

Using Graphic Organizers

CONTENT OBJECTIVE:

Students organize the information they have learned in a graphic format.

DIFFERENTIATION APPROACH:

Vary the process students use to demonstrate knowledge based on readiness and/or learning style.

Middle school students often need help to process and prioritize the detailed information we present in content areas; it is our task to provide a way to make the content manageable, organized, and easy to understand. We can use graphic organizers—visual representations of content, concepts, or information—to show students how we organize information and think in our disciplines. For instance, rather than limit students' understanding of the military impact of the Civil War with tasks that primarily involve memorization and basic recall of names, battle dates, and statistics, we can assign students a concept map that helps them learn about two or three key battles that affected the outcome of the war. This type of work ensures that students are processing information, making sense of it, discriminating essential from nonessential details, and effectively communicating that information to others in a structured way.

There are important reasons for using graphic organizers to differentiate your instruction. First, in a visually accessible format information becomes less cluttered and easier to work with. This format appeals to students with strong visual-spatial and logical-mathematical intelligences. Students with learning difficulties or reading problems also may handle information better when it is graphically organized; they can demonstrate their learning without being hindered by complex writing or reading tasks.

Our students benefit from using organizers regularly during instruction, especially as they read textbooks, organize their writing, and conduct research—activities for which the organizer serves as a scaffold for gathering and processing information. We find that when we give them well-planned organizers at the right level, students are more purposeful about their reading and research, and they enjoy working when the information has an organization. Organizers have made teaching of content far easier for us and learning more enjoyable for our students!

Second, reading, writing, and communication skills improve when students think critically and analytically. The process of putting information into a graphic organizer is quite different from writing essays or answering multiple-choice questions. Organizers help students think strategically and communicate that thinking in writing. Using a variety of organizers in your teaching—hierarchical, conceptual, sequential, and cyclical—allows you to differentiate based on process.

Any graphic organizer may be assessed for a grade using the rubric provided in this chapter. Instead of giving a unit test of essay questions that demand a lot of composition time, for example, you may want to try an organizer that targets the same material instead. If students can successfully complete the organizer, you will know that they have not only learned the information but have also internalized and organized it into meaningful chunks.

