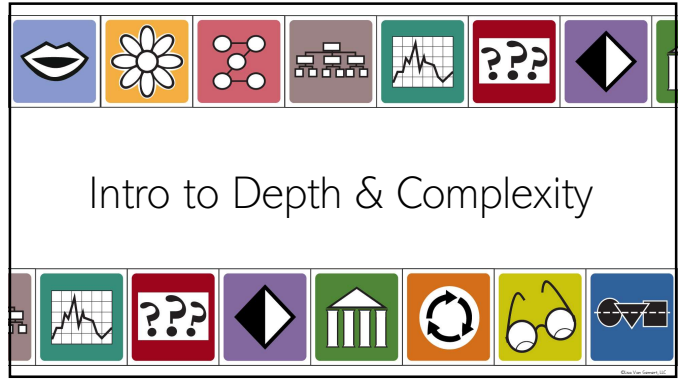
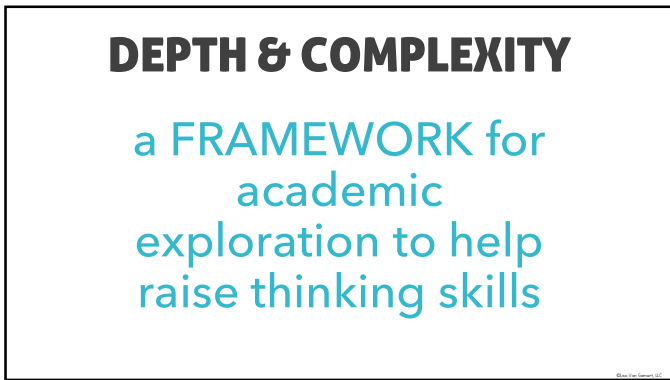


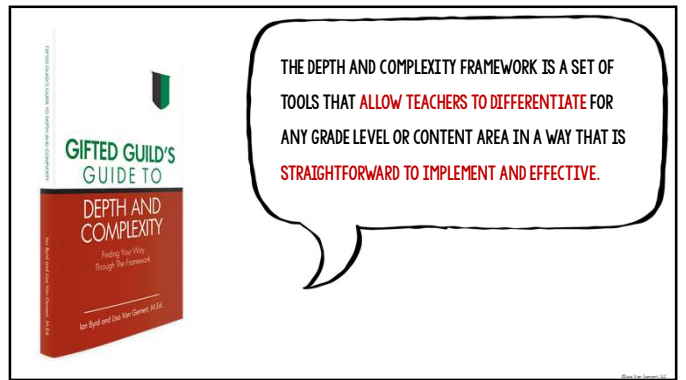
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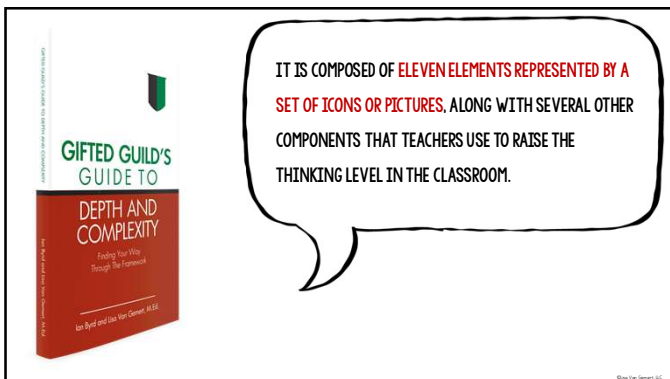
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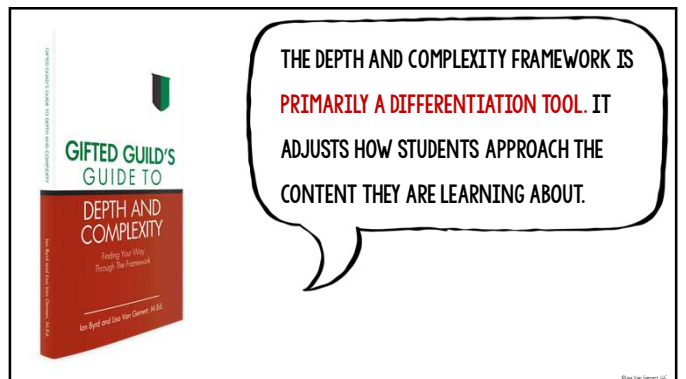
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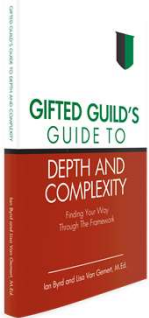
4



