

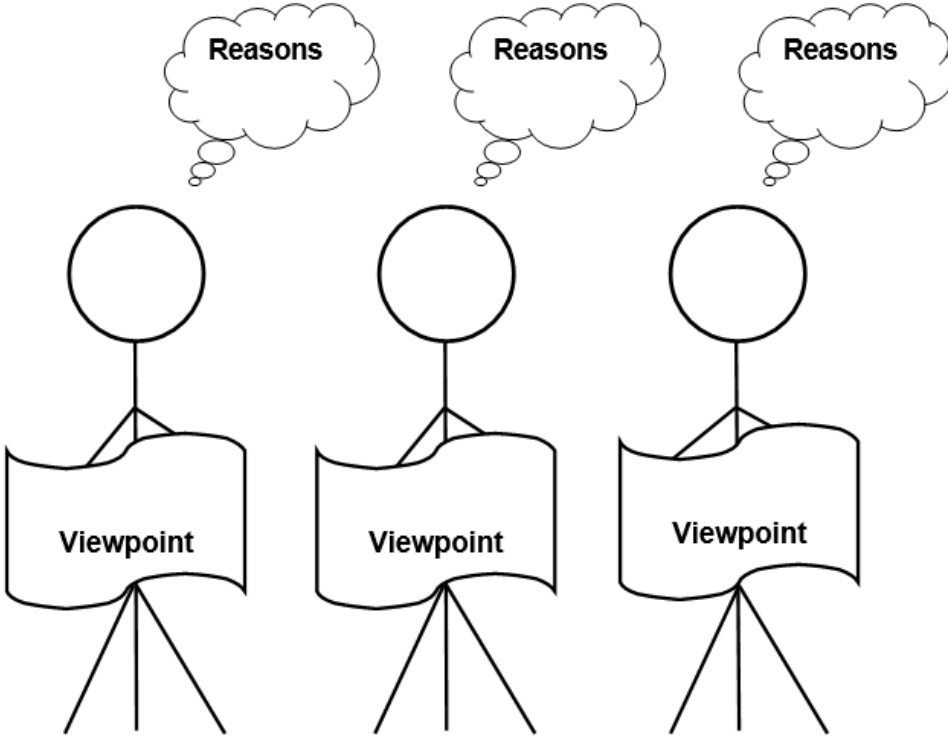
Previewing Strategy: Graphic Organizers

Example Higher Order Thinking Graphic Organizer: Stick Figure Viewpoints

Analyzing Viewpoints Graphic Organizers like Stick Figure Viewpoints help students describe the reasons for personal viewpoints and the viewpoints of others. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Compare two or more viewpoint
- Compare and contrast firsthand and secondhand accounts of an event
- Assess how the author's viewpoint influences the text
- Analyze the viewpoint for bias or illogical reasoning

Issue:



The diagram shows three stick figures standing side-by-side. Each figure has a circular head, a rectangular body, and a triangular base. Above each head is a thought bubble containing the word "Reasons". Inside each body is a rectangular box containing the word "Viewpoint".

Viewpoint

Reasons

Viewpoint

Reasons

Viewpoint

Reasons

Viewpoint

Reasons

What might be the viewpoint of each and the reasons behind the viewpoint?

Steps for Previewing Stick Figure Viewpoints

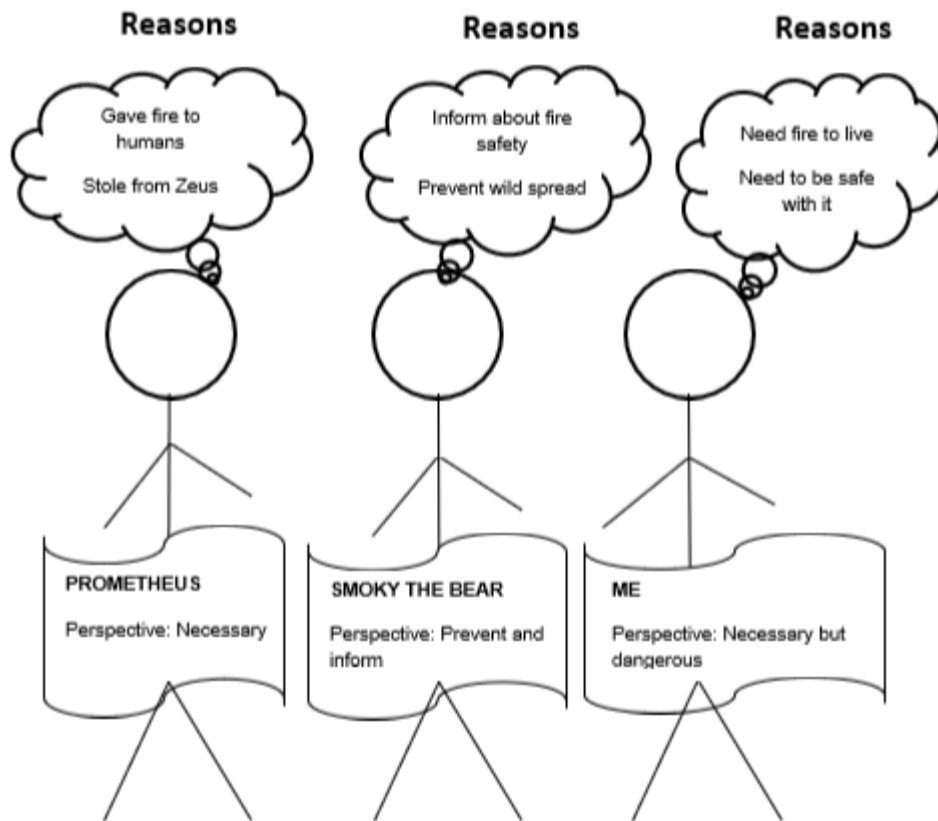
When planning, the most important question you need to answer is, “How will Analyzing Viewpoints from various perspectives help students understand what is important in the lesson?”