Materials

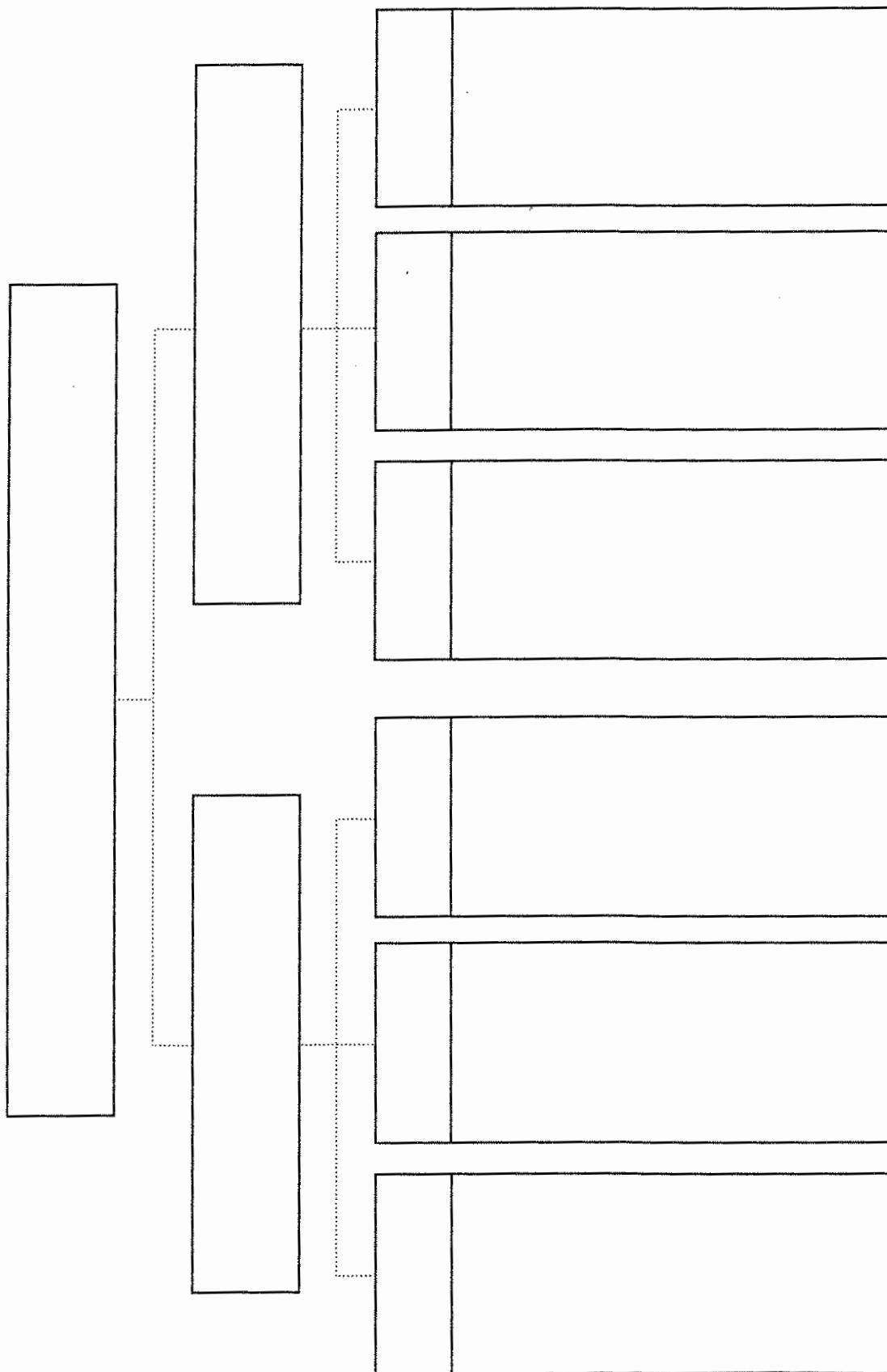
- Copies of the graphic organizer of your choice (or an overhead transparency from which students may copy the format). We include several in this chapter: Concept Map (page 22), Reading Road Map (pages 23–24), and Essay Organizer (page 25)
- Graphic Organizer Checklist (page 31)
- Graphic Organizer Rubric (page 32)

Procedure

1. Keeping in mind the objective or standard you want your students to demonstrate, choose the graphic organizer that will best help them organize the information or ideas. For example, a Concept Map will help students summarize and organize information they have learned from lectures, discussions, and research (see the leveled variations on page 26). The Essay Organizer serves as a prewriting map of ideas for an informational essay on any topic (see examples on page 27). As you begin a unit of study, you may choose to provide a Reading Road Map for students to complete as they read and process a required textbook passage (see the example on page 29).

2. To tier or level the organizers for different readiness needs in your class, consider what response or information would satisfy grade-level expectations. Make sure that the on-level organizer you shape asks this appropriately. Provide students who need more support with a scaffolded version of the on-level organizer. For example, you might fill in some sections or reduce the amount of information that's required. You might also design a more advanced organizer for students who need a more challenging task. (Consider tasks that require more analysis, evaluation, and synthesis, that involve more steps, or that deal with more-complex information.) To see how you might make simple adjustments to level the organizers in this chapter, see the tiered examples of the Concept Map (page 28) and Essay Organizer (page 30).
3. Using an example on the overhead projector, model how to use the graphic organizer with the class. Be clear about your expectations for the assignment: you want students' best work. To make sure students are comfortable with one organizer before introducing another, do not introduce more than one organizer at a time.
4. To scaffold instruction, have students work in small groups or partnerships to complete an example of the organizer you have just modeled. Circulate and assist groups as needed.
5. Assign students to complete an organizer for independent work when you are certain that they understand the task. This is the time to work with small groups to introduce a leveled organizer that challenges them appropriately.
6. Before students turn in a graphic organizer, have them evaluate the assignment. You may want to provide them with the Graphic Organizer Checklist (or a checklist you've created) to target areas to improve and revise. Or you may give students the Graphic Organizer Rubric (or a rubric you've developed) before they begin the activity. Students can use the rubric to plan for and later refine and improve their activity.
7. Score the completed organizers with the rubric.