5



6



THE DEPTH AND COMPLEXITY PROMPTS ARE ACTUALLY PART OF A LONGER EQUATION:

DIFFERENTIATION = THINKING SKILL + CONTENT + RESOURCES + PRODUCT

7

Why it's so great

- differentiation made easy
- standards alignment
- all ages & content areas
- robust thinking toolbox

8

Components of Depth & Complexity Framework

- Thinking Skills
- Icons of DC
- Universal Concepts
- Content Imperatives
- Disciplinarianism

9

DEPTH & COMPLEXITY

the icons are a path to understanding the thinking lens we're using for that experience | it's the signal | ELL

10

We are looking through a lens that pivots.

11

DEPTH & COMPLEXITY

The eleven elements are not in any particular order.

12

Why We Use Emojis

13

second part:

The Pick Four

14

or

15

values What is Right?

fairness philosophies }
 controversies }
 STANDARDS Pros & Cons
 JUSTICE morals

16

Should great art belong to private owners or public institutions? Is it fair for such beauty to be owned by one person? [Cite a character for each position and, using examples from the text, defend their point of view.]

17

Evaluate the fairness of charging \$5.50 for a pound of butter if 25% of a pound costs \$1.28.

18

Find the length of each line segment. For each graph give an ordered pair to extend each of the line segments.

Find the length of each line segment **without graphing**.

(2, 5) (2, 11) _____
 (-6, 2) (-6, 9) _____
 (7, -5) (1, -5) _____

AB _____ Ordered pair _____ RS _____ Ordered pair _____
 UT _____ Ordered pair _____ MN _____ Ordered pair _____ FG _____ Ordered pair _____

Joe took a taxi across town for a meeting. The coordinates are shown below. (Each unit on the grid = 1 city block.)
 The taxi company Joe used charges \$2 per city block of travel. The driver charged Joe \$15 for the fare.
 Was this a fair price for the fare? How do you know? Prove your answer with evidence.

19

Find the length of each line segment. For each graph give an ordered pair to extend each of the line segments.

Find the length of each line segment **without graphing**.

(2, 5) (2, 11) _____
 (-6, 2) (-6, 9) _____
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20

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21

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 Was this a fair price for the fare? How do you know? Prove your answer with evidence.

22

3-LS2 Ecosystems: Interactions, Energy, and Dynamics
Interactions, Energy, and Dynamics
 Grade understanding can:
Make an argument that some animals form groups that help members survive.
 Science expectations above were developed using the following information from the NRC document *A Framework for K-12 Science Education*.

Engineering Practices	Disciplinary Core Ideas	Cross-Cutting Concepts
Modeling Evidence in 3-5 builds on K-2 by critiquing the scientific models proposed by peers by citing natural and designed worlds(s), with evidence, data, and/or a	LS2.D: Social Interactions and Group Behavior • Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size. (Note: Moved from K-2). (3-LS2-1)	Cause and Effect Cause and effect identified an

Third grade: N/A
 Grade-levels: 1.LS1.B (3-LS2-1); MS.LS2.A (3-LS2-1); MS.LS2.D (3-LS2-1)
 Connections:

23

99 strange collective animal names
Whether it's a shrewdness of apes or a zeal of zebras, lots of animals have bizarre names when they cluster into crowds.
1st, we'll have a little fun with crazy names for groups of animals.

24




Living in Groups
SOCIAL BEHAVIOR

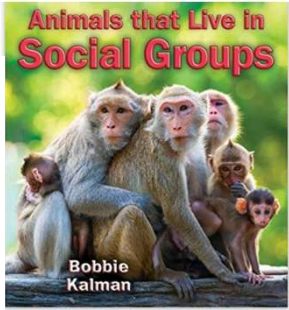
17
0:24 / 14:17

I'll flip the classroom & have them watch this video at home.


