon arrival, one leader should check in at the front desk to report the final tally of students and adults. It is important that you know your total numbers before coming to the front desk. This will ensure your group starts promptly at your designated time.
- Rolling bins will be provided to your group upon arrival to store items like sack lunches and/or coats. We cannot provide cooling or heating services for lunches.
- A museum host/educator will greet the group in the lobby and give a brief orientation.

## Bus Loading/Unloading Zones:

- Buses can load and unload at the front entrance of the museum at 222 SW Washington Street. There is a drop-off lane directly in front of the museum.
- There is no on-site bus parking; buses can park under the Bob Michel Bridge.
  - A bus driver map is available [online](#), or at the front desk.





### **Group Orientation:**

- Upon your arrival at the museum, a staff member will briefly explain the museum rules, review your group's specific schedule, and provide chaperones with maps, activity sheets, and gallery guides as needed.

### **Chaperone Policy:**

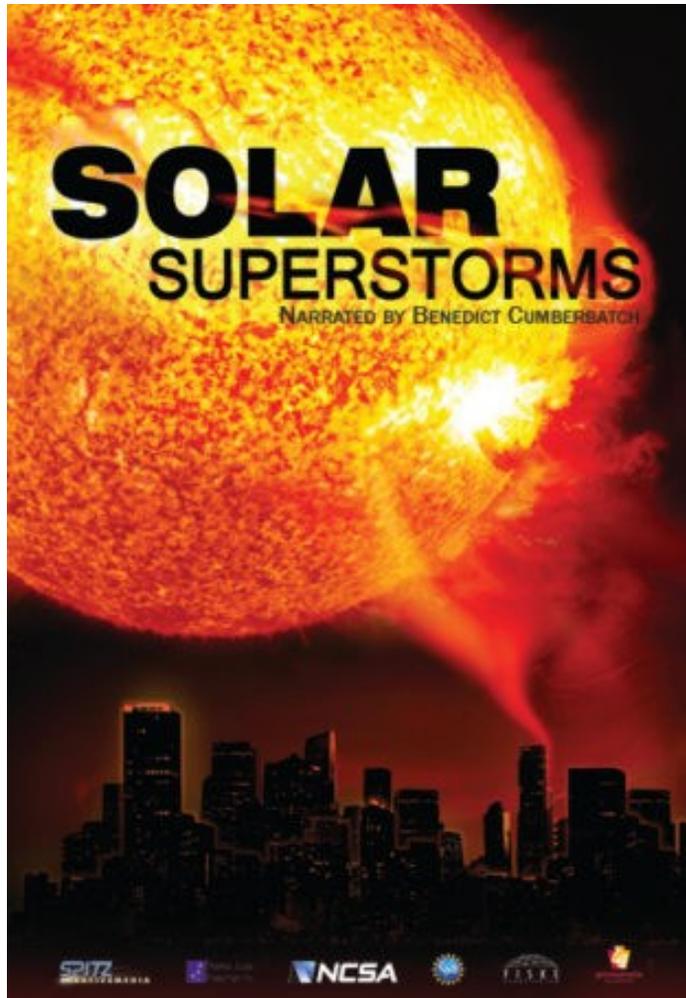
- Peoria Riverfront Museum recommends one chaperone for every five students; all attending adults are considered a chaperone.
- Chaperones arriving separately can park in the museum parking deck for free.
- All chaperones should be made aware of the tour's itinerary.
  - Chaperone guides are available on the museum's website; please make use of these.

### **Museum Rules:**

Our goal is to provide a successful learning environment for all students. **You can help to create that environment by clarifying our behavioral expectations with your students both before you arrive AND by helping us enforce those expectations during your visit.** During your group orientation, a staff member will remind your students of the following rules:

- Walk in the museum. No running.
- Use indoor voices.
- Many of our exhibits are "hands-on," but some are not. We'll help your students to know the difference.
- No food, drink, candy or gum in the galleries.
- Respect others in your group as well as other museum visitors and staff.
- Teachers and chaperones must stay with their groups at all times.
- Photography is permitted in some galleries. Please ask your host for details.

