

Parts, Purposes, Complexities

A routine for looking closely at systems.



Choose an object or system and ask:

What are its **parts**?

What are its various pieces or components

What are its **purposes**?

What are the purposes of each of these parts?

What are its **complexities**?

How is it complicated in its parts and purposes, the relationship between the two, or in other ways?

Purpose: What kind of thinking does this routine encourage?

This thinking routine helps students slow down and make careful, detailed observations by encouraging them to look beyond the obvious features of an object or system. This thinking routine helps stimulate curiosity, raises questions, and surfaces areas for further inquiry.

Application: When and where can I use it?

This thinking routine can be used to explore any object or system. This routine can be used on its own, or in combination with another routine. Here are some ideas and considerations for putting this thinking routine into practice:

The routine provides an opportunity to make students' thinking visible through creating lists, maps, and drawings of the parts, purposes, and complexities of various objects and systems. You may introduce the three elements of this routine all at once, or you may want to introduce the three elements of the routine one at a time.

If an object students are working with is present and/or physically visible, students might not need a lot of background knowledge. However, if students are working with a system—like democracy—it may be helpful for students to have background knowledge or to give them an opportunity to reflect on their experiences interacting with that particular system.

To take this routine to the next level, after students have considered the parts, purposes, and complexities of an object as it is, you may consider having students take apart the objects they are working with—and then continue to identify the parts, purposes, and complexities they notice using different colored markers. You may consider swapping out the word “complexities” for more accessible terms, such as puzzles or questions.

Share your experience with this thinking routine on social media using the hashtags [#PZThinkingRoutines](#) and [#PartsPurposesComplexities](#).