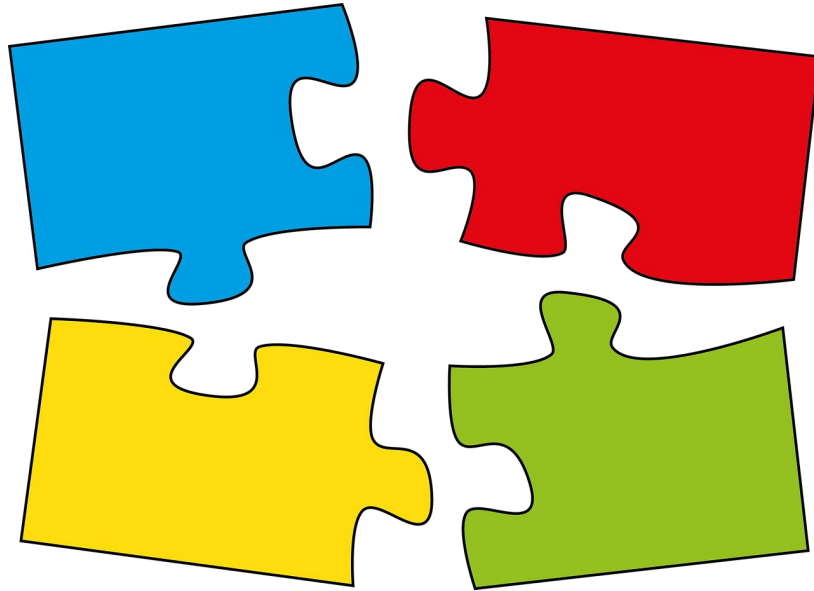


Problem Solving

Drawing Conclusions and Justifying Solutions



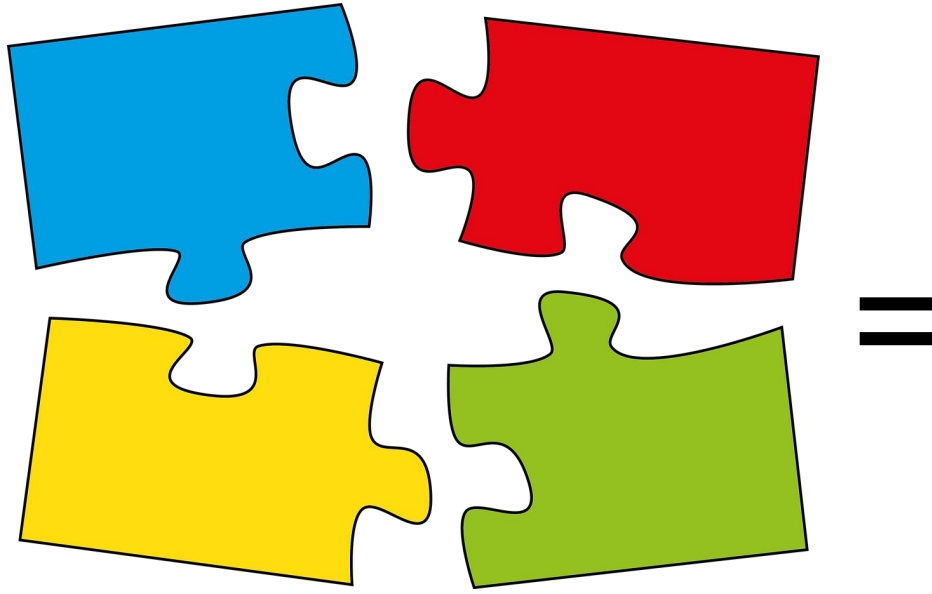
Drawing Conclusion

Students draw conclusions based on data presented to them in many forms, viewpoints, perspectives, and quality.

3 Levels

1. A specific answer, idea, or opinion;
2. A full harvesting of all that has been achieved, including, for example, a listing of ideas considered; and
3. An objective look at the "thinking" that has been used.

Drawing Conclusions



“The Circuit”

“It was that time of year again. Ito, the sharecropper, did not smile. It was natural. The peak of strawberry season was over and the last few days the workers, most of them *braceros*, were not picking as many boxes as they had during the months of June and July.”

“My Superpowers”

“Do you ever wish you had superpowers?”