## Element 1: Planetarium: Solar Superstorms and Uniview



### *Narrated by Benedict Cumberbatch*

A fury is building on the surface of the Sun – high-velocity jets, a fiery tsunami wave that reaches 100,000 kilometers high, rising loops of electrified gas. What's driving these strange phenomena? How will they affect planet Earth? Find the answers as we venture into the seething interior of our star.

***Solar Superstorms*** is a major new production that takes viewers into the tangle of magnetic fields and super-hot plasma that vent the Sun's rage in dramatic flares, violent solar tornadoes, and the largest eruptions in the solar system: Coronal Mass Ejections.

The show features one of the most intensive efforts ever made to visualize the inner workings of the sun, including a series of groundbreaking scientific visualizations computed on the giant new supercomputing initiative, Blue Waters, based at the National Center for Supercomputing Applications (NCSA), University of Illinois.

In addition to *Solar Superstorms*, students will be able to glimpse the current night sky with a focus on forces in space, such as gravity and heat.

## Element 2: The Golden Age of Disney: The Collection of Steve Spain

1930 - 1960  
THE GOLDEN AGE OF  
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 PEORIA  
RIVERFRONT MUSEUM

"The Golden Age of Disney" features the most comprehensive regional collection of Disney art from 1928-1959. This exhibition of framed preparatory drawings, celluloid, and painted backgrounds examines Disney animation innovations as well as the impact of Disney on American culture.

On the guided tour, students will see animation cells, sketches, watercolor backgrounds, and movie posters from Disney animated films and shorts from the "Golden Age" of Disney, from 1928-1959. Some of the media represented in this exhibit include Snow White, Lady and the Tramp, Pinocchio, as well as Disney shorts. The tour will focus on how animation tricks our brain's perception of reality by examining briefly how our eyes see, the process of traditional animation, some of the themes in the early Disney films, and a brief history of the biggest company in the animation industry: Walt Disney.



PEORIA  
RIVERFRONT  
MUSEUM

# Educator Preview Pass

Preview the museum before planning your field trip! Educators are invited to come to Peoria Riverfront Museum and visit the galleries and see the Dome Planetarium shows\* at no cost.

Print out this pass and bring it and your official school ID to the ticket desk in the main lobby. This pass is good for free admission for one educator.

*\*Applies to our regularly scheduled public shows only.*

INFO BELOW MUST BE FILLED OUT FOR FORM TO BE VALID

Name \_\_\_\_\_

School \_\_\_\_\_ Grade(s) Taught \_\_\_\_\_

City \_\_\_\_\_ Email \_\_\_\_\_

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**Peoria Riverfront Museum**  
222 SW Washington Street | Peoria, IL 61602  
309.686.7000 | [www.PeoriaRiverfrontMuseum.org](http://www.PeoriaRiverfrontMuseum.org)

## Pre Visit Activity: Forces, Energy, and Matter Crossword and Optical Illusions

### Introduction:

These activities are to help review the vocabulary terms associated with Forces, Energy, and Matter and understand how their eyes work to prepare them for their field trip at the Peoria Riverfront Museum. The crossword puzzle is a quick activity that students can do as a group or alone. It comes with a glossary to help students remember each term. That can be found on pages 9-10. The answer key for the crossword puzzle can be found on page 11.

In addition to the crossword puzzle, there is a quick activity about optical illusions. This activity's worksheet can be found on pages 12-13. The instructions are found below. On their guided tour, students will learn about two types of perception: optical and thematic, through Disney's animated movies.

