

Example Planning Tool

Target Core Ideas



Planning a sequence of learning experiences that allows students to add to their understanding of a disciplinary core idea requires identifying a) the target component(s) of a core idea and b) learning goals that help move students closer to the target.

Curriculum Unit: Investigating Water Transformations

What Disciplinary Core Idea(s) (DCI) and grade level does the unit as a whole address? (from the NGSS)

5 PS1 Matter and its Interactions

Zoom in. Identify a short sequence of learning experiences that address a DCI.

Section 3. Water to Ice (Investigations 10, 11, and 12)

a) What component(s) of the DCI does this sequence of learning experiences target? (Refer to the NGSS.)

From PS1-A Structures and Properties of Matter:

- The amount (weight) of matter is conserved when it changes form. (5-PS1-2)
- Measurements of a variety of properties can be used to identify materials. (5-PS1-3)

Introduce:

- Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. (5-PS1-1)

b) Look for the learning goal(s) for this sequence of learning experience. List the ones that help students understand the target DCI.

Learning Goals for Investigations 10-12:

- Weight is conserved during melting and freezing so the amount of matter stays the same. Volume may not be conserved.
- Water is composed of particles that have weight, occupy space and are too small to see. During freezing and melting the number and kind of particles remains the same.
- Melting and freezing change the form of water, but not the material.

Are there parts of the learning experiences that you can omit because they don't contribute to understanding the target DCI?

Can't find anything!