Concept Map

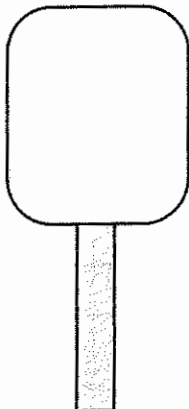
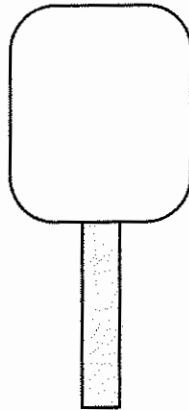
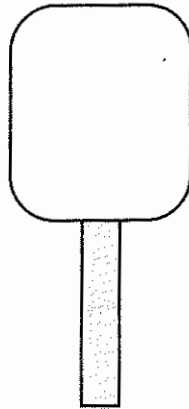
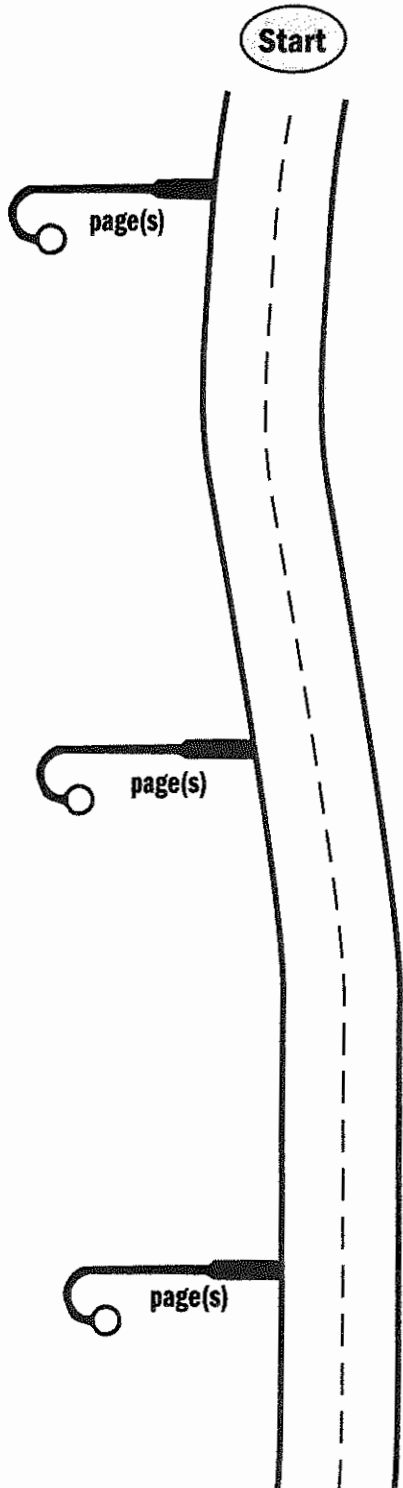


Reading Road Map

Location

Speed

Mission



Answer the following questions.