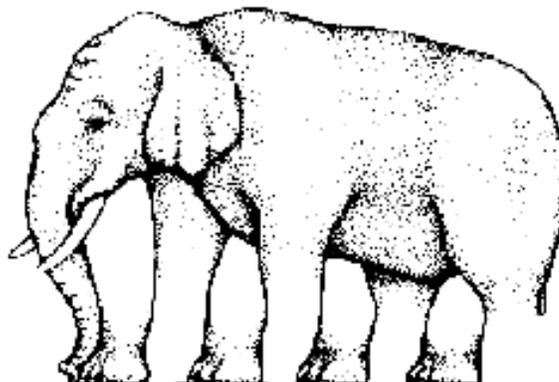
### Instructions:

**Crossword Puzzle:** Give each student or group a copy of the crossword puzzle and glossary. Decide if you want to review each term as a class before they begin, or let them go through first without any additional information. Afterwards, go over the answers to the puzzle as a class. They will be hearing some of those terms in their planetarium show at the Peoria Riverfront Museum.

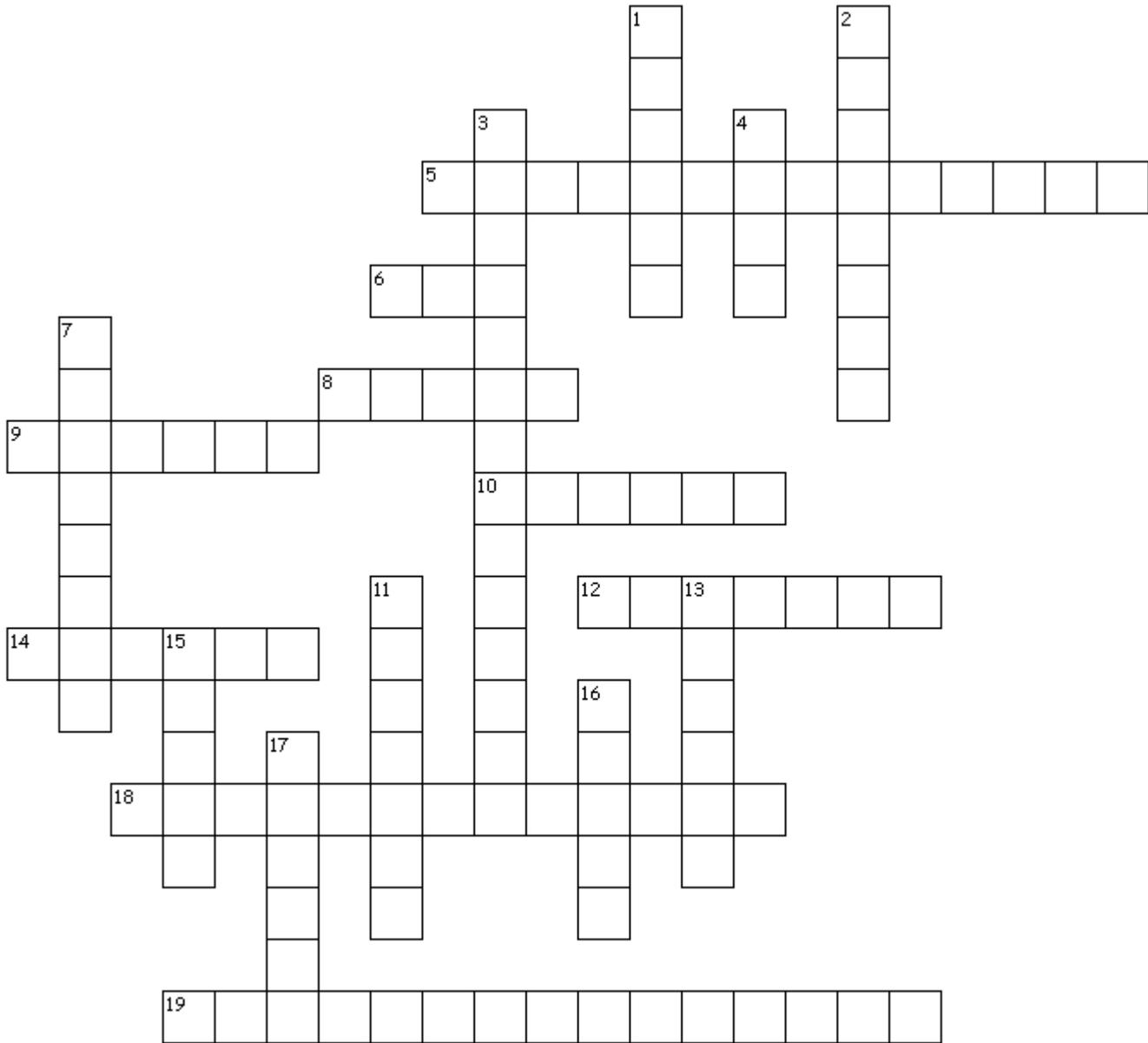
**Optical Illusions:** This is a quick activity that requires a computer lab. Give your students the worksheet found on pages 12-13. Help them find the websites on the paper, then give them about 45 minutes (or however long you think they need) to complete the worksheet. The links to these websites can be found below:

