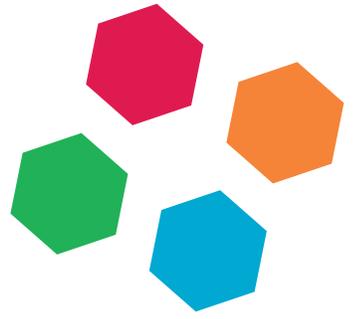


# GAME CHANGERS



## EDUCATOR RESOURCE GUIDE



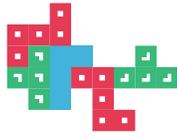
SOMETHING FOR EVERYONE

IL Y EN A POUR TOUS LES GOÛTS

**GAME GENRES**  
Video game genres are broadly defined by the goals, rules and interactive elements that shape the playing experience. Despite this, classifying video game genres and subgenres can be a daunting task. Over the years, the number and variety of titles has exploded, with more games creating over multiple genres.

**LES GENRES DE JEUX**  
Les genres des jeux vidéo sont largement définies par les objectifs, les règles et les éléments interactifs qui forment l'expérience de jeu. Malgré cela, il n'est pas toujours facile de classer les nombreux genres et sous-genres des jeux vidéo. Au fil des ans, le nombre et la variété des jeux ont explosé, et il s'en suit maintenant un éventail de plus en plus diversifié de genres.

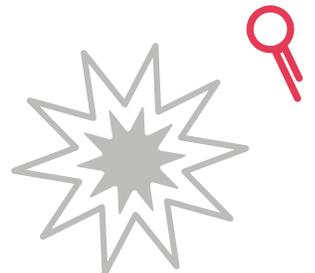
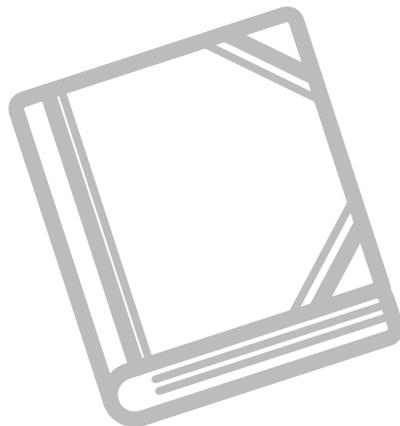




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# FORT COLLINS MUSEUM OF DISCOVERY

## ABOUT US

### WHY VISIT?

Explore the properties of a river, and create your own fanciful forest. Experience the raw power of a tornado, or follow in the footsteps of da Vinci and design your own flying machine. Join the ranks of guitar legends Jimi Hendrix and Bob Dylan, then travel back in time to march across the Great Plains with the West's brave pioneers. At the Fort Collins Museum of Discovery (FCMoD), the possibilities are endless.

FCMoD is an innovative blend of history, science, and culture. Our open floor plan encourages unique flow-through topic adjacencies, so every teacher can plan a route specific to their students' needs. Components of our exhibits meet social studies, science, and music standards, providing students with an educational as well as entertaining experience.

### MISSION & VISION

#### Mission

The museum creates meaningful opportunities to learn, reflect, and have fun through hands-on and collections-based explorations in science and culture.

#### Vision

To inspire inquisitive thinkers and encourage responsible stewardship of the future.

### HISTORY

The Fort Collins Museum of Discovery (FCMoD) of today was built from a partnership between the City of Fort Collins Museum (established 1941) and the nonprofit Discovery Science Center (1989). After merging operations in 2008, and with the generous support of many members of our community, we built a new museum to share unique and fun learning experiences that explore the interplay of science and culture. The partnership between City and nonprofit continues on today, and creates extraordinary opportunities for visitors to engage with that interplay in ways that are deeply relevant to our community, our geography, and our shared history.

Since opening in 2012, we have welcomed over 700,000 visitors from all 50 states. Our exhibits gallery boasts long-term exhibits in science, music, agriculture, astronomy, first peoples, wildlands, and more, including 4 buildings of regional historical importance at our Heritage Courtyard, the on-site Archive & Collections, and Northern Colorado's only 360° immersive theater – the OtterBox Digital Dome Theater. Since 2016, we have welcomed national touring special exhibitions from producers including National Geographic, American Museum of Natural History, the Smithsonian, and more. Each year, we offer 400 unique science- and culture-based programs for kids ages 2-102.

We were proud to achieve accreditation by the American Alliance of Museums in 2018, the highest recognition of excellence in museums in our nation. We received the greatest compliment from our peer reviewers during the accreditation process: "Fort Collins has a 'vibe' about it and the museum is clearly in sync with the intangibles that make up this vibrant community."





# GAME CHANGERS EXHIBITION

## ABOUT THE EXHIBITION

### OVERVIEW

Get your game on! Discover how innovation has shaped the video game industry in Game Changers, a special exhibition opening October 12, 2019 in the Woodward Special Exhibition Gallery at Fort Collins Museum of Discovery. Game Changers takes you on a fascinating journey, exploring the past and uncovering the future of gaming.

In this exhibit, you'll live the video game evolution, from memorable Pong to the photorealistic, immersive games of today. Try your hand at operating a supersized Nintendo controller, play Tetris on a giant Game Boy, test your knowledge of retro video game music, and so much more!

### HIGHLIGHTS

- Explore over 120 of the most influential games that have transformed the gaming scene, and test your skills with 16 games that have significantly changed the gaming experience, including Pac-Man, Super Mario Bros., Tetris, Angry Birds, Space Invaders, Flower, and Adventure.
- Examine how the intersection of audio, storytelling, graphics, and gameplay creates the immersive environment of current video gaming systems.
- Discover original concept art, storyboards, level designs, and scripts of some of the most influential games ever developed, and listen to experts from the industry explain how they develop the games you love.
- Experiment with augmented reality and examine upcoming video game trends while imagining what gaming will look like in the future.

