

Think, Puzzle, Explore

A routine that sets the stage for deeper inquiry.

- What do you think you know about this topic?
- What questions or puzzles do you have about this topic?
- How might you explore your puzzles about this topic?

PURPOSE

What kind of thinking does this routine encourage?

This routine activates prior knowledge, generates ideas and curiosity, and prepares students for deeper inquiry.

APPLICATION

When and where can I use it?

This routine works especially well when introducing a new topic, concept, or theme in the classroom. It helps students recall what they already think they know about the topic and then invites them to identify puzzling questions or areas of interest to pursue. This routine can help you gauge students' current understanding of a topic and inform your subsequent lesson planning. You might return to this thinking routine throughout the study of a topic to surface changes in student conceptions.

LAUNCH

What are some tips for starting and using this routine?

With each question in the routine, give students adequate time to think about and identify their ideas. You may want to have students write down their individual responses to the routine before sharing them with others. Students could document their responses in a journal.

The routine can be used to engage a class at the beginning of a new topic or unit. At first, students may list seemingly simplistic ideas and questions. It also is common for students to have misconceptions about the topic. As you're documenting students' responses, be sure to list these initial conceptions so all ideas are available for reconsideration after further study. Encourage students to think about things that are truly puzzling or interesting to them.

At times, you may want to use some of the questions in the routine by themselves. For example, you can use the think section of the routine at the end of a unit as a reflective tool. You may also want to use the puzzle section of the routine to remind students that there will always be more to learn about a topic and that learning is a continual process.

This thinking routine was developed as part of the Visible Thinking project at Project Zero at the Harvard Graduate School of Education. Explore the full PZ Thinking Routine Toolbox at pz.harvard.edu/thinking-routines.