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| --- | --- | --- |
| Grade Band | Standard |  |
| K-2.PA.3  | Arrange information using concept mapping tools and a set of statements that accomplish a simple task. | Big Ideas:* Students need to be able to describe a set of steps to complete a simple linear task.
* Students use tools (writing) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* Peanut Butter Sandwich (unplugged)
* Arrange programming shapes or words to produce a simple program (unplugged)
* Identify the task that is out of order (unplugged)
 |
| 3-5.PA.3 | Implement problem solutions using a block-based visual programming language. | Big Ideas:* Students need to be able to describe a linear set of steps to complete a linear task.
* Students use tools (block coding) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* Paired Drawing of a Box (unplugged)
* Paired Drawing of a House (unplugged)
* Task: Animate Your Name! https://resources.scratch.mit.edu/www/guides/en/NameGuide.pdf

(plugged, Scratch)* https://studio.code.org/s/course1/stage/4/puzzle/1(plugged)
 |
| 6-8.PA.2 | Implement problem solutions using a programming language [*that includes looping behavior, conditional statements, logic, expressions, variables, and functions]*. | Big Ideas: * Students need to be able to describe a linear set of steps to complete a more complex linear task with multiple commands.
* Students use tools (block coding or programming language) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* <https://studio.code.org/s/coursee-2018> (plugged)
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**Coding Structure: Sequencing**

What are the similarities that you notice across the grade bands? What are the significant differences that you notice across the grade bands?

Keeping in mind the advice from Michelle Roberts (Session 1), are there any pieces of the standards that can be moved from the middle school to the lower grades?

Since these are organized in bands, and considering your context, how might this work be distributed meaningfully for each grade level within the band?

**Coding Structure: Selection/Branching**

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| --- | --- | --- |
| Grade Band | Standard |  |
| K-2.PA.3  | Arrange information using concept mapping tools and a set of statements that accomplish a simple task. | Big Ideas:* Students need to be able to describe steps to complete a simple conditional task.
* Students use tools (writing) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* “Simon Says” activities with Cards https://code.org/curriculum/course2/12/Teacher (unplugged)
* Red Light/Green Light (unplugged)

<http://www.gameskidsplay.net/games/sensing_games/rl_gl.htm>* Tara Turtle (K – 2) <http://bit.ly/TaraTurtle> (unplugged)
 |
| 3-5.PA.3 | Implement problem solutions using a block-based visual programming language. | Big Ideas:* Students need to be able to describe steps to complete a conditional task.
* Students use tools (block coding) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* Tara Turtle (3 – 5) <http://bit.ly/TaraTurtle> (unplugged)
* Paper Blocks (if/else) https://drive.google.com/file/d/0B-uvt08wYSQqdG8tMGlyNWlHelk/view
* 5 Things About Yourself (plugged, Scratch)
 |
| 6-8.PA.2 | Implement problem solutions using a programming language [*that includes looping behavior,* conditional statements*, logic, expressions, variables, and functions]*. | Big Ideas: * Students need to be able to describe steps to complete a more complex task with multiple commands that includes conditional statements.
* Students use tools (block coding or programming language) to describe step-by-step procedures to accomplish a goal.

Sample Activities:* Tara Turtle Activity (6-8) <http://bit.ly/TaraTurtle> (unplugged)
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What are the similarities that you notice across the grade bands? What are the significant differences that you notice across the grade bands?

Keeping in mind the advice from Michelle Roberts (Session 1), are there any pieces of the standards that can be moved from the middle school to the lower grades?

Since these are organized in bands, and considering your context, how might this work be distributed meaningfully for each grade level within the band?