### WHEN & WHERE

This exhibition will be located in the Woodward Special Exhibition Gallery at Fort Collins Museum of Discovery from October 12, 2019 through April 30, 2020.

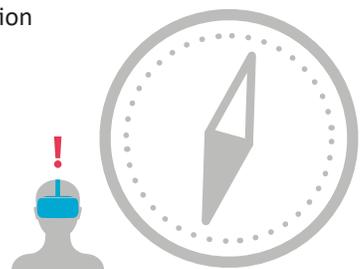
### PRICING

This exhibition costs \$3 per student. Chaperones are free if your group meets a 1:5 student-to-chaperone ratio. If your group does not meet the 1:5 ratio, the exhibition costs \$6 per chaperone.

The cost of visiting the Game Changers exhibition is in addition to general admission cost and any additional visit itinerary items.

Please note that field trip fees are separate from membership fees, so memberships cannot be used to waive field trip fees.

Fort Collins Museum of Discovery strives to make hands-on education accessible for every student in our community. In collaboration with our school districts, FCMoD offers discounted group rates to all schools for field trips. **The museum offers further field trip discounts to schools with 40% or greater Free & Reduced Lunch eligibility** (as cited by the Colorado Department of Education or the Wyoming State Board of Education for the 2018-19 school year). These additional discounts are commensurate with the school's overall Free & Reduced rate and apply across the full field trip experience (including special exhibitions). For more information, visit our website at [fcmo.org/field-trips](http://fcmo.org/field-trips) or call our Reservations Line at 970-416-2769.





## RECOMMENDED FIELD TRIP PACKAGES



### GAME CHANGERS + ELECTRICITY LEARNING LAB + GENERAL ADMISSION

Creating a video game requires work from all kinds of people: artists, writers, sound engineers, musicians, and even electricians! How does science contribute to the magic? Learn about the force that makes your console start up in the first place: electricity! In this hands-on lab, you can build power circuits, ignite light bulbs with your hand, and make your hair stand up with currents of electricity, and even peek inside a taken-apart console to see the circuits for yourself.

While this lab is available to 3rd-5th grade students, it ties best to 3rd and 5th grade Colorado State Physical Science Curriculum.

This field trip package costs \$14 per student.



### GAME CHANGERS + BINARY BUSTERS LEARNING LAB + GENERAL ADMISSION

Have you ever wondered how your favorite video game characters get from paper to screen? It's as easy as 01, 10, 21... well, at least, if you know binary! In this lab, your students will explore the basics of binary code, pixels, and the RGB color model through hands-on investigations and simulations. As their final challenge, students will mimic the process of video game graphic creation by taking on the roles of artists, coders, and computers – transmitting an colorful image from one classmate to another using only 0s and 1s!

While this lab is available to 3rd-5th grade students, it ties best to 4th grade Colorado State Physical Science curriculum.

This field trip package costs \$14 per student.

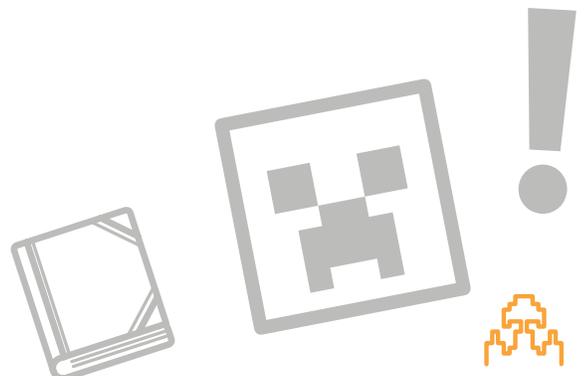
## HOW TO BOOK YOUR VISIT

To make a field trip reservation, you must have a minimum group size of 15 visitors. Field trip reservations and payment must be made at least 2 weeks in advance to receive the group rate. School groups may arrive as early as 9:00am, Tuesday-Friday.

To provide the best experience for your students and for the safety of all visitors, we require a 1:5 ratio of chaperones to students. If you meet or exceed the 1:5 chaperone ratio, chaperones will receive free museum admission. If you do not meet the 1:5 chaperone ratio, ALL chaperones will pay the adult general admission rate. If your group is viewing a Digital Dome show, ALL chaperones are charged Digital Dome fees.

Contact the reservations line at 970-416-2769 or submit a reservation request form.

Please allow 3 business days for a response.





## **GAME CHANGERS EXHIBITION** **CURRICULUM TIES**

This exhibition provides an excellent opportunity to address several 2020 Colorado State Standards for grades 3-5. Here are a few notable curriculum ties:

### 3RD GRADE

#### READING, WRITING, AND COMMUNICATING

Standard 2: Reading for All Purposes

1. Apply strategies to fluently read and comprehend various literary texts.
2. Apply strategies to fluently read and comprehend various informational texts.

