



Cambridge Preschool Program (CPP) Science & Engineering

The Cambridge Preschool Program used the integrated Focus curriculum. As part of the learning routine, students engage with both Discovery Centers and Science and Engineering Centers as part of the broader curriculum. Through these centers, students develop their science and engineering skills and engage with content standards aligned to the MA STE Framework.

Unit	Description	Guiding Questions
I: Together in Our Community	Students and teachers build the foundation for a strong community of learners by developing caring and respectful relationships, routines, and expectations for how the classroom works. Children and adults share experiences through stories and play to explore feelings, identity, family, community, and what it means to be in school. They begin a year-long study of weather. The unit closes with a Showcase of Learning for families and community members.	● How do we make a community? ● What are roles in our community? ● Who are the people in our families, and how can they be part of our school community? ● How can we each contribute to our community? ● How do we work together and share our ideas? ● How can we communicate our ideas? ● How does weather affect our community?
2: Building our Working City	As children look around the city where they live, as they listen to the sounds it makes and see the people who populate it, they might begin to wonder what makes the city function. Who does what? What purpose does this serve? Why is it organized or built that way? What else can we imagine? In this unit of study, children and adults build on the community they have formed and the systems they have routine in Unit I to learn together about some of the structures, features, and people that make things happen in the city around us. In the last two weeks of the unit, children create a model of a city	● How can people build a city that works? ● What makes our neighborhood and city function? ● What evidence can we find of work people do? ● How are different kinds of work connected? ● What resources do we rely on to make our city work? ● How does weather affect what we build?

	street—including elements and features of a working city: transportation, communication, and infrastructure systems, construction, public art, and people’s roles.	
3: Animals All Around	In this unit, children notice and learn about animals in the immediate, urban environment, those that live outside the city but still close by (in Massachusetts), and those that live in the ocean. They also make direct connections between themselves and other animals. Throughout, children entertain questions about how animals live in their environments: Why and how do animals communicate? What body parts do different animals have, and how do they use those parts to help them live? How do animals move? How do we move? We also continue the year-long thread about weather, by considering how animals respond to varying weather and seasonal conditions. Towards the end of the unit, children’s knowledge about animals is incorporated into a class play! .	● How do animals live in their environments? ● Why and how do animals communicate? ● What body parts do different animals have, and how do they use those parts to help them live? ● How do animals move? How do we move? ● How do animals use their senses? ● How does weather affect animals?
4: Growing and Changing	This final unit, Growing and Changing, celebrates the multiple dimensions of children’s growth and encourages them to notice, wonder about, and represent other living things as they also change and grow. Children start plants and observe butterflies as they change from caterpillars to adults, recording what they notice. Children set up a Growing Gallery, sharing how they have grown and changed and their ideas about that, and sharing their work across the unit as their understanding about living things has grown and they look across their experience together and toward what comes next.	● How do we and other living things change as we grow? ● Why are plants important? ● What do living things need to grow and be healthy? ● How do plants and animals depend on each other? ● How does weather affect how things grow? ● How are we growing?