<https://www.optics4kids.org/illusions>

<https://www.carolina.com/teacher-resources/Interactive/optical-illusions/tr25344.tr>



# Forces, Energy, and Matter



**Across**

- 5. Rust forming on iron
- 6. Not liquid, solid, or plasma
- 8. A push or pull
- 9. The SI of Force
- 10. Water
- 12. An objects resistance to change in motion
- 14. Stars are made mostly out of this
- 18. Energy that has been released
- 19. Stored energy waiting to be released

**Down**

- 1. Throwing a ball
- 2. Surface resistance between two objects moving over each other
- 3. Ice melting into water
- 4. How much matter is in an object
- 7. Falling without a parachute
- 11. The force that keeps us on the Earth
- 13. The ability to do work
- 15. Not liquid, gas, or plasma
- 16. How fast an object is moving
- 17. This can change depending on the amount of gravitational pull on an object

## Crossword Glossary

**Chemical Change:** The rearrangement of the atoms of one or more substances that changes their chemical properties that creates a new substance. *Examples: Formation of rust on iron, the reaction when*

**Energy:** Ability to do work. Objects can have energy from their motion, position, or mass.

**Force:** Push or pull upon an object resulting from the objects interaction with another object.

**Free Fall:** Downward movement under the force of gravity only. *Example: Falling without a parachute*

**Friction:** The resistance that one surface or object encounters when moving over another. *Example: Walking on the floor, rug burn, using an eraser, tires on the road.*

**Gas:** A fluid (such as air) that has neither independent shape nor volume but tends to expand indefinitely. Not a liquid or solid.

**Gravity:** The force that attracts a body towards the center of the earth, or towards any body with mass

**Inertia:** The resistance of an object to any change in its motion, including direction. *Example: An object at rest will remain at rest, unless acted upon by a large enough force.*

**Kinetic Energy:** Energy from an action or a movement.

**Liquid:** A substance that flows freely but has a constant volume. *Examples: Oil and water.*

**Mass:** The measure of the amount of matter in an object. Not the same as weight, as weight can change, but mass always remains the same.

**Motion:** Displacement or change in the position of an object over time. *Examples: Throwing a ball, opening a door, walking from one location to another.*

**Newton:** The International System of Units (SI) for force. It is equal to the force that would give a mass of 1 kilogram an acceleration of one meter per second.

**Physical Change:** A change in the physical properties of a substance. *Example: Water freezing into ice, ice melting into water.*