1. Explain to students the purpose of Analyzing Viewpoints graphic organizers like Stick Figure Viewpoints is to help them understand the concept of Analyze Viewpoints.
2. Introduce the Analyzing Viewpoints Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Analyzing Viewpoints Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the Stick Figure Viewpoints or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Analyzing Viewpoints Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to describe the viewpoints of select individuals and explain their reasons using important information and evidence.
 - c. Compare the similarities and differences among the viewpoints.
 - d. Explain the viewpoints and model writing a conclusion about them in the box beneath the stick figures.
5. Pairs of students complete the Stick Figure Viewpoints using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Stick Figure Viewpoints

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to:
 - Distinguish an individual's own point of view from that of an author or speaker
 - Write from a different viewpoint
 - Develop arguments and counterarguments
 - Analyze the reasons behind a particular viewpoint
 - Analyze how a character or individual's viewpoint changes over time
 - Reach conclusions about an issue
- Provide the graphic organizer with some of the perspectives and reasons already completed as a model for students who need extra support.
- Provide one perspective and have students choose the other(s).

Example Stick Figure Viewpoints

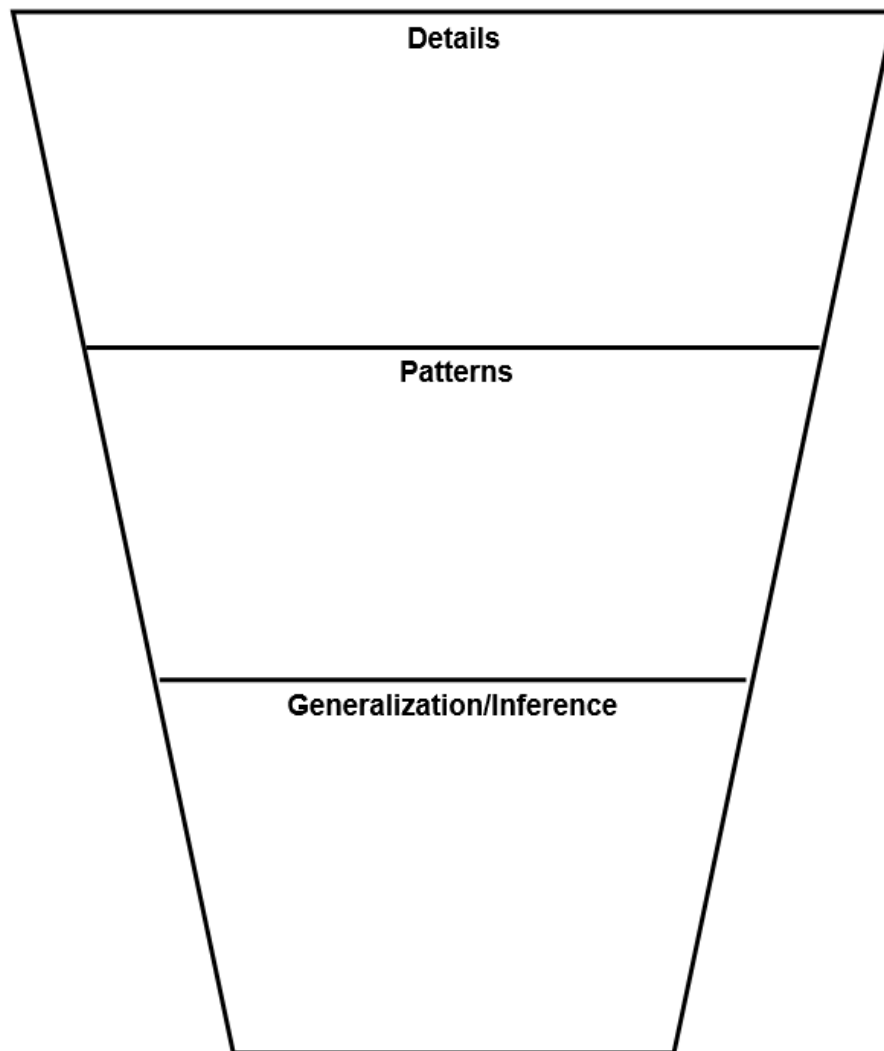


What might be the perspective of each and the reasons behind the perspective? Fire is necessary, as it gives us heat, light, and lets us cook. But it is also dangerous because it is easily spread, and can cause lots of damage, destroying both forests and buildings.