Flipped

From the chapter
“Diving Under”

“All I’ve ever wanted is for Juli Baker to leave me alone. For her to back off—you know, just give me some space.”

“The Jacket”

“My clothes have failed me. I remember the green coat that I wore in fifth and sixth grades when you either danced like a champ or pressed yourself against a greasy wall, bitter as a penny toward the happy couples.”

ELA

Level 1 - A specific answer, idea, or opinion;

Which narrative opening do you believe is most efficient?

“The Circuit”

“It was that time of year again. Ito, the sharecropper, did not smile. It was natural. The peak of strawberry season was over and the last few days the workers, most of them *braceros*, were not picking as many boxes as they had during the months of June and July.”

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“Do you ever wish you had superpowers?”

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From the chapter
“Diving Under”

“All I’ve ever wanted is for Juli Baker to leave me alone. For her to back off—you know, just give me some space.”

“The Jacket”

“My clothes have failed me. I remember the green coat that I wore in fifth and sixth grades when you either danced like a champ or pressed yourself against a greasy wall, bitter as a penny toward the happy couples.”

ELA

Level 2 - A full harvesting of all that has been achieved, including, for example, a listing of ideas considered;

Why?

“The Circuit”

“It was that time of year again. Ito, the sharecropper, did not smile. It was natural. The peak of strawberry season was over and the last few days the workers, most of them *braceros*, were not picking as many boxes as they had during the months of June and July.”

“My Superpowers”

“Do you ever wish you had superpowers?”

Flipped

From the chapter
“Diving Under”

“All I’ve ever wanted is for Juli Baker to leave me alone. For her to back off—you know, just give me some space.”

“The Jacket”

“My clothes have failed me. I remember the green coat that I wore in fifth and sixth grades when you either danced like a champ or pressed yourself against a greasy wall, bitter as a penny toward the happy couples.”

ELA

Level 3 - An objective look at the “thinking” that has been used.

Choose one of the less efficient narrative opening and improve it.

Explain your thinking about why what you added improved the narrative opening.

Math

Level 1 - A specific answer, idea, or opinion;

Exercise

The cost of a babysitting service on a cruise is \$10 for the first hour and \$12 for each additional hour. If the total cost of babysitting baby Aaron was \$58, how many hours was Aaron at the sitter?

If the total cost of babysitting baby Aaron was \$58, how many hours was Aaron at the sitter?

Algebraic Solution

h = number of additional hours

$$12h + 10 = 58$$

$$12h + 10 - 10 = 58 - 10$$

$$12h + 0 = 48$$

$$\left(\frac{1}{12}\right)(12h) = (48)\left(\frac{1}{12}\right)$$

$$1h = 4$$

$$h = 4$$

$$1 + 4 = 5$$

Math

Level 2 - A full harvesting of all that has been achieved, including, for example, a listing of ideas considered; (students compare with another student that solved the problem a different way.)

Explain how each student solved the problem.

Level 3 - An objective look at the "thinking" that has been used.

Explain which strategy was more efficient and why?

Exercise

The cost of a babysitting service on a cruise is \$10 for the first hour and \$12 for each additional hour. If the total cost of babysitting baby Aaron was \$58, how many hours was Aaron at the sitter?

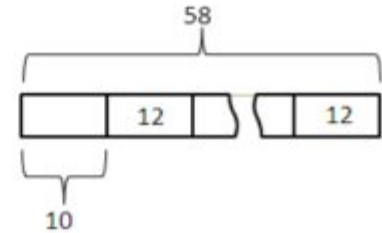
Algebraic Solution

h = number of additional hours

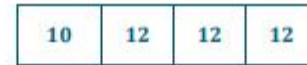
$$\begin{aligned}12h + 10 &= 58 \\12h + 10 - 10 &= 58 - 10 \\12h + 0 &= 48 \\ \left(\frac{1}{12}\right)(12h) &= (48)\left(\frac{1}{12}\right) \\1h &= 4 \\h &= 4\end{aligned}$$

$$1 + 4 = 5$$

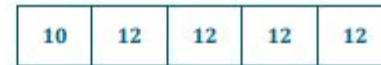
Tape Diagram



$$10 + 12 + 12 = 34 \quad (\text{not enough, need } 58)$$



$$10 + 12 + 12 + 12 = 46 \quad (\text{not enough, need } 58)$$



$$10 + 12 + 12 + 12 + 12 = 58$$

$$58 - 10 = 48$$

$$48 \div 12 = 4$$

Aaron was with the babysitter for 5 hours.