#### SOCIAL STUDIES

Standard 1: History

1. Compare primary and secondary sources when explaining the past.

#### VISUAL ARTS

Standard 1: Observe and Learn to Comprehend

1. Investigate works of art and design to recognize how to create meaning with purpose and intent.

#### MUSIC

Standard 4: Aesthetic Valuation of Music

1. Select and use specific criteria in making judgments about the quality of a musical performance.

### 4TH GRADE

#### READING, WRITING, AND COMMUNICATING

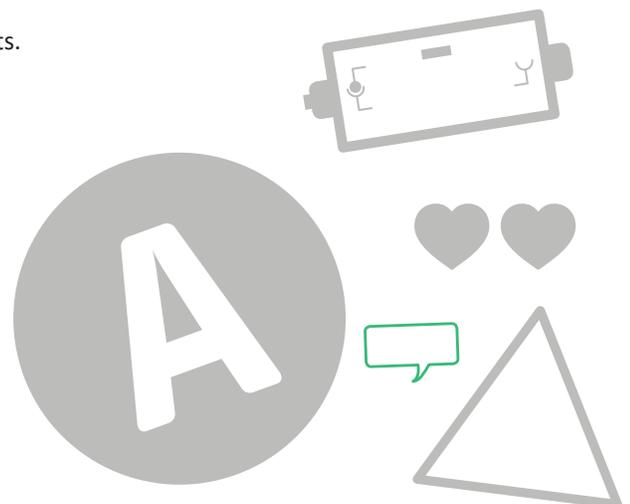
Standard 2: Reading for all Purposes

1. Apply strategies to comprehend and interpret literary texts.
2. Apply strategies to comprehend and interpret informational texts.

#### VISUAL ARTS

Standard 1: Observe and Learn to Comprehend

1. Uncover how artistic intent can be enhanced through the use of the language of visual art and design.
2. Respond to an artist's point of view being mindful of historical, contemporary and cultural context.





## MUSIC

Standard 4: Aesthetic Valuation of Music

1. Discriminate between musical and nonmusical factors in creating criteria for evaluating music.

## SCIENCE

Standard 1: Physical Science

7. Patterns can encode, send, receive and decode information.

## 5TH GRADE

### READING, WRITING, AND COMMUNICATING

Standard 2: Reading for All Purposes

1. Apply strategies to interpret and analyze various types of literary texts.
2. Apply strategies to interpret and analyze various types of informational texts.

### VISUAL ARTS

Standard 1: Observe and Learn to Comprehend

1. Investigate and analyze how specific points of view can be communicated through the language of visual art and design.
2. Demonstrate an understanding of how works of visual art and design are influenced by the culture of daily life.

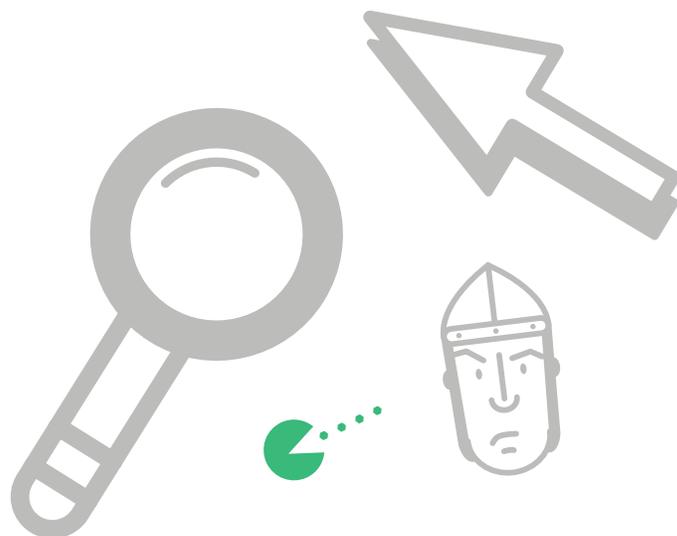
Standard 2: Envision and Critique to Reflect

1. Using a variety of criteria, question and evaluate works of art.

## MUSIC

Standard 4: Aesthetic Valuation of Music

1. Create and use specific criteria in making judgments about the quality of a musical performance.





# WHAT TO EXPECT FROM YOUR FIELD TRIP

## FROM THE MOMENT YOU BOOK THE TRIP...

We're so thrilled for you to join us at Fort Collins Museum of Discovery!

### STEP 1: BOOKING YOUR VISIT

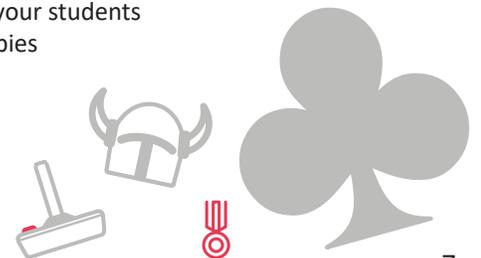
- Fill out our Reservations Form at [fcmuseum.org/field-trips](https://fcmuseum.org/field-trips) or call our reservations line at 970-416-2769 at least two weeks prior to your desired field trip date. Please note that field trips book up fast, and reservations are first come, first served. We recommend booking your field trip at least 3 months in advance, particularly for spring visits.
- What will the weather be like during your visit? If there is a chance of cold, snow, or rain, we highly recommend booking a space in our lunch rooms for lunch. We have two rooms available, and each room seats 36 people for lunch. These spaces are booked first come, first served.

### STEP 2: PREPARING FOR YOUR FIELD TRIP

- Ensure that you have received a Field Trip Confirmation from our Reservation Specialist. Double check your arrival time, departure time, itinerary items, and group numbers. If you need to make any changes, or if you haven't received a confirmation, contact our Reservations Specialist.
- Want to get an even better idea of what to expect from our exhibits? Visit us in advance of your field trip! Show your field trip confirmation and school ID to the Welcome Desk to receive one free teacher guest pass.
- Submit payment at least two weeks prior to your trip. You can pay via phone (970-416-2769) by credit card or send a check to Fort Collins Museum of Discovery, 408 Mason Ct, Fort Collins, CO 80524. If you have significantly fewer students on the day of your trip, we can refund amounts of \$25 or greater.
- Facilitate the Pre-Visit Activity with your students to best prepare them for the Game Changers exhibition.
- If desired, print off In-Exhibition Guiding Questions that tie with your curriculum goals or the In-Exhibition Scavenger Hunt for your students' use (available in the Master Copies section of this document).
- Recruit chaperones! Once your chaperones are confirmed, assign them each to a color group based on your Field Trip Itinerary (applicable only if your group has multiple itinerary items). Assign 5 students to each chaperone in advance of arriving. Communicate with chaperones which color group they will accompany.

