

Lesson Plan: Writing TIQA Paragraphs About Rock Types

Grade level: Middle school | Duration: 30 minutes

Learning Objectives

- Students will define the TIQA paragraph structure (Topic, Introduce, Quote, Analyze).
- Students will create a short TIQA paragraph about one rock type (igneous, sedimentary, or metamorphic), including each of the four required elements.
- Struggling writers will use sentence starters and visual aids to support writing.

Materials for Students

- TIQA graphic organizer with color-coded sections (Topic, Introduce, Quote, Analyze).
- Sentence starter strips (e.g., “According to _____, _____” or “This shows that _____”).
- Printed facts about rocks (e.g., “Sedimentary rocks form when tiny particles press together”).
- Peer review checklist (with checkboxes and emojis for easy self-assessment).

Adaptations for Accessibility

- Provide visuals of rock types (e.g., lava, sandstone, marble) for reference.
- Show a video about rock types to help students build background knowledge.
- Allow verbal sharing of responses for students who struggle with writing, so they can clarify their ideas before committing them to writing. .

Lesson Plan

Step 1: Introduction to TIQA (5 minutes)

1. Explain TIQA with simple terms:
 - “TIQA is a writing strategy to help you organize your ideas. It supports us in using and analyzing evidence to support our central ideas.
 - TIQA is an acronym for the parts of the paragraph structure:
 - -Topic: Your paragraph’s main idea.
 - -Introduce: Name the source (textbook, scientist, article) and include a synonym for “says”.
 - -Quote: Copy the exact words with quotation marks or paraphrase.
 - -Analyze: Explain how the quote supports the main idea.”
2. Think-aloud example using igneous rocks:

- Introduce your writing by sharing a prompt with students. “The prompt asks me, ‘How is igneous rock formed?’”
- “Hmm, I remember that metamorphic rock is formed from lava that hardens.
- “My topic is, ‘After it flows from a volcano, lava hardens to make rocks called igneous rocks.’ I’ll introduce the source first: ‘As explained in our textbook, ...’ Here’s a quote that is evidence for my topic: ‘Molten rock cools quickly on the surface.’ Then I’ll analyze it: ‘When a liquid cools enough, it becomes a solid, like we see with water becoming ice.’”

Step 2: Guided Practice with Sentence Frames (20 minutes)

1. Project the sentence frames for the class. Distribute printed copies for students who struggle with copying across the room.
2. Model filling one section at a time. Work with the class to write a TIQA paragraph on the board or interactive panel using the class’s ideas. Say, “We are going to write a TIQA paragraph about one type of rock. Choose one type from the textbook section and think of a topic sentence.” Have students share their answers to the following questions, guiding them to help you write one TIQA paragraph about one type of rock.
 - “What is your main idea or answer to the prompt?” (Topic)
 - “Who is speaking for your quote? What is the context of the quote?” (Introduce)
 - “Which quote did you choose as evidence for your topic?” (Quote)
 - “Why is this quote important? Explain like you’re talking to a friend.” (Analyze)
3. Encourage students to use the sentence starters and color-code their sections.

Step 3: Group Work with Peer Feedback (10 minutes)

1. In pairs, students create a TIQA paragraph about sedimentary or metamorphic rocks using provided facts. Example rocks:
 - Sedimentary: Sandstone (particles of sand), shale (from mud).
 - Metamorphic: Marble (from limestone), slate (from clay).
2. Partners use the checklist to give feedback:
 - **Topic** sentence makes a clear statement.
 - **Introduction** names a trustworthy source.
 - **Quote** is in quotation marks.
 - **Analysis** explains “why” or “how”.

Step 4: Exit Ticket & Sharing (10 minutes)

1. Share another short text or a video.
2. Distribute a quarter sheet of colored paper to each student.
3. Ask students to write a TIQA paragraph on the small paper and color-code the sections:
 - **Topic sentence**
 - **Introduction**

- Quote

- Analysis

4. Encourage volunteers to share aloud.
5. After class, add strong examples to a large TIQA poster or bulletin board for classroom reference. This could be a display of example phrasing for the strategy that students can use if they get stuck. Add sticky notes with your feedback to highlight why these examples are exemplary.

Teacher Notes for Flexibility

- **Scaffolding:** For students who write slowly or with excessive effort, consider using predictive software or partially filling in a graphic organizer to support them in keeping up with the class.
Example:
 - Topic: “_____ rocks are formed through _____.”
 - Introduce: “_____ states”
 - Quote: Copy exactly or paraphrase: “_____”
 - Analyze: “This shows _____ because _____.”
- **Challenge:** Advanced students can try “TIQATIQA” by adding a second quote with a transition phrase like “In addition, _____” or a transition sentence, such as “Many scientists believe that ...”
- **Review:** Use a short video clip about rocks (1–2 minutes) for visual learners and include it as a source for the “Introduce” step. Be sure to turn on closed captioning and be ready to pause the video or teach students to do so.

Assessment

- Check exit tickets from Step 4 for correct structure (Topic includes main idea, introduction provides the source and makes it clear that the source said the quote, quote provides evidence, and analysis connects the quote to the topic sentence).