25



Next, they'll come back to class & we'll read this book, looking for connections between it and the video.



26



Why Live in Groups

There are several major disadvantages to living in groups:

1. Greater competition for food, mates, sleeping site
2. Increase parasite and disease load.


There is an incidental reason why some animals live in groups. E.g., birds don't nest on cliffs because they are attracted by a scarce resource: cliff swallows attract together.

How do individuals benefit by living in groups?

1. **Cooperative food collection.** Wolves hunt together. By doing so each can more easily track and take down large game. Although the individual has to share meat, each still benefits from group hunting. Group hunting is less important in primates. Chimps hunt some but meat is not a major part of their diets. Group hunting is important in many human societies, however.
2. **Sleeping together to conserve warmth.** This explains why individuals form groups at night but it does not explain why groups are maintained during the day.
3. **Shared information.** By forming groups, individuals can exchange critical information (reciprocity). For example, frugivores let each other know where fruit trees are located.
4. **Protection from predators.** There are three reasons why an individual may live in group to avoid predation.

My advanced learners will read a scholarly article instead.

27

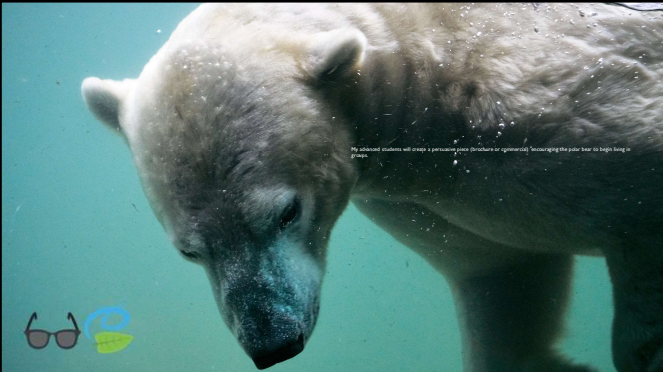


Now, the six best students will create a tree map classifying animals by the reason they group.


```

graph TD
    Root[ ] --- Safety[safety]
    Root --- Food[food]
    Root --- Social[social]
    Safety --- S1[ ]
    Safety --- S2[ ]
    Safety --- S3[ ]
    Food --- F1[ ]
    Food --- F2[ ]
    Food --- F3[ ]
    Social --- Soc1[ ]
    Social --- Soc2[ ]
    Social --- Soc3[ ]
    
```

28



My advanced students will create a persuasive piece (brochure or op-ed) about the polar bear to help bring in groups.



29



Students will debate:

Resolved: It is fair for packs of animals to hunt in order to kill a solitary animal.




30




Write a newspaper editorial taking a stand on this issue: To what extent is it fair for humans to modify their environment if it impacts plants and animals?

31




What are the problems you run into when doing long division?

32



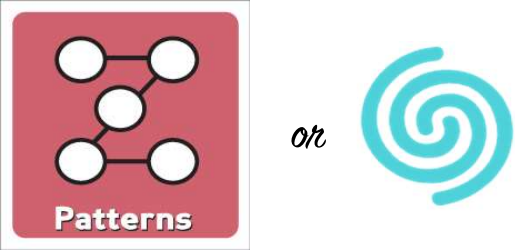
Rank those problems in order from most important/common to least.

33



The most important/common issue in long division is _____ because it impacts _____ in this way _____.