**Plasma:** The 4th state of matter, where many electrons wander freely among the nuclei of atoms.

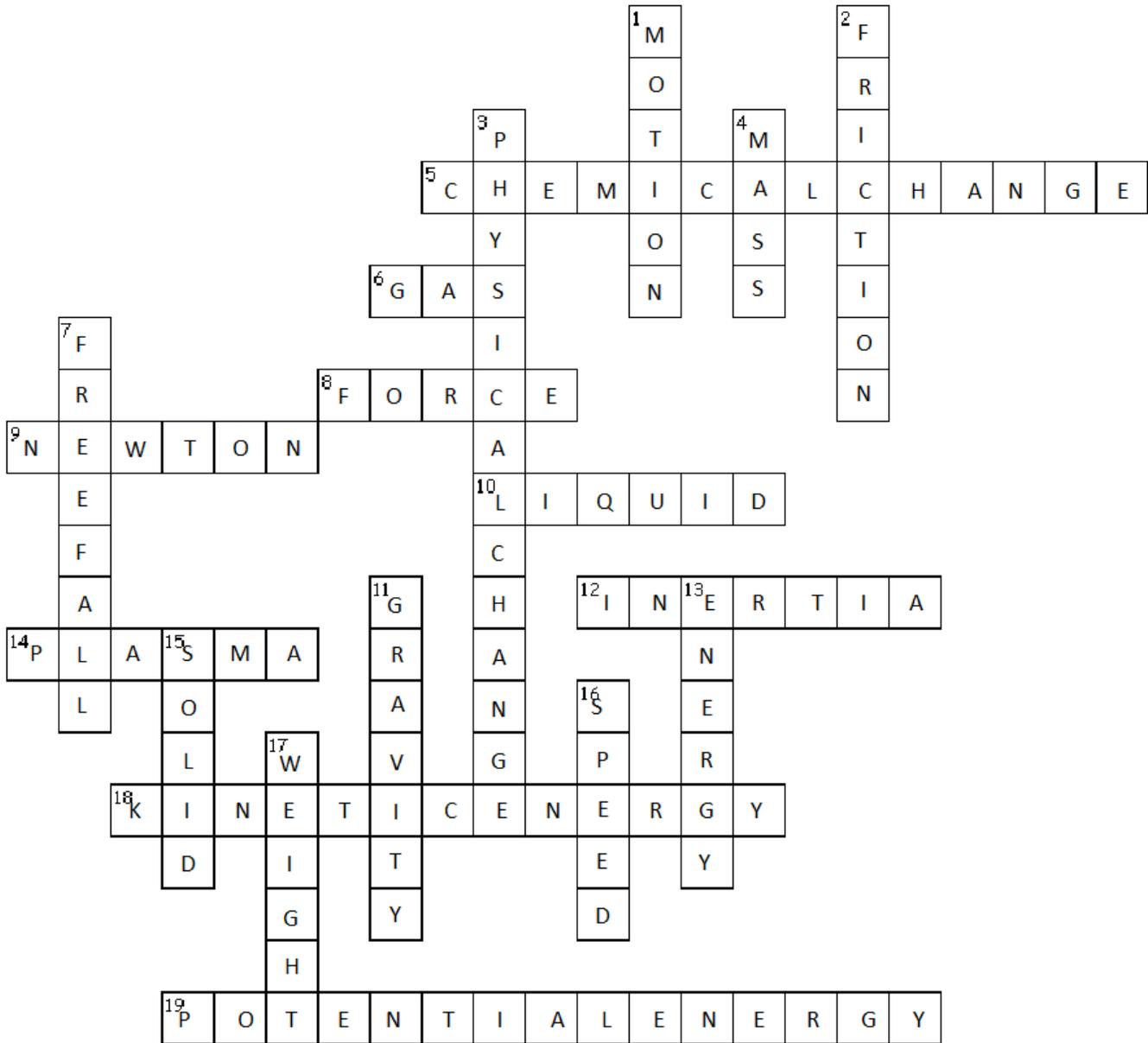
**Potential Energy:** Energy an object has because of its position; stored energy. *Example: A rock at the top of a hill, skier waiting at the top of the mountain.*

**Solid:** Of definite shape and volume, not a liquid, gas, or plasma.

**Speed:** Distance traveled per unit of time or how fast an object is moving.

**Weight:** The measure of the intensity of the force imposed on an object by the local gravitational force. Weight changes depending on gravity. *Example: On Earth, Susan weighs 145 pounds. On the Moon, Susan weighs only 24 pounds.*