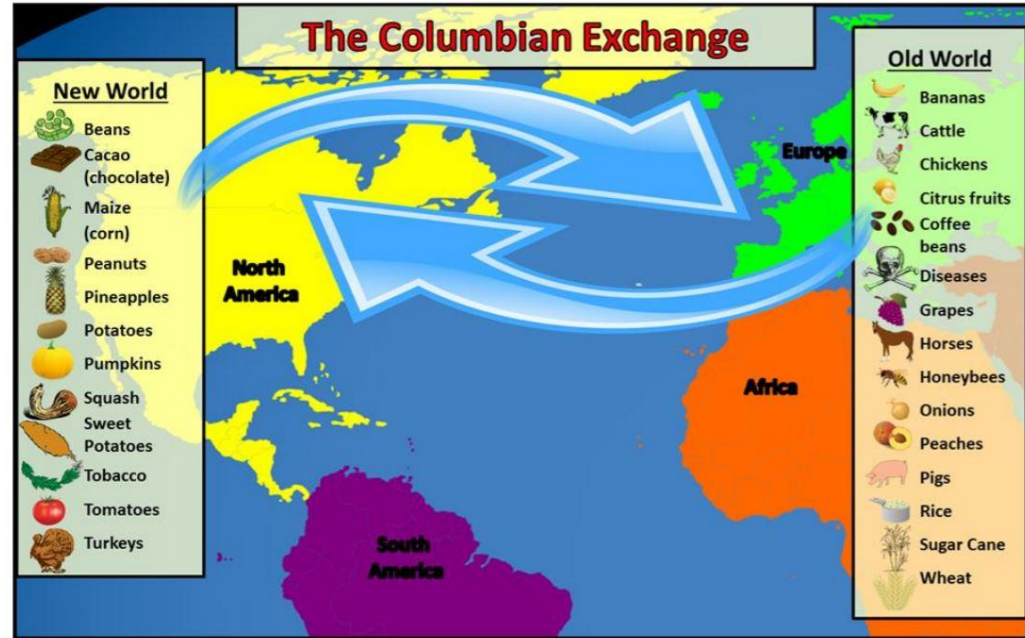
Social Studies

Level 1: A specific answer, idea, or opinion;

Students are introduced to the Columbian Exchange by showing them this source.

Students must respond to the following question:

What is the Columbian Exchange?



Social Studies

Level 2: A full harvesting of all that has been achieved, including, for example, a listing of ideas considered;

Analyze multiple sources to determine positive and negative effects of Columbian Exchange.

Using the sources and your knowledge of social studies, Did the Columbian Exchange have a positive or negative effect on the World?

Making a claim using multiple sources and adding evidence to justify your answer

3. An objective look at the "thinking" that has been used.

Explain the counterclaim. If you claimed that the Columbian Exchange was positive then explain why another student would claim that it was negative and vice versa.

Science

Level 1: A specific answer, idea, or opinion;

Students would read "Drinking Cleopatra's Tears" to gather the information to answer the following question: where does water vapor in the air come from?

Level 2: A full harvesting of all that has been achieved, including, for example, a listing of ideas considered;

Students look at multiple sources to arrive to an overall conclusion and cite ideas from each source.

Level 3: An objective look at the "thinking" that has been used.

Show students an example of an incorrect water cycle.

How would you reteach the student who drew the incorrect water cycle?

Name: _____ Date: _____

Synthesizing Ideas About Water on Earth

1. Read the question below.
2. In the first four boxes, record big ideas from each source that help you answer the question.
3. Connect ideas together to come up with a new understanding that answers the question.
4. Record your new understanding in the box below the arrow.

How can water from Cleopatra's tears be on Earth today?

Source: <i>Drinking Cleopatra's Tears</i> Ideas:
Source: Freshwater and Saltwater Drops Investigation Ideas:
Source: Condensation Investigations (ice water in a cup, frozen empty cup, ice water in a cup in a bag) Ideas:
↓
New understanding:

28 The Earth System—Lesson 2.5
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ELA -

Your turn
to bump it
up a few
levels.