### STEP 3: ARRIVAL

- When you arrive at the museum, ask your bus driver to pull up near School Group Entrance on the southwest side of our building, nearest the parking lot entrance.
- A School Group Host will greet your students on the bus. They will go over museum expectations with your students. If your group has multiple buses, please be patient as our School Group Host(s) jump from bus to bus.
- A School Group Host will pass out colored lanyards to all the chaperones and teachers in your group. The color of the lanyard will correspond with the color itinerary listed on your Field Trip Confirmation. For this reason, if at all possible, please communicate with chaperones which color they are assigned to prior to arrival.
  - If you have a large group, School Group Hosts may choose to bring certain color groups in before others to relieve entrance congestion. Listen for instructions from your School Group Host.
- Once students have received their orientation, the School Group Host will lead your students inside. Students will have the opportunity to place coats/jackets/lunches in cubbies and to use the restroom/drinking fountain.





## STEP 4: ITINERARY ITEMS

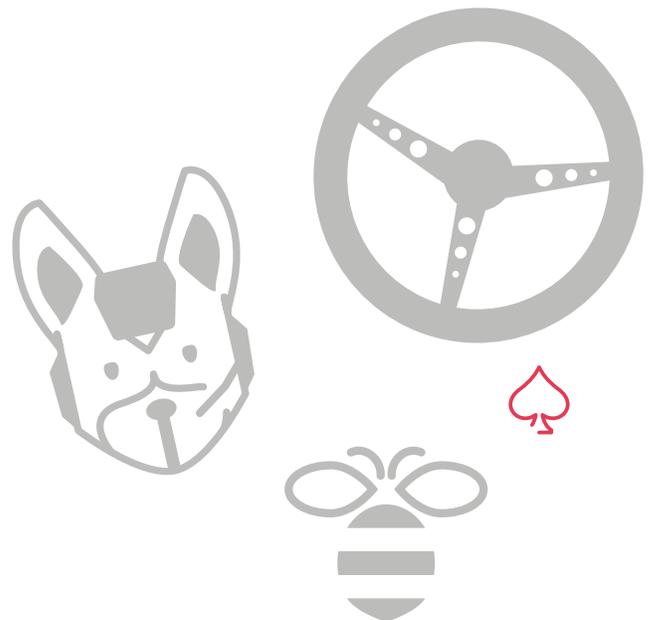
- Depending on the size of your group, one or more School Group Host(s) will and lead you from one Itinerary Item to another (e.g., from the gallery to your dome show to lunch to your Learning Lab). School Group Hosts may or may not be available to stay with your group while they explore the gallery spaces. It is the responsibility of teachers and chaperones to ensure that students are following all museum behavior expectations.
- 10-15 minutes before a new itinerary item begins, please help your School Group Host gather up the students in your group. This helps ensure that your field trip runs on time.

## STEP 5: DEPARTURE

- Direct chaperones to head back to the School Group Entrance with their students.
- Students may use the restroom/drinking fountain before departure.
- Ensure students collect all their items from the cubbies.
- Hang chaperone lanyards on the hooks nearest the School Group Entrance door.

## STEP 6: BACK AT SCHOOL

- Facilitate the Post-Visit Activity with your students.
- Discuss highlights of the trip with students. You might also choose to go over the In-Exhibition Guiding Questions or In-Exhibition Scavenger Hunt.
- Look out for an email with a post-visit survey.
- Book your next visit at Fort Collins Museum of Discovery!





## PRE-VISIT ACTIVITY

### LEARNING ABOUT AND WRITING BRANCHING VS. LINEAR NARRATIVES

**OBJECTIVE:** This activity is meant to help students understand how narrative structure differs between video games and other forms of storytelling (books, plays, movies, etc.). Students will apply this knowledge by converting a linear narrative into a branching narrative.

**ESTIMATED TIME FOR ACTIVITY:** 1-3 hours (can be adjusted to class needs)

#### COLORADO STATE STANDARDS ADDRESSED:

##### 3RD GRADE

Reading, Writing, and Communicating

Standard 3: Writing and Composition

3. Write real or imagined narratives that use descriptive details, have a clear sequence of events, and provide closure.

##### 4TH GRADE

Reading, Writing, and Communicating

Standard 3: Writing and Composition

3. Write engaging, real or imagined narratives using descriptive details and dialogue to convey a sequence of related events.

##### 5TH GRADE

Reading, Writing, and Communicating

Standard 3: Writing and Composition

3. Write engaging, real or imagined narratives using literary techniques, character development, sensory and descriptive details, and a variety of transition words to signal a clear sequence of events.

#### MATERIALS NEEDED:

- Setting and Character Development worksheet (1 per student or group; master copy provided)
- Linear Story Sequencer (choose between simple and advanced; 1 per student or group; master copy provided)
- Branching Story Sequencer (1 per student or group; master copy provided)
- Crayons, markers, or colored pencils
- Pencils

#### FACILITATING THE ACTIVITY:

Comparing and Contrasting Linear and Branching Narratives (optional)

- As a large group or in smaller groups, have students read a short story and a short choose-your-own-adventure story. Encourage students to compare and contrast the types of narrative by discussing or using a Venn Diagram.
  - o Recommended Build-Your-Own Adventure Books (you can check out these books from FCMoD):
    - “Sneezy Steve and the Best Quest Ever” by John Diary
    - “Pick Your Own Quest: Dragon vs. Unicorn” by Connor Hoover
  - o Similarities might include the following: both stories have a narrator, both stories have characters, both stories have a beginning, both stories use dialogue and description
  - o Differences might include the following: the sequence of events can change in the build-your-own-adventure book; the build-your-own-adventure book has many different endings
- Encourage students to think about the imagery of a tree branch. Why do they think branching narratives are named like they are?