Example Higher Order Thinking Graphic Organizer: Flower Pot

Infer Graphic Organizers like the Flower Pot help students develop generalizations from information or observations. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Defend a generalization
- Make predictions about future actions of characters or future events
- Compare themes among different texts
- Conduct research to verify the accuracy of conclusions
- Evaluate how individuals may interpret information differently
- Evaluate the evidence used to make an inference
- Evaluate the validity of an inference



Steps for Previewing Flower Pot

When planning, the most important question you need to answer is, “How will students Infer the most important points of a story or text?”

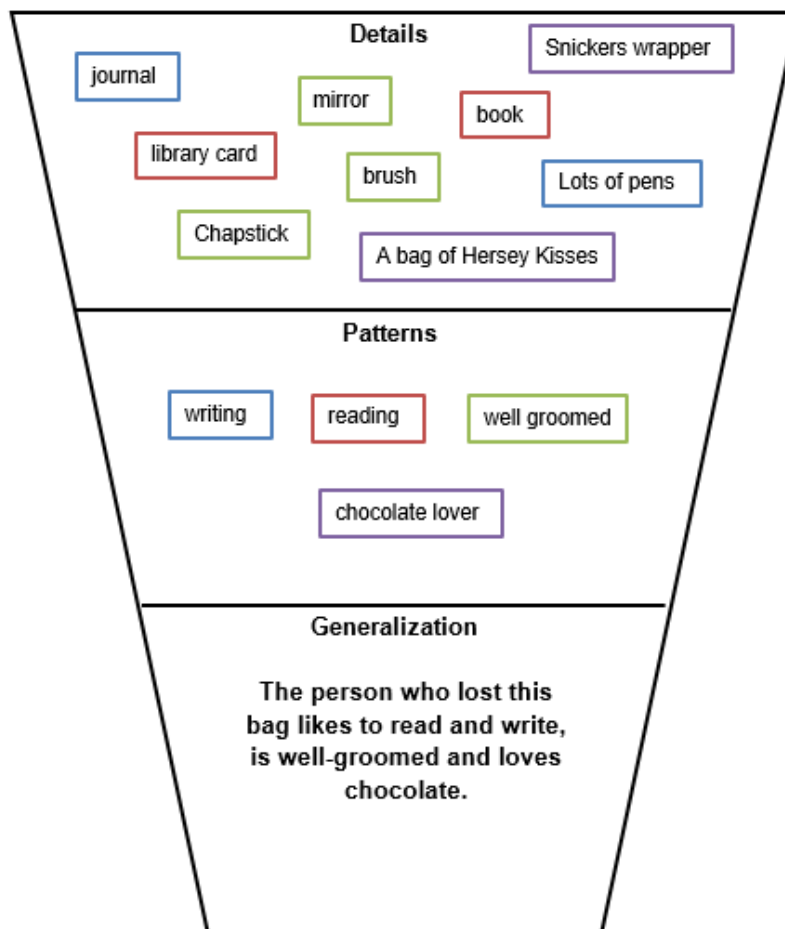
1. Explain to students the purpose of Infer graphic organizers like the Flower Pot is to help categorize details into patterns in order to reach conclusions or inferences.
2. Introduce the Infer Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Infer Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the Flower Pot or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Infer Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to identify important details, determine patterns from among all the details, and reach a conclusion or inference.
 - c. Explain that the shape of the organizer is meant to guide their thinking from many details, to a few supported patterns, to a supported inference.
5. Pairs of students complete the Flower Pot using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Flower Pots

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to to:
 - Write an explanation of the process that was used to make a generalization
 - Determine the central message or theme of a selection
 - Compare generalizations with a partner or members of a small group
 - Write a character analysis
 - Write an essay citing text evidence that supports a generalization
 - Prepare for a group discussion
- Provide the graphic organizer with some of the details already completed as a model.

Example Flower Pot

What can you infer from what someone has in their bag?