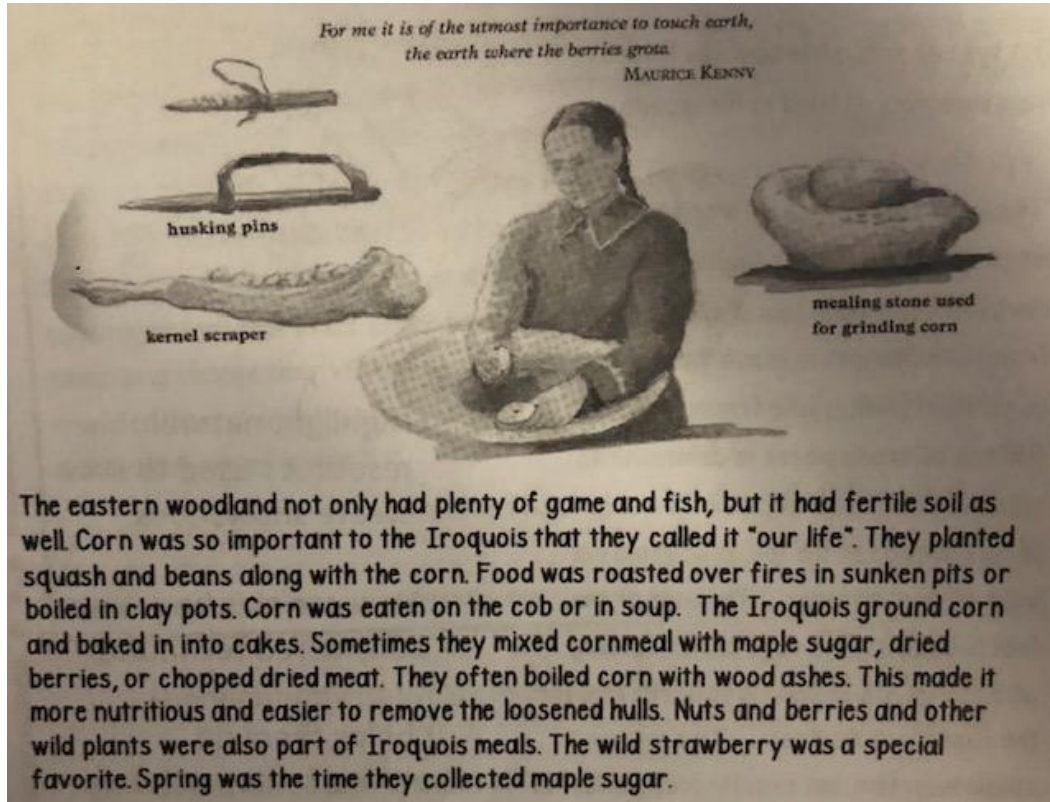
	Personal Narrative	Short Story
Topics	real incidents; limited to what has happened	imagined incidents; unlimited topics
Setting	time and place in a memory	imaginary time and place
Plot	sequence of events in an incident with an explicit statement about significance	sequence of events based on a conflict with an implicit meaning or theme
Characters	narrator is the main character (first-person point of view); there may be other characters	characters may be any number of people, animals, or objects
Dialogue	limited to what might really have been said; may have to recreate dialogue	imaginary dialogue

4. With a group, discuss your ideas about how personal narratives and short stories may be similar or different. Write down the conclusions you can draw, based on your discussion.

Math

In a city election, two people ran against each other to be the next mayor. Candidate 1 received 24,000 votes. Candidate 2 received 8,000 votes. What is the relationship between candidate 1's votes and candidate 2's votes?

Social Studies



What natural resources are the Iroquois Native Americans using in this source? What are they using it for?

Science

Reading About Design Solutions

1. Read *Engineering Clean Water*.
2. Record ideas from the book that will help you answer the question below.

What do engineers do while designing solutions to problems?

For Next Meeting:

Give the new learning to the teacher(s) on your grade level that are not members of the ILT.

Bring back the "bumped up" example of a lesson from their curriculum.

Next meeting - October 9



The End!