34



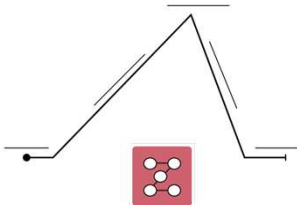
or

35

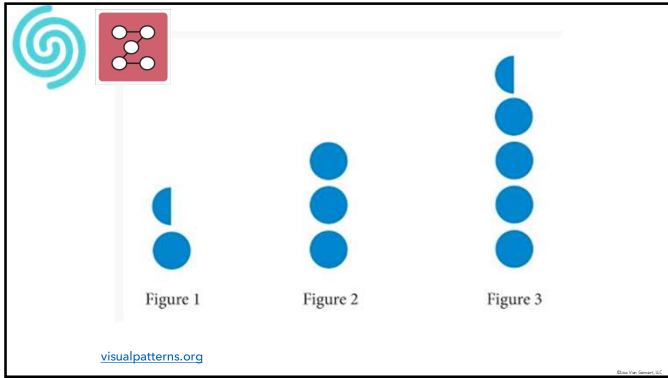
Plot is Pattern



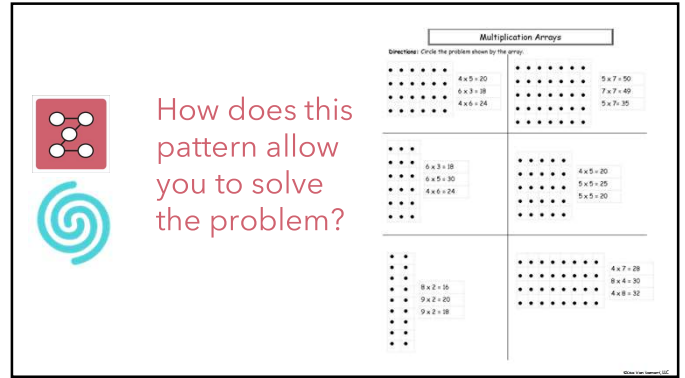
Outline the plot of your story.



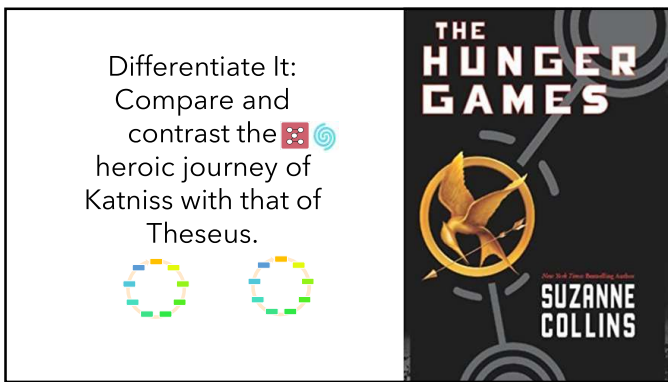
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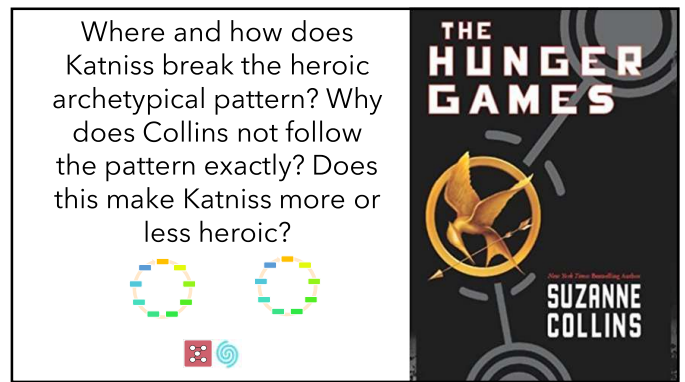
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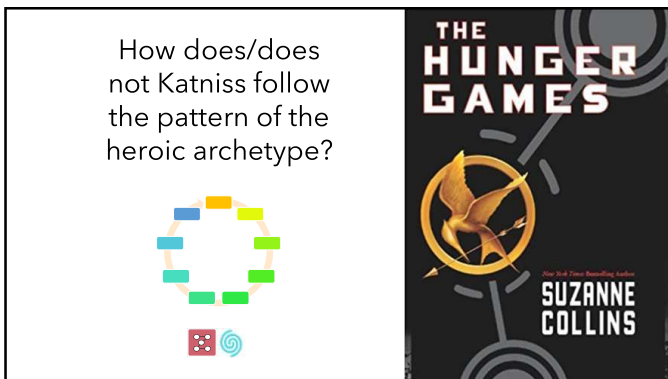
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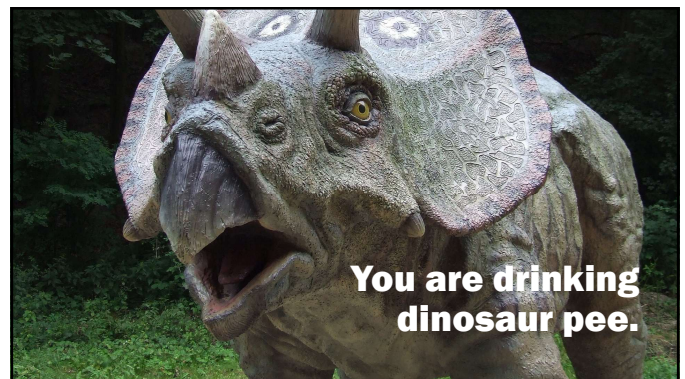
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40