1. _____

2. _____

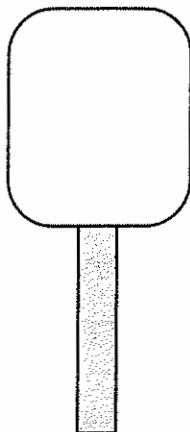
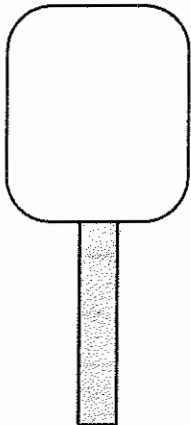
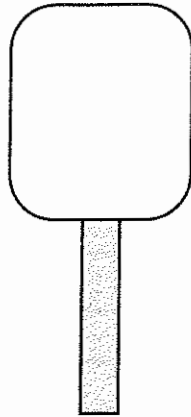
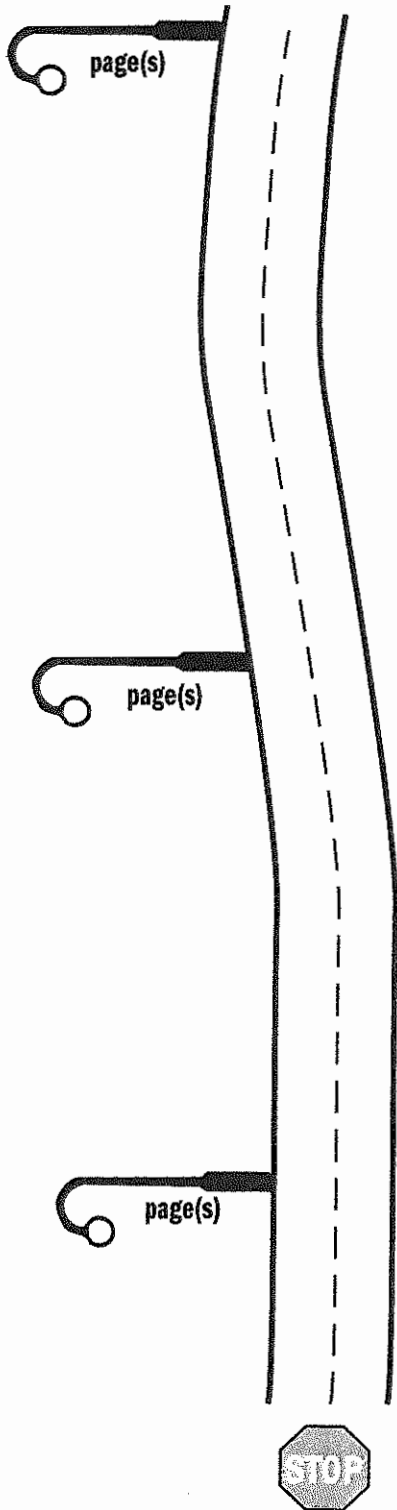
3. _____

Reading Road Map

Location

Speed

Mission



Answer the following questions.

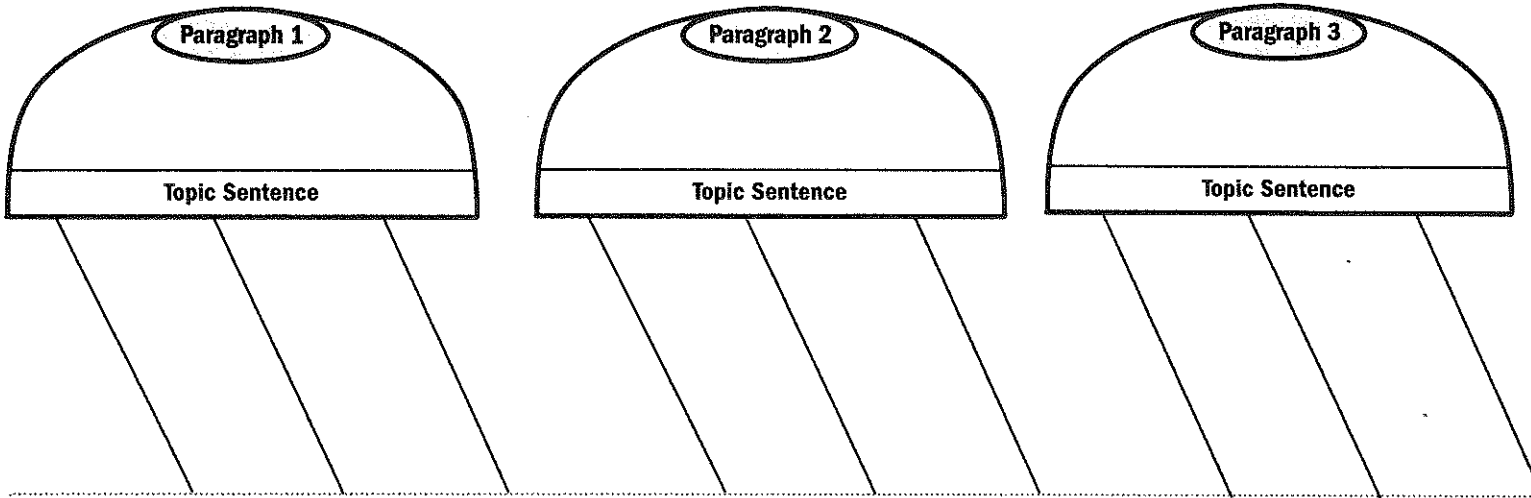
4. _____

5. _____

6. _____

Essay Organizer

Hook Paragraph: (3 sentences minimum) _____



Concluding Paragraph: (3 sentences minimum) _____

Common Transitions:

One thing, Another, Whereas, Additionally, For example,
However, Obviously, On the other hand, In conclusion, In summary, Thus

Time Transition Words:

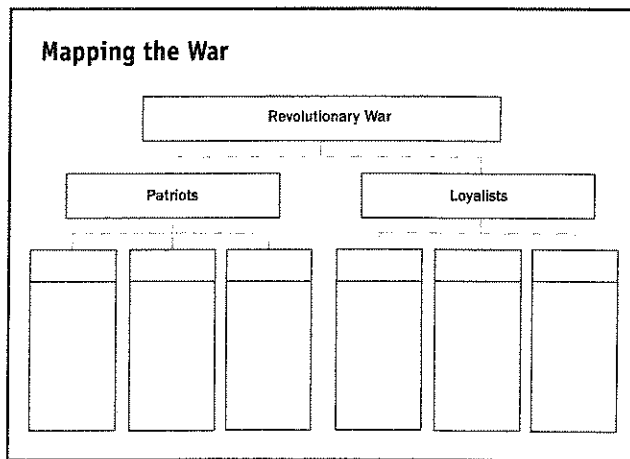
First, Next, Thereafter, During, Later, Then, Finally

Concept Map

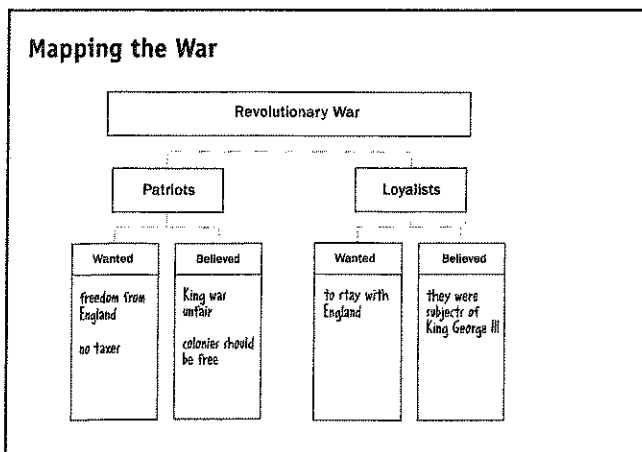
Social Studies: The American Revolution (tiered)

Working on a Concept Map organizer that is appropriately leveled allows each student to demonstrate his or her understanding of a big concept in the same reading assignment. During our study of the Revolutionary War, I wanted my fifth graders to be aware of the differences between the Loyalists and Patriots: why they chose the side they did, what their beliefs were, and some famous people on each side. I used only two detail boxes for students needing the most support and added an additional subtopic for students who were able to grasp more information.

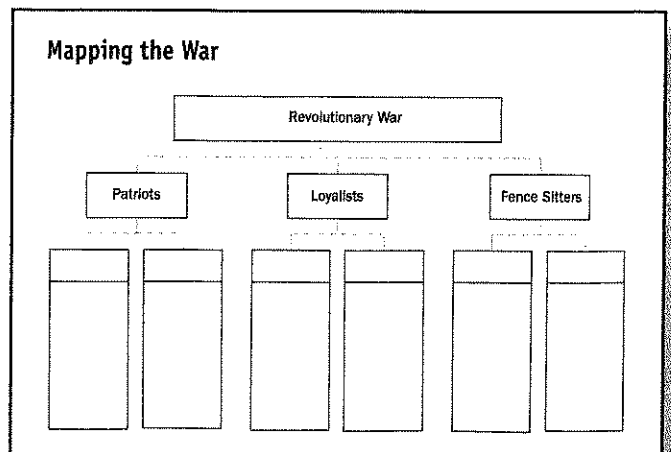
On-Level Assignment



Below-Level Assignment



Above-Level Assignment



Essay Organizer

Science: Informational Essay

Across the board, middle schoolers' writing tends to lack organization. Before students complete any content-area writing, we have them use an organizer to help them process and structure the information. These tiered essay organizers allow science students at different readiness levels to gather information and organize their research notes to write an essay, in this case on fungi. As the difficulty of the organizers increases, the advanced students are asked to use more sophisticated transitions and supply additional information. At the same time, students aren't concerned about having different assignments than their peers because all the organizers are structured in the same way.

