



Storytelling

Integrating
Computational Thinking and ELA

Guiding Question (or problem)

*The fundamental question that
directs the search for understanding*



What are the makings of a great story?

Prewriting Activity

Storytelling is a powerful way to teach, inspire, entertain, and influence others.

Before you write your own story, it might be helpful to analyze your favorite story (book or movie) and reflect on why you enjoy it so much.

You can then use your newfound knowledge to write your own amazing tale.



Use your **Computational Thinking** skills to answer this question!

Decomposition

*Breaking a problem down into
small pieces*



Is the problem made up of smaller
problems?

Can part of the problem be solved?

What are the makings of a great story?



What are the essential elements of any story?

Many authors and educators think there are 5 components to any story. Can you name them all?



Break down a story of your choice into the different
components you named above.

Can't decide? Why not use [Little Red Riding Hood](#) or [Goldilocks and the Three Bears](#)

Abstraction

Looking at patterns to find what can be ignored and what is important; figuring out how to represent a problem in general terms; making generalizations



What information in the question or problem is important?

Is there information or concept in the question or problem that can be generalized or represented by an idea or model?

Is there information in the problem that isn't needed?

- Consider: text, numbers/values, images/diagrams

What are the makings of a great story?



Is there a moral to the story?
If so, what is it?



Is the story you chose of a particular genre?
If so, what is it?



Pattern Recognition

Looking for common themes and repeating sequences



Is there a pattern within the information?

Can the information be organized in a different way (to look for patterns)?



Is the genre of the story directed at or marketed to a particular group of people?

If so, why do you think that is?



Is the story a retelling? Are there other stories similar to the one you selected?

For example, all these movies have a common theme:

- Romeo and Juliet
- West Side Story
- Romeo Must Die
- Warm Bodies



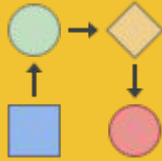
Do other cultures have their own version of the story?

Computer Science Connection:

Streaming companies like Netflix and Amazon Prime often suggest movies for their members to watch. How do you think they decide the movies to suggest? Are their suggestions accurate?

Algorithms

Creating a process or list of steps

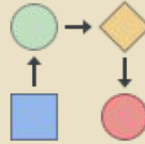


What steps need to be taken to solve the problem?

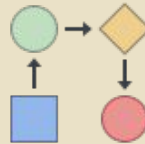
Can the problem be solved in multiple ways?

Does the problem's solution depend on specific inputs or conditionals (IF *this* THEN *that*)

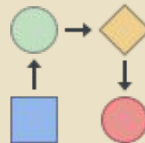
What are the makings of a great story?



Is there a formula or a process for writing a story?
Could there be more than one formula?



Do you think you could devise your own algorithm for creating and writing a story?



Develop your own story by brainstorming your own ideas for the basic components of storytelling. Emphasize the elements you found were most compelling in your favorite story.



Teacher Edition

Storytelling

Integrating
Computational Thinking and ELA





Professional Learning Goal

Recognize opportunities to integrate Computational Thinking into content areas other than Computer Science

Standards

This activity meets numerous ELA standards spanning multiple grade levels. A few are listed in the following slides. Modify this activity as needed to target a level or rigor.

This activity also meets several Computer Science and/or Computational Thinking Standards. (CSTA, CSK-12 Framework, NGSS)

Answer Key



What are the essential elements of any story?

Possible Answers: Plot, Setting, Characters, Conflict, Resolution



Is the genre of the story directed at or marketed to a particular group of people? If so, why do you think that is?

*Possible Answers:
Children, Easy to convey a moral*



Break down a story of your choice into the different components you named above.

Answers will vary



Is the story a retelling? Are there other stories similar to the one you selected?

Do other cultures have their own version of the story?

*Possible Answers:
All throughout Europe, Norse Tales*



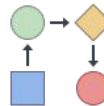
Is there a moral to the story? If so, what is it?

*Possible Answers:
Little Red Riding Hood - Don't trust strangers
Goldilocks - Respect (property),*



Is the story you chose of a particular genre? If so, what is it?

*Possible Answers:
Fairytale - Folklore*



Write your own story

Stories will Vary

English Language Arts Standards

Grade 1

Key Ideas and Details:

CCSS.ELA-LITERACY.RL.1.1

Ask and answer questions about key details in a text.

CCSS.ELA-LITERACY.RL.1.2

Retell stories, including key details, and demonstrate understanding of their central message or lesson.

CCSS.ELA-LITERACY.RL.1.3

Describe characters, settings, and major events in a story, using key details.

English Language Arts Standards

Grade 2

Key Ideas and Details:

CCSS.ELA-LITERACY.RL.2.1

Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.

CCSS.ELA-LITERACY.RL.2.2

Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.

CCSS.ELA-LITERACY.RL.2.3

Describe how characters in a story respond to major events and challenges.

Computer Science project ideas based off of storytelling

- Create a webpage using HTML to tell a story or an autobiography
 - Make is a choose your own adventure story (conditionals)
- Create a text based role playing game
- Create an algorithm/program/application that will suggest books, movies, songs, etc to others



Icons by: <https://pixabay.com/>