41



42



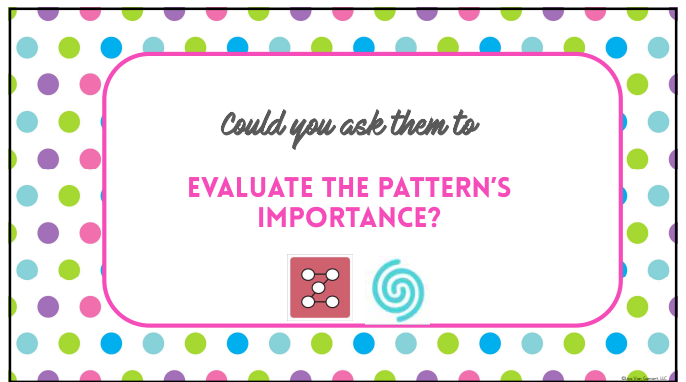
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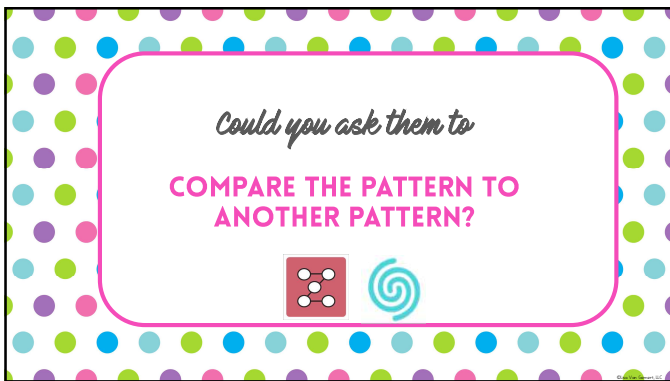
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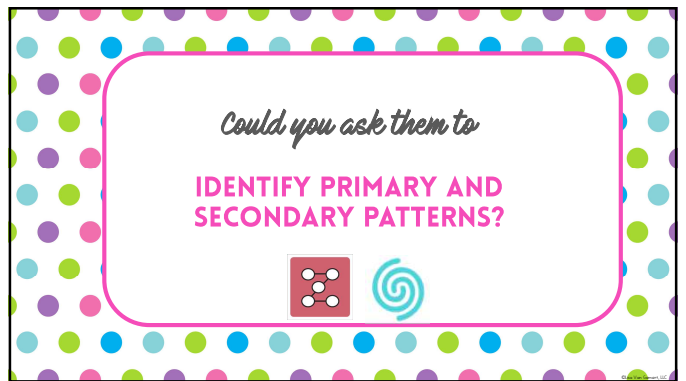
45



46



47



48

Could you ask them to


RECOGNIZE WHEN/WHERE A PATTERN BREAKS?



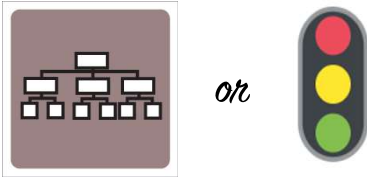
49

Could you ask them to

SEE THE PATTERN OUT OF SEQUENCE AND FIX IT?