On-Level Assignment

Informational Essay

Hook Paragraph: (3 sentences minimum)

Paragraph 1 Paragraph 2 Paragraph 3

Topic Sentence Topic Sentence Topic Sentence

Concluding Paragraph: (3 sentences minimum)

Common Transition Words:
One thing, Another, Whereas, Additionally, For example, However, Obviously, On the other hand

More Transition Words:
First, Next, Therefore, In brief, Without a doubt, During, Later, Then, Finally, In conclusion, In summary, Thus

Below-Level Assignment

Informational Essay

Hook Paragraph: (2 sentences minimum)

Paragraph 1 Paragraph 2 Paragraph 3

Topic Sentence Topic Sentence Topic Sentence

Concluding Paragraph: (2 sentences minimum)

Common Transition Words:
One reason, Another, Also, In addition, Definitely, For example, In fact, Again, Besides

More Transition Words:
First, Next, After that, After a while, At this time, During, Later, Then, When, Finally, In conclusion, Thus

Above-Level Assignment

Informational Essay

Hook Paragraph: (4 sentences minimum)

Paragraph 1 Paragraph 2 Paragraph 3

Topic Sentence Topic Sentence Topic Sentence

Concluding Paragraph: (4 sentences minimum)

TIPS

- Experiment with your "hook" Write the Introduction with two different types of leads.
- Remember to use effective transitions to guide your reader through your writing.
- Write a conclusion that does more than just summarize—let it guide your reader to a new question or level of understanding.

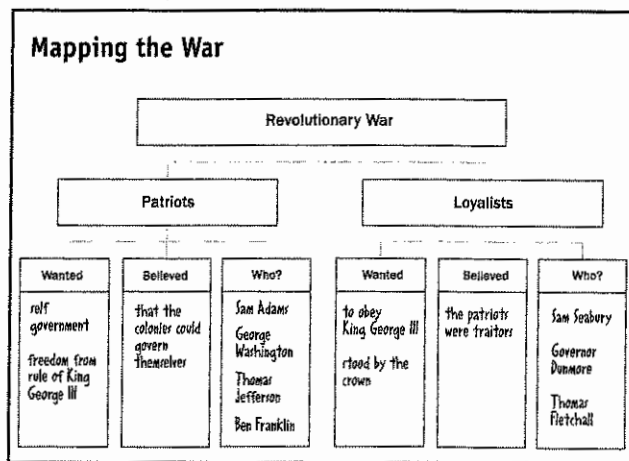
Concept Map: Social Studies

(American History, American Revolution assignment, page 26)

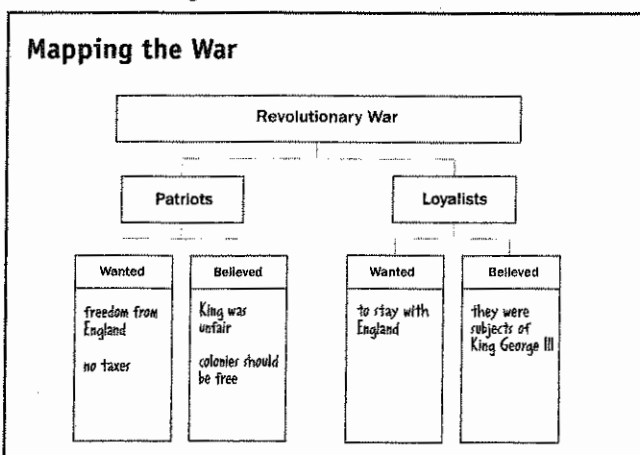
ASSIGNMENT NOTES:

Our objective was to understand the beliefs and backgrounds of key groups in the Revolutionary War. For students working below level and on level, it was enough to know at least two main differences between the groups. For the advanced students, it was important that they also knew of the "fence-sitters" and the impact they had on the Revolution. Even in the below-level assignment shown here, students were guided to find two key characteristics about each group.

