

Asking Unanswerable* Questions

Use this tool to discover children's thinking about questions with more than one answer.

Step 1: Develop an unanswerable question related to a topic of inquiry

An unanswerable question is one that truly has no single, definitive, right answer — perhaps a question you have noticed children grappling with. Often philosophical in nature, these questions require imagination, benefit from collaborative dialogue, and give us practice navigating the uncertain. For example: *What stories live inside a flower?* OR *How can you create a boundary that doesn't make others feel excluded?*

Step 2: Prepare with children to discuss the question

Set expectations and make agreements about the discussion. Will children need to raise their hands? How will disagreements be addressed? How will children help each other bring their voices forward? What is your role as teacher? Do you want others (children or adults) to play a certain role or have responsibilities?

Step 3: Facilitate a conversation among the children

Keeping the agreements in mind (post them nearby), facilitate a dialogue among children. Consider using a "turn and talk" during the conversation. Encourage children to connect their ideas.

- Offer your observations: I notice that Elena's idea built on Lois's idea in this way...
- Draw out participation from children who appear to have ideas they have not yet shared: Connor, did you want to jump in?
- Clarify ideas: I heard Alijah say _____. Does anyone have a connection to that?
- Be a memory keeper: When we started this conversation, Ollie said _____. Do you still agree with that, Ollie? Have your ideas shifted since we've been talking? Has anyone else's ideas changed?

Step 4: Introduce materials to further children's thinking

Choose materials so that each child or small group can develop and represent their theory about the question under discussion. How can you use blackline pen (or clay, watercolors, india ink, etc.) to express your current theory about this question?

Step 5: Facilitate individual or group reflection

Questions might include, What do you think now that you didn't think before? How did your thinking change during the conversation? How did the materials further your thinking? Are there different agreements or processes you think we might try the next time we dive into an unanswerable question?

* We borrow the word *unanswerable* from a conversation with a group of Opal School 3rd-graders, who used the term to refer to questions with no single or commonly accepted answer.

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Children need to value the known and the unknown — to see beyond what already exists towards unimagined possibilities.

Asking unanswerable questions opens the door to invention. Teachers can model uncertainty by asking children questions to which there is no single or definitive answer. Your genuine curiosity will communicate to children that their ideas are relevant to what you are trying to learn. Consider posing questions that have never been asked before, or questions that have been asked by philosophers and scientists throughout human history for which there is no resolution. These questions build a collaborative, inventive classroom culture by launching a group of learners into the unknown; they encourage children to think critically and creatively, to develop theories based on their current understanding, and to grapple with and build on each other's ideas.



Suggested Time Frame

At least an hour (for discussion and work with materials)

When and How

These questions create an excellent opportunity to work with materials (and to develop an [artist statement](#)) and to hold a “science talk.” For more on science talks, see Karen Gallas’s book, *Talking Their Way Into Science* (1995; New York: Teachers College Press).

Tips and Variations

- There are many different types of questions. Good questions support the development of relationships among children, adults, ideas, and materials. They provoke us to engage deeply with materials.
- Go public with children’s theories. You might display them in the classroom or hall, make a class book, or publish them in a family newsletter.
- Explore big questions with your colleagues; approach uncertainty about your own practice with curiosity and vulnerability.
- It can be difficult to facilitate and document at the same time; recording and listening to the conversation later will enable you to hear things you missed the first time. Make provocative ideas that you want to return to later on visible in the classroom.

For video examples and reflections on practices that inspire inventiveness, become an Opal School Online Sustaining Member at learning.opalschool.org.