50




51

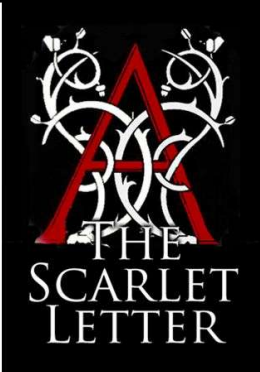


52


Differentiate it:



Compare the rules society imposes on women in *The Scarlet Letter* to contemporary mores. Argue either that a) the rules have changed or b) the punishments are more subtle.



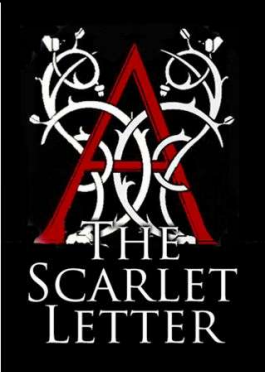
53



In *The Scarlet Letter*, are the rules society imposes on women fair?

How does it punish the breaking of those rules?

Who else is punished besides the rulebreaker and how?



54

What rule of Roman numerals are these numbers breaking? Fix them.



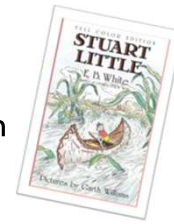
19 = XVIV

100 = LL

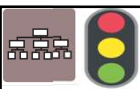
55



How is the behavior of Stuart Little different from that of real mice?



56



Which one does not belong?

31

28

23

29

57



Which one does not belong?

NATO

Treaty of Versailles

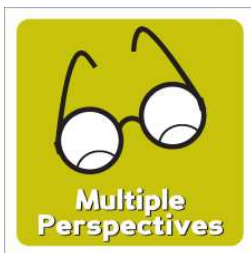
Truman Doctrine

Marshall Plan



What are the similarities between this and pre-WWI US policy?

58



or



59

How does point of view affect perception of reality? What are opposing views?

60





61





62



63



			
	FOREST FIRE		
	animals & vegetation		

64

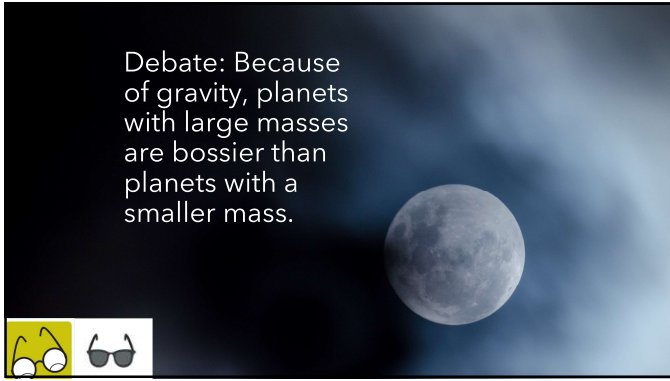
			
	SOME STORY		
	character one & character two		

65

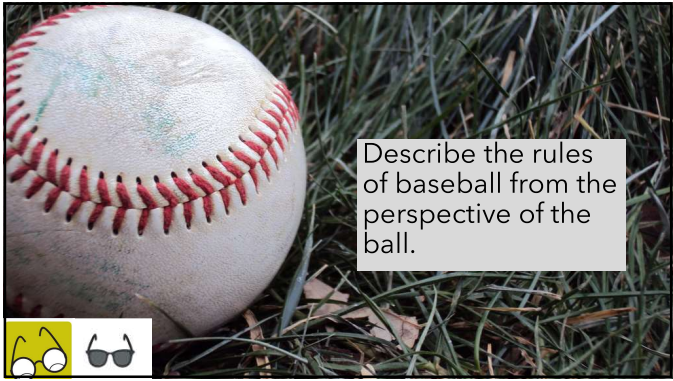
Which is more affected by gravity, the moon or Earth?