Example Higher Order Thinking Graphic Organizer: Determine Patterns (Three Columns)

Determining Patterns Graphic Organizers like the Determine Patterns (Three Columns) help students find, identify, and explain general patterns in text they are reading or information they are learning. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Create similes, metaphors or analogies
- Make generalizations about recurring themes in literature or historical events
- Create non-verbal representations that illustrate a pattern or theme
- Make predictions
- Compare two processes

First Example	General Pattern	Another Example

Summary:

Steps for Previewing Determine Patterns (Three Columns)

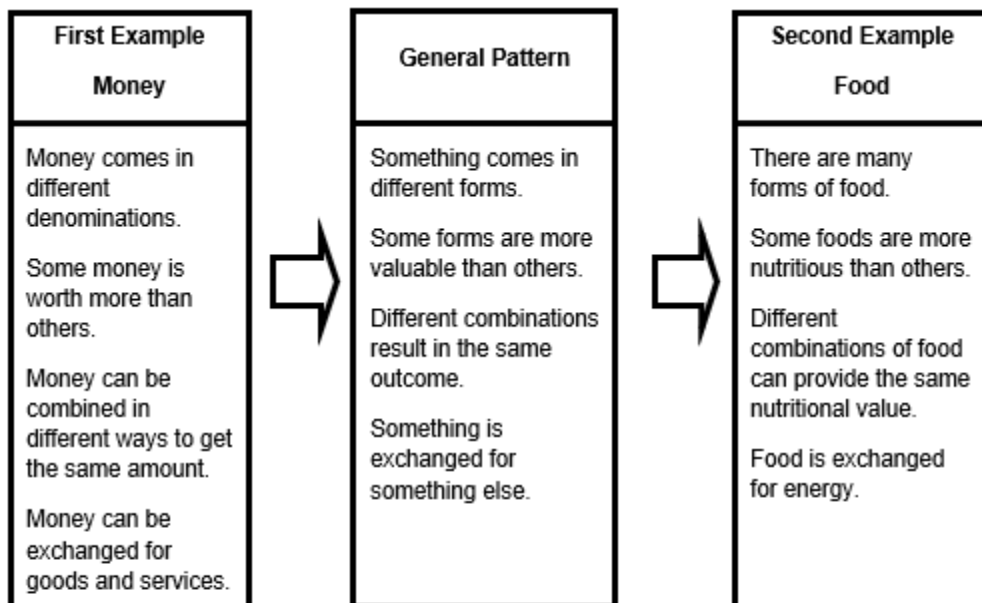
When planning, the most important question you need to answer is, “How will finding similarities in unlike things help students understand what is important in the lesson?”

1. Explain to students the purpose of Determining Patterns graphic organizers like the Determine Patterns (Three Columns) is to help categorize details in order to draw conclusions or inferences.
2. Introduce the Determining Patterns Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Determining Patterns Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the Determine Patterns (Three Columns) or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Determining Patterns Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to examine an example to determine possible categories of importance and then “name” the pattern.
 - c. Think Aloud how to apply the pattern to a new example.
 - d. Summarize the importance of the pattern(s) and model how to write a summary beneath the three columns.
5. Pairs of students complete the Determine Patterns (Three Columns) using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Determine Patterns (Three Columns)

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to to:
 - Write an essay describing similar patterns in two sets of information
 - Find new situations or processes that fit an identified pattern
 - Summarize events
 - Determine themes
- Provide the graphic organizer with some of the details already completed as a model.
- Allow students to create a visual representation of a pattern.
- Provide a list of items from which students can choose the one most similar to the concept being studied.

Example Determine Patterns (Three Columns)



Summary: Money and food both follow a general pattern regarding their what they are and how they are used. They both come in different forms, some are worth more, different combinations result in the same outcome, and both can be exchanged for something else. So even though they are unlike objects, there are patterns of similarities between the two things.

Example Higher Order Thinking Graphic Organizer: Plus/Minus/Intriguing

Analyzing Relationships Graphic Organizers like the Plus/Minus/Intriguing help students group items into categories on the basis of their attributes. Developed by Dr. Edward de Bono, a PMI strategy can help you to brainstorm ideas, make decisions quickly by analyzing and weighing the pros and cons, reflect upon or evaluate a product or process after the fact, or identify strengths and weaknesses for future improvement. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Write a justification for the classification system
- Write to explain the relationship among concepts
- Reclassify the information in a different way
- Reclassify the information from a different perspective (Example: How would a scientist classify this? A cook? A farmer?)
- Compare two classification systems

Plus (+)	Minus (-)	Intriguing (!)

Steps for Previewing Plus/Minus/Intriguing

When planning, the most important question you need to answer is, “How should students categorize the details in order to relate them to the most important concepts in the lesson?”

1. Explain to students the purpose of Analyzing Relationships graphic organizers like the Plus/Minus/Intriguing is to help categorize details in order to draw conclusions or inferences.
2. Introduce the Analyzing Relationships Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Analyzing Relationships Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the Plus/Minus/Intriguing or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Analyzing Relationships Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to enumerate all of the positive, negative, and intriguing things associated with a topic.
 - c. Explain that Interesting ideas are those that can lead to other ideas, new connections, shifts in understanding about the topic, a metaphorical way of thinking.
 - d. Justify your organization of each of the listed attributes.
 - e. Explain that the plus and minuses are used in conjunction with the interesting ideas for improving the positive aspects if possible, or reducing the negative aspects.
5. Pairs of students complete the Plus/Minus/Intriguing using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Plus/Minus/Intriguing

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to:
 - Write a paragraph or essay explaining the classification system
 - Answer or ask questions
 - Identify the group to which something belongs
 - Determine which items would not belong in a group
 - Organize notes
- Provide the graphic organizer with some of the details already completed as a model.
- Provide the attributes on which to base the classification.
- Provide a word bank.
- Print the items to be classified on cards or slips of paper allowing students to manipulate information.