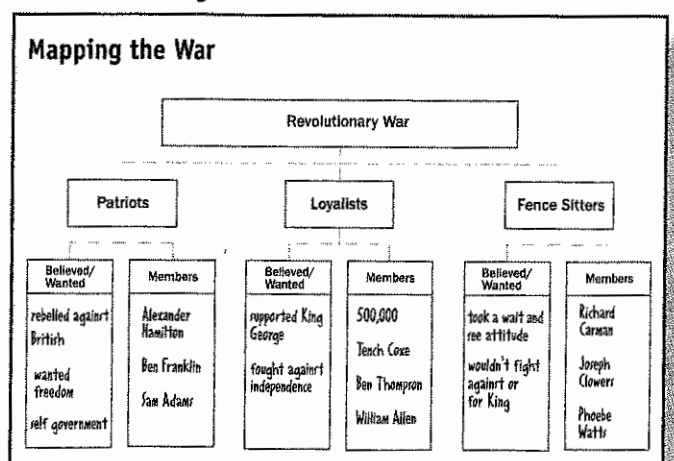
On-Level Assignment



Below-Level Assignment



Above-Level Assignment



Reading Road Map: Science

(Earth Sciences, Oceans)

ASSIGNMENT NOTES:

This Reading Road Map organizer was designed for use in an inclusion class. It helps students who need support to locate important information while reading assigned content-area material. This particular organizer helped students navigate "Oceans," a selection from a seventh-grade science textbook, which was challenging for many of our students. It highlights the main points and prompts them to fill in key ideas as they read. To prepare this organizer, we completed the Location, Speed, and Mission columns based on the main ideas of the reading, and structured the space appropriately to guide the type and length of response students gave.

Reading Road Map

Location	Speed	Mission
<p>Importance of Oceans page 522</p> <p>page(s)</p>	<p>Start</p> <p>Read Quickly Fill in blanks</p>	<p>Answer the following questions.</p> <p>1. Describe five ways that Earth's oceans affect your life.</p> <p>food _____</p> <p>minerals _____</p> <p>transportation _____</p> <p>weather _____</p> <p>fuel _____</p>
<p>Origins of Oceans page 523</p> <p>page(s)</p>	<p>Slow Down Write</p>	<p>2. According to scientific hypothesis, how were Earth's oceans formed?</p> <p>When Earth started to cool after being formed, water vapor began to condense and fall as rain quickly filling lower levels of Earth's crust forming oceans.</p>
<p>Composition of Oceans Page 523-524</p> <p>page(s)</p>	<p>Slow Down Complete the Sentence</p>	<p>3. When do scientists hypothesize the oceans were formed?</p> <p>4 billion years ago</p>
		<p>4. Today, <u>70</u> percent of Earth's surface is covered by <u>oceans</u></p>
		<p>5. Ocean water contains <u>oxygen, carbon dioxide, nitrogen and other dissolved gases</u></p>

Reading Road Map

Location	Speed	Mission
<p>Composition of Oceans Page 523-524</p> <p>page(s)</p>	<p>Slow Down Think Write</p>	<p>Answer the following questions.</p> <p>6. How does oxygen get into the oceans?</p> <p><u>from organisms in the ocean that photosynthesize and straight from the atmosphere</u></p>
<p>Composition of Oceans Page 523-524</p> <p>page(s)</p>	<p>Slow Down Complete the Sentence</p>	<p>7. Ocean water contains many dissolved salts. Chloride, sodium, sulfate, <u>magnesium, calcium, and potassium</u></p>
<p>Composition of Oceans Page 523-524</p> <p>page(s)</p>	<p>Read quickly Define</p>	<p>8. Salinity <u>is how much salt is found in dissolved ocean water</u></p>
		<p>9. Name three methods of removing desalination.</p> <p><u>1) melt frozen ocean water</u></p> <p><u>2) passing the ocean water through a membrane</u></p> <p><u>3) allowing ocean water to evaporate on a glass roof and collect the leftover fresh water</u></p>

Essay Organizer: Science

(Life Sciences, Fungi)

ASSIGNMENT NOTES:

These organizers were designed for a diverse group of students who were preparing to write informative essays on fungi. In the example on the top; a student needing extra support filled in the organizer during small-group work with teacher guidance. Meanwhile, other students were able to work independently or in pairs with their research notes to complete the above-level organizer. Both met prewriting goals.