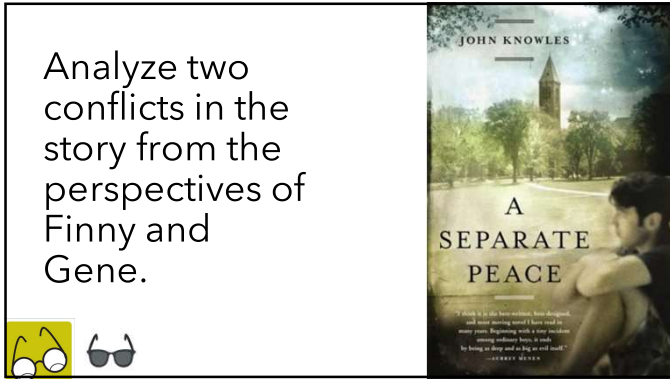
66



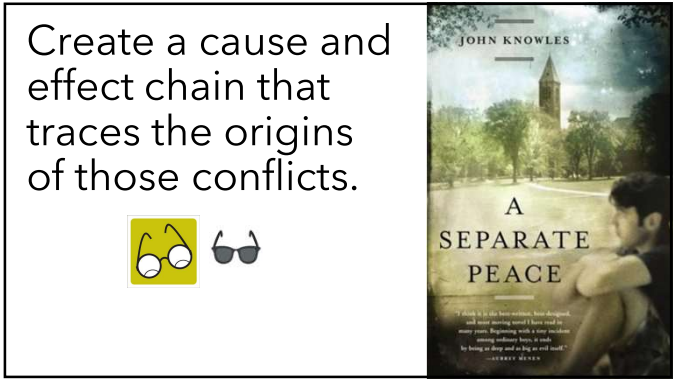
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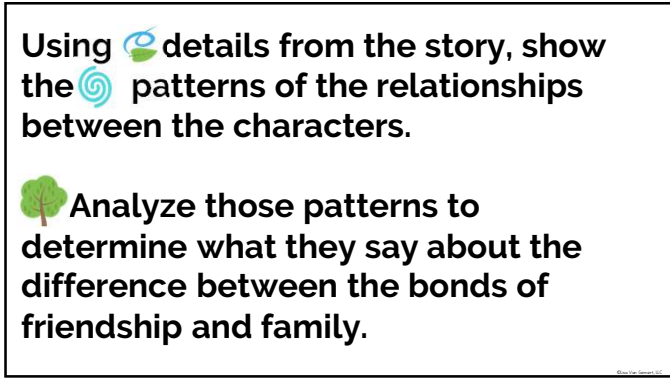
68



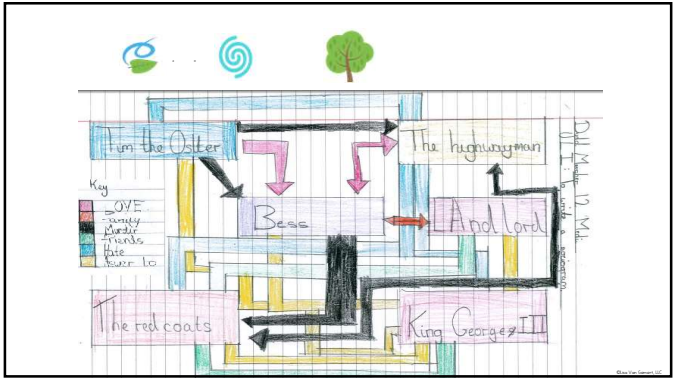
69



70



71



72

third part:
Let's go even deeper

73

What are the 🚦 rules of multiplication?

What are the 🌀 patterns in Shakespeare's sonnets?

What is the 🌳 big idea of the War of 1812?

What are the 🌿 essential details of a forest?

74

Book Title: _____
Author: _____

🏛️ What is the main theme of this story?

🗨️ What special writing techniques does the author use? Give examples.

🌀 Do you notice any patterns in this book?

⚖️ What moral or ethical issues are raised in this book? What controversies exist?

❓ Are you left with any unanswered questions?

🕒 How would this book or story be different if it were written from a different point of view?

🕒 What changes over time? What doesn't change? What impact might this story have on the future?

75

Book Title: _____
Author: _____

Name: _____

🏛️ What is the main theme of this story?