Example Plus/Minus/Intriguing

Moving to a big city

Plus (+)	Minus (-)	Intriguing (!)
Restaurants	Expensive	More people
Job opportunities	Traffic	Cultural diversity
Parks and entertainment	Pollution	Mass transit
Shopping	Crime	Education opportunities

Example Higher Order Thinking Graphic Organizer: Error Analysis

Error Analysis Graphic Organizers like the Error Analysis Process Chart help students support students in finding and describing errors in thinking or performance. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Analyze errors in the use of the other higher level thinking strategies
- Evaluate a product or a process
- Correct errors
- Analyze reliability and credibility of resources
- Analyze a speech, essay, editorial or advertisement and identify unusual claims or faulty logic

What is the information?
Unusual claims or reasoning:
Identify possible errors (sort facts/opinions, look for bias, assumptions or unusual claims, check sources):
Considered solution or consequence:
New or revised information:

Steps for Previewing Error Analysis Process Chart

When planning, the most important question you need to answer is, “How are errors identified and corrected in the process?”

1. Explain to students the purpose of Error Analysis graphic organizers like the Error Analysis Anchor Chart is to help categorize details in order to draw conclusions or inferences.
2. Introduce the Error Analysis Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Error Analysis Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the Error Analysis Process Chart or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Error Analysis Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to evaluate a process or product to identify errors by identifying what is incorrect or missing,
 - c. Provide possible solutions for how to correct the error underneath the organizer.
5. Pairs of students complete the Error Analysis Process Chart using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Error Analysis Process Chart

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to:
 - Write a paragraph or essay explaining the causes of particular errors
 - Explain how errors can be corrected
 - Summarize the Evaluate process
- Provide the graphic organizer with some of the details already completed as a model.

Examples Error Analysis Process Chart

What is the information? Jake wants to ride to the ballgame with his friend Hank. Jake's parents do not know Hank. Jake tries to convince his parents that Hank is a safe driver.
Unusual claims or reasoning: Everyone is going to the game. (Unusual Claim. Everyone does not like sports) Hank is a nice guy and an honor roll student. He does not have a tattoo or earring or anything. He dresses clean and he will be careful. (Unusual reasoning. What does clean-cut, honor roll, have to do with it?) They will go straight to the game and then home. Hank drives a small sports car and only has one passenger.
Identify possible errors (sort facts/opinions, look for bias, assumptions, or unusual claims, check sources): • Facts: Mom does not know enough about Hank's character or his driving skills to allow Jake to ride to the game. • Opinions: Hank is a nice clean-cut guy. They will come straight home. You cannot trust someone you do not know. • Assumption: Sports cars are more dangerous than other types of cars.
Considered solution or consequence: Jake needs to find a ride with someone his parents know already. Or They need to try to work within the two schedules to accommodate both the meeting and Jake going to the game.
New or revised information: Hank Meets mom and reassures her he is a good driver. He has never received a ticket or had an accident. He offers the name of a good friend of Jakes mom who knows him personally.

Example Higher Order Thinking Graphic Organizer: Deduce

Deduce Graphic Organizers like the 3 Block Deduce Organizer help students identify specific examples that support a general statement, rule, or principle. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Evaluate an argument for fallacies or illogical reasoning
- Compare inductive and deductive reasoning
- Analyze an argument

Premise	+	Premise	Logic is valid 	Conclusion
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Summary/conclusions:

Steps for Previewing 3 Block Deduce Organizer

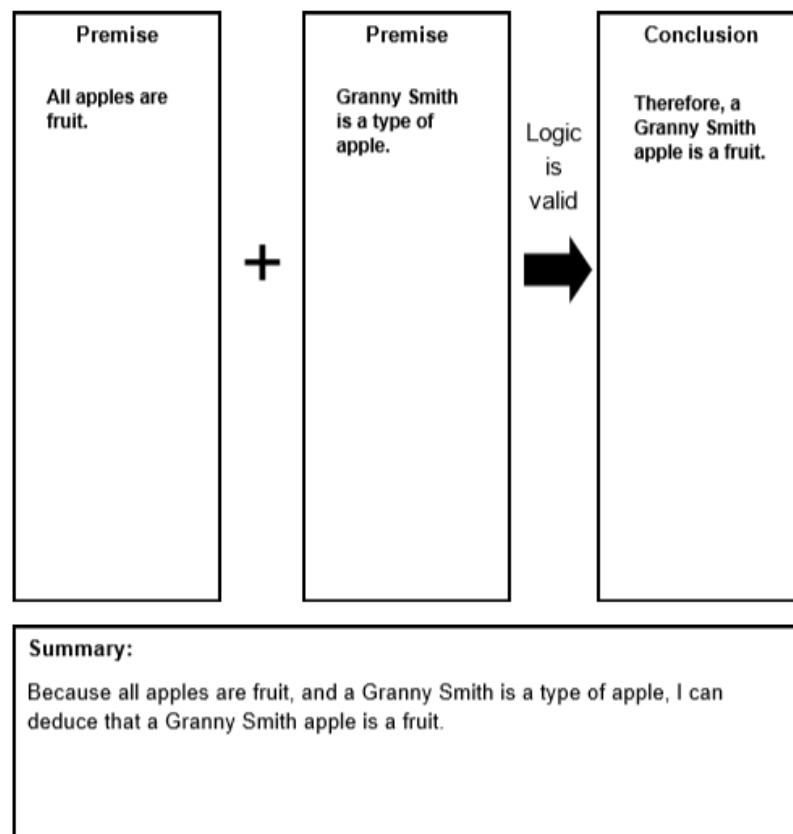
When planning, the most important question you need to answer is, “How will students logically Deduce conclusions built from premises?”

1. Explain to students the purpose of Deduce graphic organizers like the 3 Block Deduce Organizer is to help categorize details in order to draw conclusions or inferences.
2. Introduce the Deduce Anchor Chart and point out important vocabulary words that should prompt you to think about a question or task using the Deduce Higher Order Thinking Strategy by following its steps in the process.
3. Distribute the 3 Block Deduce Organizer or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Deduce Thinking Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to combine premises to logically support a conclusion.
 - c. Think Aloud how to apply the pattern to a new example.
 - d. Model how to support the conclusion by writing an explanation in the box beneath the organizer.
5. Pairs of students complete the 3 Block Deduce Organizer using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing 3 Block Deduce Organizer

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to to:
 - Write an explanation of the process that was used to support a conclusion or prediction
 - Summarize the steps in deductive reasoning
 - Write an “If...then” paper
 - Defend a prediction
 - Write a proof
 - Prove or disprove a conjecture
 - Write a deductive argument
- Provide the graphic organizer with some of the details already completed as a model.
- Provide the graphic organizer with the generalization, necessary conditions or specific examples already completed as a model.