## WRITING A LINEAR NARRATIVE:

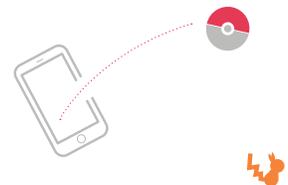
- Before students begin writing, have them draw and describe their characters and their setting on the Character and Setting worksheet provided.
- Before students begin writing, have them plan their plot. Encourage students to fill out the Linear Story Sequencer (master copy provided; choose between “simple” and “advanced.”)
- Individually or in small groups, students should write their own linear narrative story. There are many ways to structure this time to best suit class needs.
  - o If plenty of time is allotted, students can come up with their own original story with characters, setting, and plot created from scratch. To set the scope of the project, encourage students to think of this as a “short story” with a beginning, middle, and end that occurs in the span of just a few pages.
  - o If less time is allotted, students can write a story about a simple personal experience, like making a sandwich or riding the school bus. You can encourage students to think of themselves as the characters, to describe the setting vividly, and to adjust the plot according to imagination. To set the scope of the project, encourage students to think of this as a “short story” with a beginning, middle, and end that occurs in the span of just a few pages.
  - o You may also choose to have students use a story they have already written in class. In that case, skip to the “Transforming Linear to Branching” section.
- Let students write their story. Encourage them to use descriptive phrases and transition words to help the reader imagine and understand their story.

## TRANSFORMING LINEAR TO BRANCHING:

- Once students are done writing their linear narrative, they should convert it to a branching narrative.
  - o To help students understand the commonalities between linear and branching narratives, students should keep the following elements of their first story:
    - Characters (including narrator)
    - Setting
  - o Students should find each point in their story where a character made a decision. As they go, students should fill out the “Branching Narrative Plot” diagram.
    - Students can write their original linear plotline as one “branch” of the narrative.
    - For the other “branches,” students should consider the outcomes that might have occurred if the character had made a different decision.
    - To set the scope of the project, encourage students to branch off into one beginning, two middles, and four endings.
  - o Let students know that they will develop their branching narrative into a final project after they have visited the museum (Post-Visit Activity).

## CONCLUSION:

- In large or small groups, discuss the following questions:
  - o What were some ways that writing a linear narrative was easier? What were some ways that writing a branching narrative was easier?
  - o What were some ways that writing a linear narrative was more difficult? What were some ways that writing a branching narrative was more difficult?
  - o Which type of writing did you prefer?
  - o What forms of media do you see a linear narrative commonly used in? What about a branching narrative? When is it appropriate to use each?





# IN-EXHIBITION GUIDING QUESTIONS

## REFLECTING ON *GAME CHANGERS*

**OBJECTIVE:** These questions are meant to encourage deeper engagement with the content of the Game Changers exhibition at Fort Collins Museum of Discovery.

**MATERIALS NEEDED:** No materials are needed to facilitate these questions. However, here are some ways you might choose to use these questions:

- Pick and choose the questions that best apply to your classroom and curriculum goals. Make a guide with these questions for students to fill out as they interact with the exhibit.
- Print off a handful of questions for your chaperones to ask as they engage with students in the exhibit.
- Encourage students to think about a handful of these questions as they go through the exhibit. Then, facilitate a discussion back in your classroom as a large group, or in smaller groups.

## GUIDING QUESTIONS

### THE ART OF STORYTELLING IN VIDEO GAMES:

Interact with the GREEN & GRAY panels to answer these questions.

1. Some of the earliest games did not have a storyline. Describe one technological advance that made it easier for the video game industry to start adding storylines. How did it help?
2. Find the exhibit heading “Play Your Part.” Choose one character on the panel, and study how the character’s appearance changed over time. How does this changed appearance make you think about the character differently? What about the character’s appearance stays the same over time?
3. Listen to the interview by Mac Walters of Bioware. How does he describe Bioware’s approach to writing a narrative? How is this approach similar to and different from writing a narrative for a book?
4. What is a cutscene? How can a cutscene help a video game writer advance the story?

### THE EVOLUTION OF VIDEO GAME GRAPHICS:

Interact with the ORANGE & GRAY panels to answer these questions.

1. Sketch your own video game character (you can make up your own or draw a character you’re already familiar with). Then find the exhibit with the heading “Square Art.” See if you can make that character using the squares. Can you imagine illustrating an entire game using only pixels?
2. Describe one strategy video game artists use to make graphics look more realistic. How does this strategy work?
3. Find the panels that explain the differences between “first person perspective,” “side scrolling and top down perspective,” and “third person perspective.” Find one game that matches each perspective.
4. Watch the interview by Maru Ferreira. What does she mean by “visual identity?” Why does “visual identity” matter in a video game? In what other types of media might “visual identity” be important?

### THE ROLE OF GAMEPLAY:

Interact with the RED & GRAY panels to answer these questions

1. Name three different game genres you see mentioned in this section.
2. Play both Angry Birds and Kinect Sports. Compare and contrast your physical experience playing each. How do these different physical experiences change how, when, and where you might play each of these games outside the exhibition?
3. Play Adventure. Why do you think it is considered part of the “adventure game” genre (other than its name)?
4. What is a “mod”? Think of your own mod for one of the games in the exhibition. How would the game change if your mod worked?
5. Watch the interview by Antoine Routon. How does he think about his audience when designing a game?