🗨️ What special writing techniques does the author use? Give examples.

🌀 Do you notice any patterns in this book?

76

Are you left with any unanswered questions?

⚖️ What moral or ethical issues are raised in this book? What controversies exist?

🕒 How would this book or story be different if it were written from a different point of view?

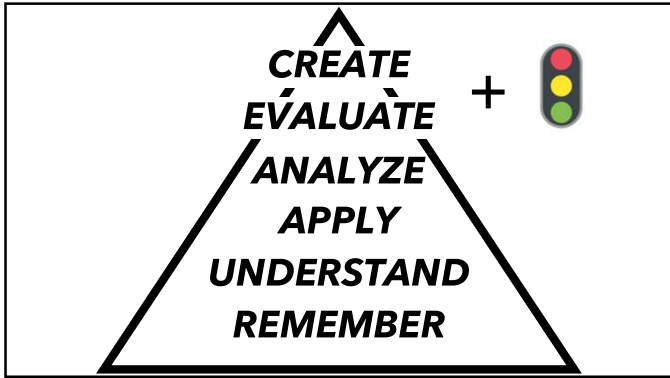
🕒 What changes over time? What doesn't change? What impact might this story have on the future?

77


How would this book or story be different if it were written from a different point of view?


🕒 What changes over time? What doesn't change? What impact might this story have on the future?


78





79

List the  rules of the US Constitution.

Contrast the  rules of the US Constitution with those of Japan's Constitution.

Apply the  rules of Japan's constitution to the US. What would it be like?

Judge which  rules in the US Constitution are least fair.

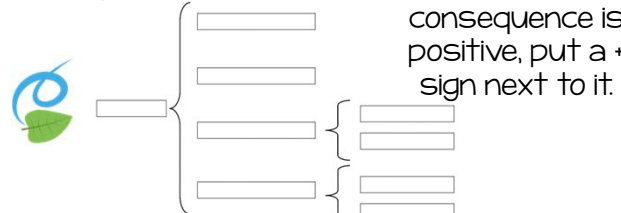
Create the  rules for a new constitution.

80

Pick **one** character from the story.

Identify **four** traits of that character.

For **two** of the traits, list **two** consequences of that trait. If the consequence is positive, put a + sign next to it.

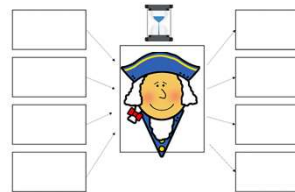


81

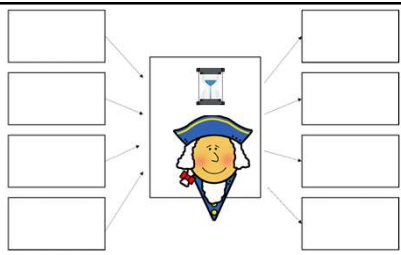
Thinking of what you just identified and considered, do you think the character's traits were a hindrance or a help to him/her and why?


82

Think of four reasons George Washington should have been a king instead of the president. Then, on the other side of the Thinking Map, think of four future consequences that would have happened if he had become a king.



83







 Is it fair for one person to be the king or queen for life? Why would it be better or worse to take turns?

84



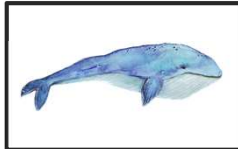


Differentiate it!

Is it possible for a truly free people to have a king or queen? If not, is England really free? Would the English agree they are less free?

85

 <p>Name FOUR words mathematicians would use to solve this problem.</p>	<p>Solve the problem.</p> 
 <p>Does making multiplication the first step mean it's more important than the other steps?</p>	<p>What is the Big Idea of this type of problem?</p> 

86

	<p>What would happen if you moved the blue whale up one level in the food chain?</p>	
<p>What do you think is a blue whale's favorite number and why?</p>		<p>What animal is the closest land animal to the blue whale in size AND personality?</p>
	<p>Why is it a good idea or not for one animal to be so much bigger than the other animals in the ocean?</p>	

87

Wrapping It Up




88