

# Elements of Making

Makers connect to content-specific skills and disciplinary core ideas as they research, build and create. Educators can purposefully highlight these concepts and practices to amplify their impact.

Makers engage in constructing products that involve personal meaning and self-expression. Making allows learners to showcase their talents, interests, and culture.

Makers describe their process, articulate design choices, and discuss important concepts as they share their work with the broader community.

Makers use a wide variety of materials and high- and low-tech tools. Like engineering, making involves designing prototypes, testing work, and engaging in a cycle of revision and refinement.

Makers connect in person and through digital forums to form vibrant communities where they showcase products, share feedback, and provide useful tips and resources.

Makers develop a mindset that is playful, experimental, and appreciates effort and persistence. With this mindset, creative thinking is a process of self-discovery that fosters agency and builds confidence. Highlighting these features through reflection and discussion can maximize the benefits for students.

Connections to Content

Personal Meaning

Sharing Work

Elements of Making

Iterative Fabrication

Community

Maker Mindset