Parts, Purposes, Complexities
for younger children

Looking Closely.

Parts

Choose an object or system and ask:

What are all of its parts?

Purposes

Why do we use the object or system? What does it do?
What does each part do?

Complexities

Wow do the parts work together to make something happen?
What would happen if a part were missing or changed?

For more information about the Agency by Design project, as well as additional resources, please visit agencybydesign.org.

For more information about the Artful Thinking project, as well as additional resources, please visit pzartfulthinking.org.

Share your experience with this thinking routine on social media using the hashtags **#PZThinkingRoutines** and **#PartsPurposesComplexities**.

PZ PROJECT ZERO
HARVARD GRADUATE SCHOOL OF EDUCATION

AbD Agency by Design

ARTFUL THINKING

This thinking routine was originally developed by the Artful Thinking project, and adapted by the Agency by Design project at Project Zero, Harvard Graduate School of Education.
Explore more Thinking Routines at pz.harvard.edu/thinking-routines

Parts, Purposes, Complexities
for younger children, cont'd

Purpose: What kind of thinking does this routine encourage?
This routine encourages learners to slow down and make careful, detailed observations as they look beyond the obvious features of an object or system and think about how it works. This thinking routine can help foster curiosity as children notice details, ask questions, make connections, and identify topics for future inquiry.

Application: When and where can I use it?
You can use this thinking routine to explore any object or system. You may choose to introduce the entire routine at once, or you may choose to break it down into parts over multiple occasions.

- This routine provides an opportunity for children to make their thinking visible. Children can show their thinking through drawings, photos, role play, and/or writing.

- If you are using this thinking routine with young learners, consider having them explore an object or a system they have direct experience with. This way, all children can apply and build upon their prior knowledge in meaningful ways. We suggest you start with objects or systems in your classroom or community that students use regularly.

- Help children develop their language and literacy skills by encouraging them to work together and to discuss what they notice with a partner. Consider creating a class word wall of descriptive language that the class can use and add to over the course of the school year.

- To encourage children to deepen their understanding of the parts, purposes, and complexities of the object under study, have them take apart the object. Then, repeat the thinking routine while looking closely at the separate parts.

- You may realize, as you engage with this thinking routine, that the system you have selected is more complicated or abstract than you originally thought. This is okay. Help students look closely at the parts that they are interested in, and feel free to help them seek more information by asking each other, by using books or the internet, or by consulting with community members. It is okay if students have unanswered questions about the system. Consider documenting these questions to revisit if the opportunity presents itself later on.

Note: This thinking routine is adapted from the Agency *by* Design *Parts, Purposes, Complexities* thinking routine.

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