## THE IMPACT OF AUDIO:

Interact with the BLUE & GRAY panels to answer these questions.

1. Find the exhibition heading that says “Pew Pew! Waka Waka! Beep Beep!” Press each button to hear the sound effects in each game. Do you think these sound effects should be considered music? Why or why not?
2. How did increased storage capacity change how game designers approached video game audio?
3. Find the exhibition heading titled “Sound Links.” Try to match the sounds to each game. Did you recognize any right away? If so, which one(s)?
4. Find the exhibition heading, “Playing by Ear.” Listen to at least one of the games. What was one phrase you heard that helped you visualize the story’s setting?
5. Listen to the interview by Gordon Durity. How does he decide when and how to use audio effects in his game?
6. Find the exhibit heading “Epic Music.” Listen to each soundtrack. How does music makes you feel? Which instruments do you hear being played?
7. Find the exhibit heading “Talk the Talk.” Think of a phrase for a friend to say. Have them say the phrase three different ways, varying the way it sounds each time (pausing at different times, changing tone of voice, etc). Did this change the meaning of the phrase?
8. Find the exhibit heading “Pop Goes the Virtual World.” Play the three different soundtracks. Compare and contrast these sounds from those in “Sound Bytes” and in “Epic Music.”

## THE FUTURE:

1. Read through the large video game timeline. What are three major ways that video game technology changed from 1947 to today?
2. Listen to the interview by Denis Talbot. How does he believe gaming will change in the next 5-10 years? Do you agree? Why or why not?

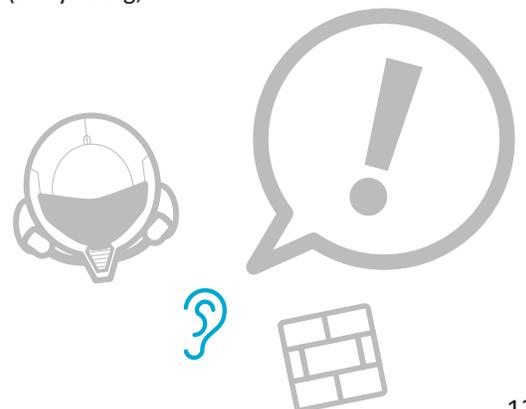
## APPLYING YOUR SKILLS!: PUTTING IT ALL TOGETHER:

Use any part of the exhibition to answer these questions.

Describe the following literary elements for one video game that you played.

- o Characters: Identify the characters in the game.
- o Setting: Where does the story take place? How do the visuals and audio add to your understanding of the setting?
- o Mood: How would you describe the mood of the story? How do the visuals and audio influence your understanding?
- o Plot: What is the story’s plot (or at least, the plot you experienced?).
- o Narrator: Who is the narrator? How do you know? Is the narrator biased in any way?
- o Structure: Often, storytellers break down stories into parts that build on one another (for example, many books have chapters). Does the storyteller break the game’s story into parts? If so, how?

Which part of the video game creation process were you most interested in and why (storytelling, graphics, gameplay, or graphics)?





## **IN-EXHIBITION SCAVENGER HUNT** **FULLY EXPERIENCING *GAME CHANGERS***

**OBJECTIVE:** This Scavenger Hunt is meant to encourage students to engage with all parts of the Game Changers exhibition.

### **MATERIALS:**

- Game Changers Scavenger Hunt (1 per student or group; master copy provided)
- Pencils (1 per student or group; available at museum with advanced notice)
- Clipboards (1 per student or group; available at museum with advanced notice)

### **FACILITATION:**

- Pass out the Scavenger Hunt handout to students prior to them entering the Game Changers exhibition.
  - o If students are completing the Scavenger Hunt in groups, ensure that the students working together have the same field trip visit itinerary and/or chaperone.



## **POST-VISIT ACTIVITY OVERVIEW** **PRODUCING A BRANCHING NARRATIVE USING MULTIMEDIA**

**OBJECTIVE:** Building on the pre-visit activity, this post-visit activity encourages students to create and produce a branching narrative through different media. Using different media helps incorporate elements of video game design such as graphics and gameplay.

### **STANDARDS ADDRESSED:**

The standards addressed will depend on which pathway you or your students take to produce the project. Specific standards are listed under each pathway. Each pathway also meets some, if not all, of the Reading, Writing, and Communicating Standards listed in the pre-visit activity.

### **MATERIALS NEEDED:**

- Branching Story Sequencer (1 per student or group; master copy provided)

### **FACILITATING THE ACTIVITY:**

- Have students brainstorm a branching narrative if you haven't already during the Pre-Visit Activity. After determining characters and setting, they should fill out a Branching Story Sequencer worksheet (provided). See Pre-Visit Activity for more information on this step.
- Once students have their branching narrative planned, they should decide which form they want their "final product" to be in (dramatic arts or visual arts). This will determine which pathway they follow. Here are some options for how you might structure these pathways:
  - o You may allow each student/group to choose their own pathway, based on their interests and the attributes of their story (recommended).
  - o You may assign each student/group to a particular pathway.
  - o If you are emphasizing a particular skill or curriculum connection in your class, or working together with a music/theater arts teacher at your school, you may choose to have all students follow the same pathway.



## POST-VISIT ACTIVITY: DRAMA AND THEATER ARTS PATHWAY

### WRITING AND PERFORMING BRANCHING NARRATIVES

**OBJECTIVE:** Building on the pre-visit activity, this post-visit activity encourages students to create and produce a branching narrative through drama and theater arts.

