Select, organize, and interpret data sets from multiple sources to support a claim.

Students should be able to refer to data when communicating an idea. Early on, students should present basic data through the use of visual representations, such as storyboards, flowcharts, and graphs. As students progress, they should interpret and communicate larger data sets.

Describe, justify, and document computational processes and solutions

Students should be able to talk about choices they make while designing a computational artifact. Early on, they should use language that articulates what they are doing. As they progress, students should provide documentation for end users that explains their artifacts and how they function.

Articulate ideas responsibly by giving appropriate attribution.

All students should be able to explain the concepts of ownership and sharing. Early on, students should apply these concepts to computational ideas and creations. As they progress, they should identify instances of remixing, when ideas are borrowed and iterated upon, and give proper attribution.

Sample Student Task:

Students will analyze a simple data sample highlighting a societal problem. Students will think creatively to design and test a computational artifact to address the issue highlighted by the data. Students will present their artifact and explain how their solution addresses the issue, giving proper attribution throughout.

Resources:

- Sample Student-Created Data Sets
- Intellectual Property Lesson Plans
- K-12 Computational Thinking Practices in Action

Source: K-12 Computer Science Framework