

# Imagine If...

**A routine for imagining ways to improve objects or systems through creative redesign.**

Choose an object or system and use the prompts.

- In what ways could it be made to be more **effective**?
- In what ways could it be made to be more **efficient**?
- In what ways could it be made to be more **ethical**?
- In what ways could it be made to be more **beautiful**?

## PURPOSE

**What kind of thinking does this routine encourage?**

This routine helps students investigate objects and systems and how they might be redesigned by identifying new ideas and inviting divergent and convergent thinking.

## APPLICATION

**When and where can I use it?**

This thinking routine can be used to explore the possibilities of improving, tinkering with, and/or tweaking any object or system. While it is important for students to generate ideas within a wideopen possibility space, it is helpful to place creative constraints on that possibility space. You may do this by limiting the variety of tools and materials students have access to, presenting certain functionality criteria, or identifying a particular population or user group.

## LAUNCH

**What are some tips for starting and using this routine?**

This thinking routine asks students to imagine new ways to improve an object or system by looking at the possibility space around an object or system through four different lenses. While we find these four lenses helpful to consider, you and your students are encouraged to come up with others. When considering how to redesign or hack an object or system, it is exciting to see students generate a list of big, unbounded ideas, but it is also important for students to be sensitive to the design of their objects or systems. You might want to consider using one of the following thinking routines that help students think about objects and systems before doing this routine. These include: Parts, Purposes, Complexities; Parts, People, Interactions; or, Parts, Perspectives, and Me.

## FACILITATION

This activity is recommended for the following learner age ranges:

Preschool

15-30 minutes

Heavily facilitated by peer/teacher/caregiver

Elementary School

15-30 minutes

Heavily facilitated by peer/teacher/caregiver

Middle School

15-30 minutes

Lightly facilitated by peer/teacher/caregiver

High School

15-30 minutes

Lightly facilitated by peer/teacher/caregiver

---

This thinking routine was developed as part of the Agency by Design project at Project Zero at the Harvard Graduate School of Education. Explore the full PZ Thinking Routine Toolbox at [pz.harvard.edu/thinking-routines](https://pz.harvard.edu/thinking-routines).

© 2022 President and Fellows of Harvard College and Project Zero. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND). This license allows users to share this work with others, but it cannot be used commercially. To reference this work, please use the following: The Connect, Extend, Challenge thinking routine was developed by Project Zero, a research center at the Harvard Graduate School of Education