

See, Wonder, Connect x2

A routine for looking closely and making connections to deepen understanding.

Explore an image, object, or work of art:

1. Look closely: What do you notice? Make many observations.
2. What questions do you have? What do you wonder about?
3. How could this connect to subjects you study in school?
4. How could this connect to your personal interests or hobbies?

PURPOSE

What kind of thinking does this routine encourage?

The goal of the routine is to help students appreciate how looking closely at something can expand one's understanding of it, which in turn can provide a basis for making connections to other things. The routine encourages students to explore the interconnectedness of knowledge, and to understand that if they intentionally look for connections, they can find them. And because this routine is supposed to be used 'routinely,' the eventual goal is for students to internalize the habit of looking for connections.

APPLICATION

When and where can I use it?

It works well toward the beginning of a topic of study because it begins by drawing on visual information students can readily see, and thus tends to be immediately engaging. Also, using the routine early in a topic of study encourages students to frame their learning as transfer-oriented from the outset. That said, the routine is a variation of the Visible Thinking routine, See | Wonder | Connect, which is a highly versatile routine that can be used at virtually any point in a learning trajectory.

LAUNCH

What are some tips for starting and using this routine?

What kind of image or object should the routine be used with? The routine encourages students to look deeply and go beyond the obvious, so it works with a wide variety of images and objects—even items whose surface appearance is plain. Everyday objects, images in the media, book covers, works of art, all work well. Often teachers choose a physical object or image that directly relates to a topic—a ruler, a map, a leaf, a portrait, a historical artifact or photograph. But don't be afraid to experiment: Let yourself be surprised by what students will be able to uncover, even when you can't envision ahead of time where students' observations will lead them.

Are there specific ways to encourage the See step? The main thing is to provide a timeframe that encourages students to prolong their looking, but doesn't feel too long. For example, give students a full minute to look quietly, noticing as many details as they can, before asking students to share their observations. Also, encourage students to elaborate by asking them to describe a particular observation in more detail. It also helps to simply prompt them to keep looking by periodically asking, "What else do you see?"

Are there specific ways to encourage students the Wonder step? One important thing you can do is to encourage students to ask different kinds of questions. For example, they might ask questions about what an item is made of, how it is made, who made it or how it came to be, who it is important to, how it be different, and what role the item plays in larger systems.

Are there specific ways to encourage the Connect steps? There is no getting around the fact that making connections can be challenging. Don't be afraid to encourage students to stretch to make connections: Does the object or image visually resemble something else they have seen? Is it structurally similar to other things they know about? Is its purpose similar? Was it made in a way that reminds them of other things? Does it connect to events they know about or can imagine? Does it have a history that connects to other things? Are there ideas or assumptions behind the object that connect to other contexts? Is it part of a larger system that connects to other things?

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