**ESTIMATED TIME:** 2-5 hours; recommended to take place over several days

**STANDARDS ADDRESSED:** Drama and Theater Arts Standard 1: Create

### 3RD-5TH GRADE

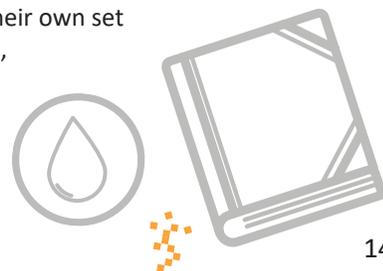
1. Generate and conceptualize artistic ideas and work.
2. Organize and develop artistic ideas and work.
3. Refine and complete artistic work.

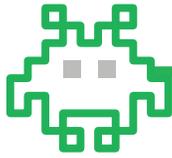
### MATERIALS NEEDED:

- Art items and/or recycled materials for students to make props and costumes (you may also choose to have them do this at home)
- Paper and pencils for writing scripts

### FACILITATION:

- As a large group, remind students of their experience in the Game Changers exhibition as it relates to writing and dramatic arts.
  - o What type of narrative is most commonly used in video games and why?
  - o Are dramatic artists used in video games? In what ways? (Some answers might include voice acting and capturing facial expressions.)
- In small groups, have students write a script based on their Branching Story Sequencer. Encourage them to include dialogue, parentheticals, and transitions in their script.
  - o You can set the scope of this project based on your classroom and curriculum needs. You might encourage students to aim for a 5, 10, or 15 minute script depending on the time allotted for the project. We recommend that more intensive projects occur over several days or class periods.
  - o Students should have some way for the audience to provide feedback on the decisions of the characters (just like video game designers must think about the flow and style of gameplay). For example, students in the audience might vote on decisions by raising hands or by clapping (e.g., “audience members who would like to see Cinderella dance with the prince, clap! Now audience members who would like to see Cinderella go eat more appetizers, clap!”). Encourage the students developing the script to include these cues for audience participation.
- Encourage a recursive process as the students write the script. Provide feedback and encourage revision over the course of the project.
- Once the students have a final draft of their script, encourage them to “produce” their skit.
  - o For a simpler production in a shorter time frame, students might create props using materials around the room and simple art materials (20-30 minutes), rehearse briefly with their classmates (20-30 minutes), and perform (5-10 minutes per group).
  - o For a more elaborate production in a longer timeframe, students can create their own set (for example, a backdrop), create more intensive props and costume elements, and spend more time rehearsing.





## CONCLUSION:

1. Gather students back in a large group. Discuss one or more of the following questions:
  - o How was this experience similar to and different from a video game?
  - o Did collaborating in a group change the direction of your project at any point? If so, how? Why is it useful for artists to collaborate?
  - o How did you decide how to portray your characters using costumes and props? Did this interpretation match how you saw your character in your “mind’s eye?”



## POST-VISIT ACTIVITY: VISUAL ARTS PATHWAY DRAWING BRANCHING NARRATIVES

**OBJECTIVE:** Building on the pre-visit activity, this post-visit activity encourages students to create and produce a branching narrative through art and animation.

**ESTIMATED TIME:** 2-5 hours; recommended to take place over several days

### STANDARDS ADDRESSED:

Visual Arts Standard 3: Invent and Discover to Create

### 3RD GRADE:

1. Plan and create works of visual art and design recognizing various purposes and intentions.

### 4TH GRADE:

1. Investigate ideas of personal interest to plan and create works of visual art and design.
2. Utilize media in traditional and inventive ways to communicate personal intent.

### 5TH GRADE:

1. Plan works of visual art and design where intended meaning is communicated to viewers.
2. Apply an understanding of art processes and studio skills to create works of art and design.

### MATERIALS NEEDED:

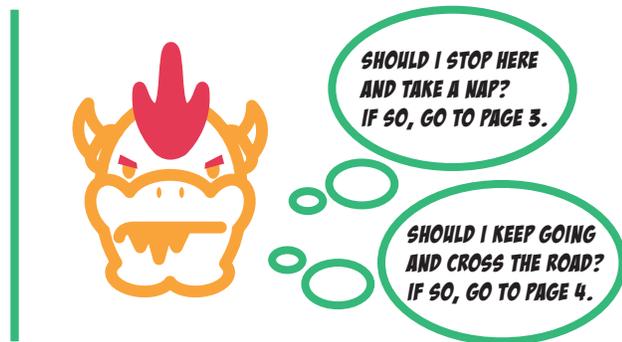
- Drawing supplies (crayons, colored pencils, and/or markers)
- Storyboard draft template (1 per student or group; master copy provided)
- Comic Book template (1 per student or group; master copy provided)

### FACILITATION:

- As a large group, remind students of their experience in the Game Changers exhibition as it relates to writing and visual arts.
  - o What type of narrative is most commonly used in video games, and why?
  - o How did video game artists communicate the ideas of the game through their art?
  - o How would you describe some of the different art styles you saw in the exhibition?
  - o How do comic books influence video games and vice versa?



- Individually or in small groups, have students draft a storyboard based on their Branching Story Sequencer.
  - o If this is your students' first time using a storyboard, you might wish to explore the concept a bit more as a class before having students create their own. For example, you might take a well-known story such as "The Three Little Pigs" and have students break the story into 6 parts, then storyboard each part. Just like writers use outlines to organize their ideas, illustrators and comic book artists use storyboards!
  - o Once students are familiar with storyboarding, have them create a storyboard for their branching narrative. Remind students that just like a tree, the "root" of their story is the same, but then the outcomes will "branch off" depending on the choices of the characters.
  - o Encourage a recursive process as the students draft the storyboard. Provide feedback and encourage revision over the course of the project.
- Once students have completed their storyboard, they are almost ready to draw their comic book! Before starting, though, have students consider the following:
  - How do you want your characters and setting to look? (Realistic, cartoon-like, anime-like, etc.).
  - How will your style help reflect your story's mood, meaning, or audience?
  - How can you use your art to tell the story with no or very few words?
- Students should start on their Comic Book. Encourage them to expand their storyboard drawings to fit the page (our template includes two frames per page) while adding more detail. To fit the branching narrative, students should come up with a way to guide readers to certain places in their comic book depending on what choice the character makes (see example below).