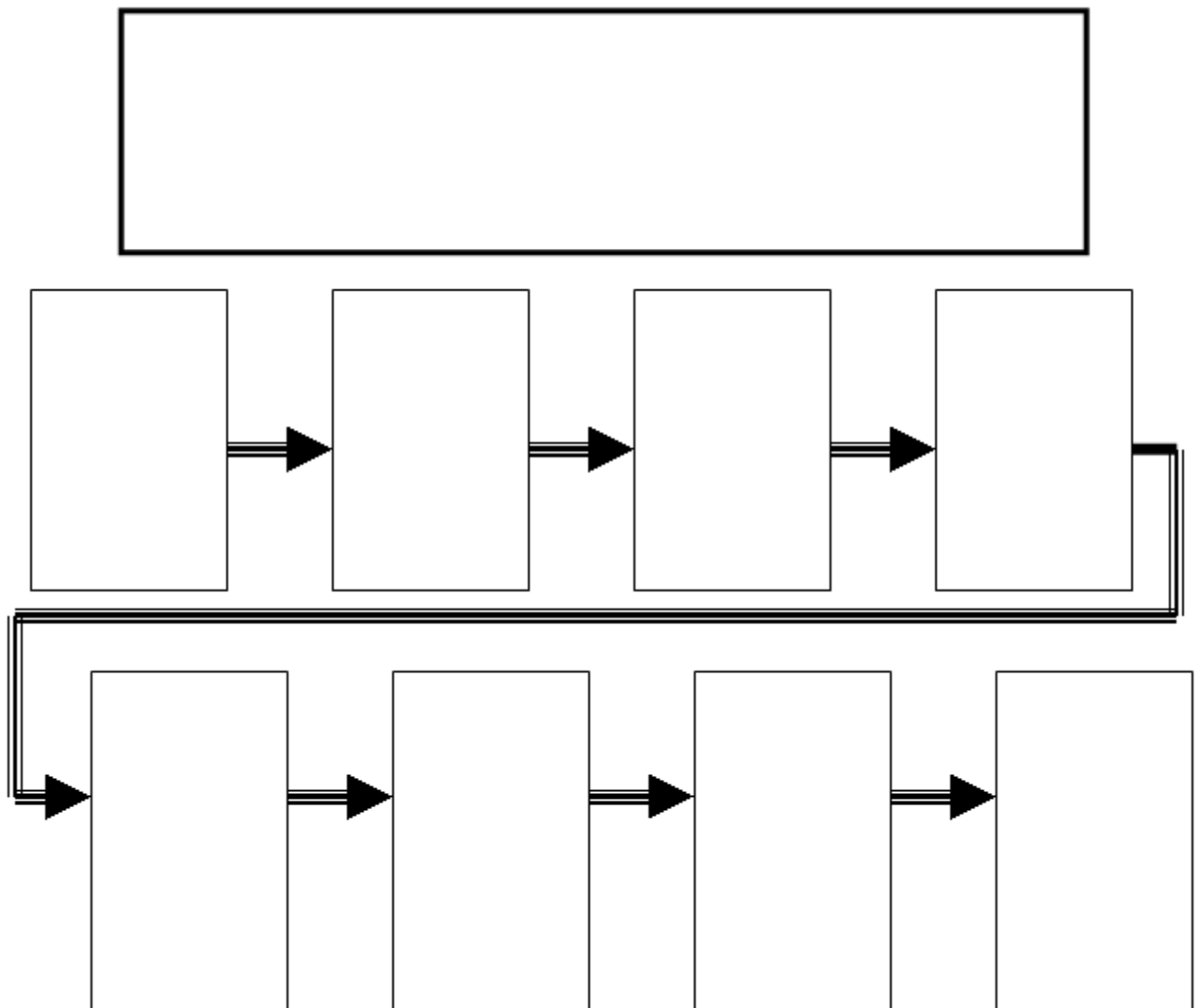
Example 3 Block Deduce Organizer



Example Reading Comprehension Graphic Organizer: Flowchart

Sequence Graphic Organizers like Flowcharts help students in determining the sequence of events in a text or the steps in a process they are learning. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Determine what might happen if one step or event is omitted from the sequence
- Analyze errors in a process
- Find patterns among processes
- Explain why events happen in a particular sequence
- Change the order of events in a story and rewrite the story with the new sequence



Steps for Previewing Flowcharts

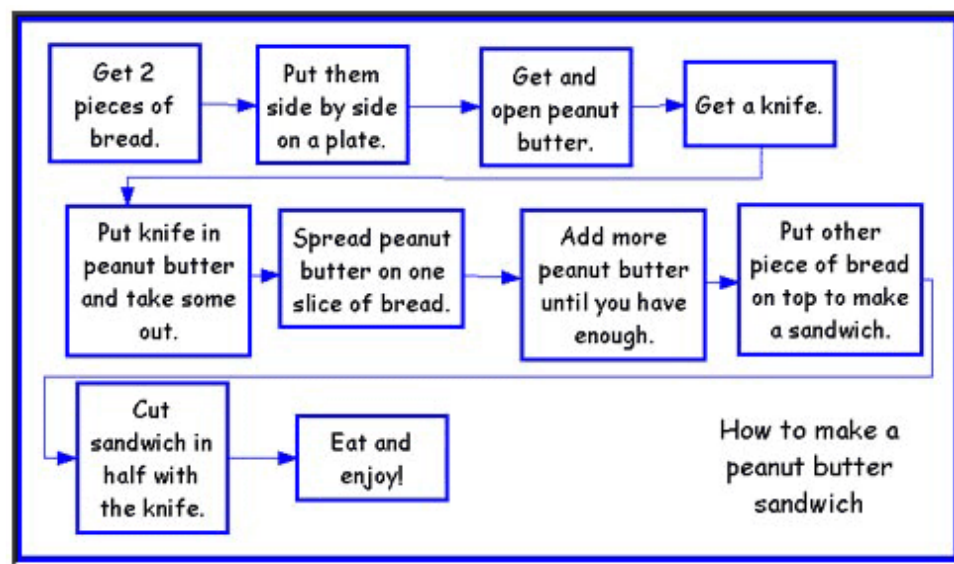
When planning, the most important question you need to answer is, “How is the sequence of events (or steps in a process) important to understanding the story or text?”

1. Explain to students the purpose of a Sequencing graphic organizer such as a Flowchart is to help list the order of use of a skill, or a series of steps to execute in solving a problem.
2. Introduce the Sequencing Anchor Chart and point out the signal words that cue readers to use the Sequencing Reading Comprehension Strategy, and the steps to follow in using it.
3. Distribute the Flowchart or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Sequencing Comprehension Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to sequence the steps or process, adding each to the Flowchart.
 - c. Explain why the order of events is important and what would happen if the order was changed.
5. Pairs of students complete the Flowchart using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Flow Charts

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Provide additional practice for students when first using the graphic organizer using familiar or less complex information.
- Have students use their completed graphic organizers to:
 - Follow the steps in a process
 - Explain the steps in a process to a partner
 - Analyze change over time
 - Summarize directions
 - Summarize the plot of a story
 - Summarize character changes
 - Write a “how to” paper
 - Answer questions related to logical sequence or chronological order
 - Create a timeline
- Scaffold the organizer by providing some of the details already added as a model.
- Have students use pictures or symbols to represent a sequence of events or steps in a process.
- Provide the events or steps on prepared cards and have students place them in the appropriate sequence on the graphic organizer.
- Have students place the events on post-it notes so they can be rearranged if necessary.

