

How Wee Engineer® Links to Head Start Early Learning Outcomes Framework

Preschool Learning and Development Goals	Indicators of Progress	How Wee Engineer supports this standard
Goal P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events	Makes increasingly complex observations of objects, materials, organisms and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	Children have the opportunity to use their senses to explore the properties of objects and materials as well as observe and discuss common properties, differences, and comparisons among objects. They can make simple observations, predictions, explanations, and generalizations based on real-life experiences and investigations. The opportunity is there to collect, describe, predict, and record information using words in both small and large group conversations, and to organize graphs and charts.
Goal P-SCI 2 Child engages in scientific talk	Uses a greater number of scientific vocabulary words. Repeats new words offered by adults and may ask questions about unfamiliar words.	Children will have the opportunity to be introduced to and incorporate scientific vocabulary words in both whole group and small group conversations. This could be conversations with adults as well as peers. The opportunity is there to contribute to the conversation about the materials in the idea box and as well as the suggestions to be made to the puppet (context), which is an opportunity to practice perspective-taking as well as making evidence-based decisions and discourse.
Goal P-SCI 3 Child compares and categorizes observable phenomena	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound,or texture. Uses Measurement tools to assess the properties of and compare observable phenomena.	Children will have the opportunity to explore the properties of materials and use the materials in ways to support exploration as well as use this information to make evidence-based decisions regarding the material properties and observed phenomena. There are multiple ways children get to explore the materials and imagine ways they can be used to solve a problem. There are opportunities to communicate this information through conversations as well as organize the materials in graphs.

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Goal P-SCI 5 Child plans and conducts investigations and experiments	With increasing independence, engages in some parts of conducting complex investigations or experiments. Increasingly able to articulate the steps that need to be taken to conduct an investigation. Uses more complex ways to gather and record data, such as with adult support, makes a graph that shows children's favorite snacks.	Children will have the opportunity to articulate and implement the three steps of the Engineering Design Process; to Explore, Create, and Improve their designs. Children have opportunities to use the sorting cards to help organize and summarize findings as well as contribute to the idea box to make final recommendations to solve the problem.
Goal P-SCI 6 Child analyzes results, draws conclusions, and communicates results.	With increasing independence, analyzes and interprets data and draws conclusions. With adult support, compares results from initial prediction and generates new questions or designs. For example, after putting multiple magnets together to create one magnet that is not strong enough to lift 10 paperclips, builds another and tries again. Communicates results, solutions, and conclusions in increasingly complex ways through multiple methods.	Children will have the opportunity to participate in simple investigations to form hypotheses, gather observations, and draw conclusions. They can also observe and discuss common properties, differences, and comparisons among objects and solutions to the problem. There is an extensive and intentional opportunity to improve the initial design as well as multiple methods to communicate information about the investigation.

- Wee Engineer teaches engineering content and links to science content, but does not teach science content. This resource should be used to find which Head Start standards align best with Wee Engineer.
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