- Once students are done, you may wish to facilitate a sharing time in which students share their creations with one another.

## CONCLUSION:

- Gather students back in a large group. Discuss one or more of the following questions:
  - o How was this experience similar to and different from a video game?
  - o If students collaborated: Did collaborating in a group change the direction of your project at any point? If so, how? Why is it useful for artists to collaborate?
  - o How would you describe your "artistic style" in your comic book?

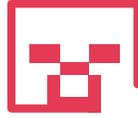


# GAME CHANGERS



PRE AND POST-VISIT ACTIVITY MASTER COPIES  
AND IN-EXHIBITION SCAVANGER HUNT





# SETTING AND CHARACTER DEVELOPMENT WORKSHEET

Name: \_\_\_\_\_

*Draw your setting.*

*Describe your setting.*

*Draw one of your characters.*

Character's Name: \_\_\_\_\_

*Describe one of your characters.*



*Draw one of your characters.*

*Describe one of your characters.*

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*Draw one of your characters.*

Character's Name: \_\_\_\_\_

*Describe one of your characters.*

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# LINEAR STORY SEQUENCER

(Advanced)

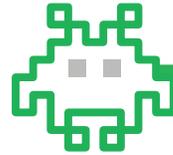
Rising Action: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Climax: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Falling Action: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Exposition: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# BRANCHING STORY SEQUENCER

End (Option #1):

End (Option #2):

End (Option #3):

End (Option #4):

Beginning:

Middle (Option #1):

Middle (Option #2):



# GAME CHANGERS SCAVENGER HUNT

Name: \_\_\_\_\_

Two things I found interesting about...

 **STORYTELLING**  
(Green and Grey panels)

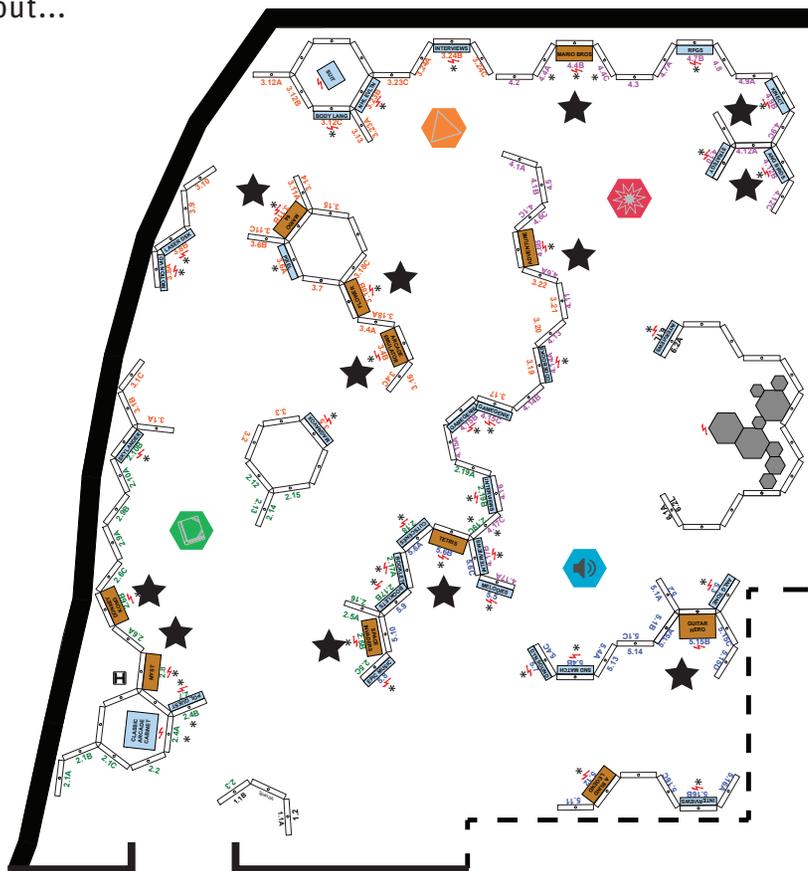
1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

 **GRAPHICS**  
(Orange and Grey panels)

1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



 **GAMEPLAY**  
(Red and Grey panels)

1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

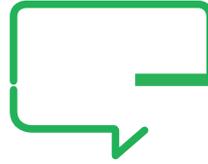
2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

 **AUDIO**  
(Blue and Grey panels)

1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Can you play all 12 games?  
Look for the stars ★ and check them off as you go!



# STORYBOARD TEMPLATE

1

A large empty rectangular box with a black border, containing the number 1 in a green hexagon in the top-left corner.

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2

A large empty rectangular box with a black border, containing the number 2 in a green hexagon in the top-left corner.

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3

A large empty rectangular box with a black border, containing the number 3 in a green hexagon in the top-left corner.

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4

A large empty rectangular box with a black border, containing the number 4 in a green hexagon in the top-left corner.

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5

A large empty rectangular box with a black border, containing the number 5 in a green hexagon in the top-left corner.

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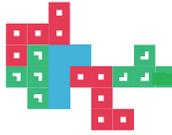
6

A large empty rectangular box with a black border, containing the number 6 in a green hexagon in the top-left corner.

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## STORYBOARD TEMPLATE (p.2)

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10

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11

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12

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# MY COMIC BOOK

Title: \_\_\_\_\_

Artist Name: \_\_\_\_\_