Example Flowchart



Example Reading Comprehension Graphic Organizer: Main Idea Tower

Main Idea Graphic Organizers like the Main Idea Tower help students determine the main idea and supporting details of the text they are reading or the information they are learning. Students apply Higher Order Thinking when they use completed graphic organizers to:

- Reach conclusions
- Compare and contrast information from different texts on the same topic
- Justify how the details support the main idea
- Evaluate the quality of evidence the author provides to support main ideas
- Reach consensus on the most important main idea

	Detail
	Detail
	Detail
	Detail
+	
	Main Idea or Main Concept

Steps for Previewing Main Idea Tower

When planning, the most important question you need to answer is, “Which details best add up to identification of the main idea of the story or text?”

1. Explain to students the purpose of a Main Idea and Details graphic organizer is to evidence from details in a text to draw a conclusion as to the author’s main idea.
2. Introduce the Main Idea Anchor Chart and point out the signal words that cue readers to use the Main Idea Reading Comprehension Strategy, and the steps to follow in using it.
3. Distribute the Main Idea Tower or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Main Idea Comprehension Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to choose key details from a text to add to the organizer.
 - c. Explain how the details “add up” to the main idea or main concept.
5. Pairs of students complete the Main Idea Tower using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Main Idea Tower

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to:
 - Write summaries
 - Write paragraphs and essays
 - Prepare for a group discussion
 - Retell a story using details
 - Make connections to other reading passages or real life situations
 - Present information
 - Ask and answer questions about information from a text or oral presentation
 - Review for a test
- Scaffold the organizer by providing some of the details already added as a model.
- Allow students to complete the organizer using sketches or drawings.
- Adapt to use with Inference by substituting “fact” for “details” and asking students to make an inference based on the information.

Example of Main Idea Tower

Frogs

Detail

Some frogs have sticky pads on their feet

Detail

Some frogs have webbed feet that help them glide

Detail

+

Some frogs have webbed feet on their back legs to help them swim

Different frogs have different feet they use to help them move.

Main Idea or Main Concept

Example Reading Comprehension Graphic Organizer: Fact and Opinion Map

Fact and Opinion Graphic Organizers like the Fact and Opinion Map help students determine the Facts and Opinions in text they are reading or information they are learning.

Students apply Higher Order Thinking when they use completed graphic organizers to:

- Evaluate the quality of evidence an author provides to support opinions
- Compare the strength of two arguments
- Identify poorly supported arguments

Opinion:

--

Facts:

Detail	Detail	Detail

Opinion:

--

Steps for Previewing Fact and Opinion Map

When planning, the most important question you need to answer is, “How are facts and opinions used to understand a story or text?”

1. Explain to students the purpose of a Fact and Opinion graphic organizer is to help distinguish the difference between facts and opinions, or to support opinions with facts.
2. Introduce the Fact and Opinion Anchor Chart and point out the signal words that cue readers to use the Fact and Opinion Reading Comprehension Strategy, and the steps to follow in using it.
3. Distribute the Fact and Opinion Map or provide the headings so students can create their own.
4. Model how to use the organizer to scaffold the use of the Fact and Opinion Comprehension Strategy.
 - a. Use familiar content so students can focus on learning how to use the organizer.
 - b. Think Aloud how to choose key details from a text to add to the organizer.
 - c. Explain how the details “add up” to the main idea or main concept.
5. Pairs of students complete the Fact and Opinion Map using familiar or less complex information; pairs may also be grouped to compare answers and make revisions and additions.
6. Post or have students keep the completed graphic organizer for reference during the lesson.

Considerations for Previewing Fact and Opinion Map

- Have students create a drawing, simple definition, example sentence or question as a memory device for recalling the signal words.
- Have students use their completed graphic organizers to:
 - Write to support an opinion
 - Classify facts and opinions
 - Make inferences from facts
 - Reach conclusions
- Scaffold the organizer by providing some of the details already added as a model.
- Provide the graphic organizer with examples of facts and opinions already added as a model.
- Provide an “answer bank” from which students can pull the facts and opinions to complete the organizer.
- Provide page numbers where information can be located.

Example of Fact and Opinion Map

Opinion:

In the view of many longtime gardeners, a Southern landscape yields some of the most spectacular arrangements of color and texture imaginable.

Facts:

Detail	Detail	Detail
Flowering plants that are native to the South include purple coneflower and rose verbena.	Dogwoods produce white, pink, or coral blossoms announcing the arrival of spring.	Trees that are native to the South include a variety of oaks, as well as flowering dogwoods and redbuds.

Opinion:

Gardens in the South are among the most colorful and beautiful in the world!