Below-Level Assignment

Informational Essay

Hook Paragraph: (2 sentences minimum) Nongreen plants are called fungi.
They grow above ground.

Paragraph 1
Topic Sentence: First, mushrooms are fungi.
Leads: Some can be eaten
They can't photosynthesize

Paragraph 2
Topic Sentence: Second, mildew is a kind of fungi.
Leads: Grow in a damp place
Some are parasites

Paragraph 3
Topic Sentence: A third kind of fungi is mold.
Leads: Grow on cheese or bread
Have roots

Concluding Paragraph: (2 sentences minimum) In conclusion, there are three main kinds of fungi. None of them contain chlorophyll, so they aren't green. Fungi are amazing.

Common Transitions: One reason, Another, Also, In addition, Definitely, For example, In fact, Again, Besides

Time Transition Words: First, Next, After that, After a while, At this time, During, Later, Then, When, Finally, In conclusion, Thus

Above-Level Assignment

Informational Essay

Hook Paragraph: (4 sentences minimum) What do mold, mildew and mushrooms have in common? They are all fungi. Fungi use spores to reproduce, and cannot make their own food. Fungi are fun!

Paragraph 1
Topic Sentence: Molds can be helpful or harmful
Leads: can cause illness
can make food spoil
used for blue cheese
broth
used to make antibiotics

Paragraph 2
Topic Sentence: Mildew is a thread-like growth of fungi.
Leads: live on clothing
have a stinky smell
can be a parasite
dampness
likes warmth and moisture

Paragraph 3
Topic Sentence: Another type of fungi is mushrooms.
Leads: can be used to eat for medicine & drug work
reproduce with spores
over 2,000 varieties
grow on logs, ground and living trees

Concluding Paragraph: (4 sentences minimum) In summary, mold, mildew, and mushrooms are all types of fungi. There fungi can be harmful or helpful. They are interesting to study. You may want to research them and find out more.

TIPS: • Experiment with your "hook." Write the introduction with two different types of leads.
• Remember to use effective transitions to guide your reader through your writing
• Write a conclusion that does more than just summarize—let it guide your reader to a new question or level of understanding.

GRAPHIC ORGANIZER CHECKLIST

Name _____ Date _____

Graphic organizer title _____

Content

- I've included the most important information about my topic/subject.
- There's something else I could add: _____

Accuracy

- I've checked the information presented in the organizer. It is correct.
- I still need to check some facts. I'm going to check the following: _____

Completion

- I filled in the entire organizer.
- There are still unfinished parts. I need help with: _____

Focus

- I stuck to the activity described in the directions.
- I did it differently. (Explain.) _____

Neatness

- The organizer is neat enough to read.
- I need to recopy it so it's legible.

Changes made:

-
-
-
-

Date turned in: _____

Graphic Organizer Rubric

Date

Assignment Traits		←				
Content Does the organizer include the most important information about the topic/subject? Were there noticeable gaps in the information?	5	4	3	2	1	
Comments:						
Accuracy Is the information in the organizer accurate?	5	4	3	2	1	
Comments:						
Completion Is the organizer filled in completely/adequately?	5	4	3	2	1	
Comments:						
Focus The student stuck to the assigned activity.	5	4	3	2	1	
Comments:						
Neatness The organizer is neat enough to read and represents the student's best work.	5	4	3	2	1	
Comments:						
Grade (based on levels attained for each criterion)						
Scoring key			Assessment guide			
25-24 = A+	19 = B+	14 = C+	10 = D	5 = Advanced		
23-21 = A	18-16 = B	13-12 = C	9 = D-	4 = Proficient		
20 = A-	15 = B-	11 = C-		3 = Basic		
				2 = Below Basic		
				1 = Novice		

Name