# Forces, Energy, and Matter Answer Sheet



## Across

5. Rust forming on iron
6. Not liquid, solid, or plasma
8. A push or pull
9. The SI of Force
10. Water
12. An objects resistance to change in motion
14. Stars are made mostly out of this
18. Energy that has been released
19. Stored energy waiting to be released

## Down

1. Throwing a ball is an example of this
2. Surface resistance between two objects moving over another
3. Ice melting into water
4. How much matter is in an object
7. Falling without a parachute
11. The force that keeps us on the Earth
13. The ability to do work
15. Not liquid, gas, or plasma
16. How fast an object is moving
17. This can change depending on the amount of gravitational pull on an object

## Optical Illusions

The way we see is a complicated process, but there are many fun ways to fool our eyes! Use your time at the computer to go to each website and figure out the answers to the questions.

For questions 1-4 go to the website:

<https://www.carolina.com/teacher-resources/Interactive/optical-Illusions/tr25344.tr>.

For question 5 go to the website: <https://www.optics4kids.org/illusions>

1. What is an optical illusion?

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2. What are the 3 types of optical illusions?

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3. Give an example of 1 of the 3 types of optical illusions:

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4. There are many types of Cognitive Illusions. What are the 4 main categories of Cognitive Illusions?

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5. On this website, there are many different kinds of optical illusions! Pick 4. For each illusion write down: a) The name of the illusion b) What type of illusion it is (Cognitive, Physiological, or Literal) and c) What makes it an optical illusion.

### Optical Illusion 1

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

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### Optical Illusion 2

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

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**Optical Illusion 3**

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Optical Illusion 4**

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Now that you have identified different kind of optical illusions, try to design your own optical illusion. Try to identify which type of optical illusion you create! Design your optical illusion here:

## Post Visit Activity: Flip Books

### Introduction

After looking at the traditional animation process in The Golden Age of Disney, students will be able to make their own traditional animation in the form of a flipbook. Students are probably familiar with the basics, by drawing the same image but slightly different in the corners of their math books or notebooks during lectures and flipping through those images to produce a “moving” picture. Give them a formalized way to get that same effect with notecards or other paper fastened together to more easily flip their animations! Some students might be intimidated, but even something as simple as a dot can create a cool animated effect.

### Materials

- Notecards/Paper cut into small segments
- Staples (Or binder clips or rubber bands to fasten one end of the flipbook if it gets too big to staple)
- Pencil

### Instructions

1. Introduce your students to the activity by explaining that they will be doing their own kind of traditional animation. Traditional animation is when an animator draws each individual frame of animation on a physical medium, like paper. They saw examples of this in the exhibit The Golden Age of Disney. Remind your students that they aren't expected to draw like professional animators, instead they should focus on having fun and telling their story. You can watch this video in class to further reinforce the activity: <https://www.youtube.com/watch?v=Un-BdBSOGKY> (This video uses a light box, which is not necessary).

### Things for Students to Remember:

- Designs should be simple, you will be drawing them over and over.
  - Even simple things, like moving dots or lines around in patterns, is an animation.
  - Reference your previous drawings by flipping between the pages to make sure the animation flows correctly.
  - Have fun!
2. Have your students brainstorm their ideas! To structure the brainstorming, you can have students create a storyboard. A storyboard are important scenes of a movie sketched out to help solidify the story. If you don't want to do a storyboard, you can find many flipbook videos on YouTube, covering a variety of topics to help inspire your students! Here is one compilation video, but feel free to find your own: <https://www.youtube.com/watch?v=rapExQ7lcpw>
  3. Once they have their ideas, students can begin animating. Students can make their animation as long or as short as they want, just remember that each picture has to be on a separate paper so it might get difficult to staple together at the end if the student wants to make a long animation. Use rubber bands or binder clips if that becomes an issue.