# National School Library Standards Crosswalk with Code with Google’s CS First Curriculum

## One Hour Activities: Start coding with a single activity.

### Subject Specific

#### Characterization
Students provide details about a character who is missing a school assignment and use code to describe the character’s actions, thoughts, and words.

- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.3.** Generating products that illustrate learning.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.2.** Engaging in sustained inquiry
- **I.D.3.** Enacting new understanding through real-world connections

#### Interactive Presentation
Students create a new presentation, or take an existing one, and make it interactive in Scratch.

- **I.A.1.** Formulating questions about a personal interest or a curricular topic
- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.1.** Using evidence to investigate questions.
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.B.3.** Generating products that illustrate learning.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.2.** Engaging in sustained inquiry
- **I.D.3.** Enacting new understanding through real-world connections

#### Dialogue
Students program a conversation between two characters to explore the role of dialogue in storytelling.

- **I.A.1.** Formulating questions about a personal interest or a curricular topic
- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.B.3.** Generating products that illustrate learning.
- **I.C.1.** Interacting with content presented by others.
- **I.C.2.** Providing constructive feedback.
- **I.C.3.** Acting on feedback to improve.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.4.** Using reflection to guide informed decisions.

#### Narration
Students take an existing story and explore first and third person point of view.

- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.3.** Generating products that illustrate learning.
- **I.C.1.** Interacting with content presented by others.
- **I.C.2.** Providing constructive feedback.
- **I.C.3.** Acting on feedback to improve.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.3.** Enacting new understanding through real-world connections
- **I.D.4.** Using reflection to guide informed decisions.

#### Figurative Language
Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.

- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.B.3.** Generating products that illustrate learning.
- **I.C.1.** Interacting with content presented by others.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.3.** Enacting new understanding through real-world connections
- **I.D.4.** Using reflection to guide informed decisions.

#### Pitch Your Passion
Students will build a project about an idea, activity, item, or cause they feel strongly about.

- **I.A.1.** Formulating questions about a personal interest or a curricular topic
- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.1.** Using evidence to investigate questions.
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.B.3.** Generating products that illustrate learning.
- **I.C.1.** Interacting with content presented by others.
- **I.C.2.** Providing constructive feedback.
- **I.C.3.** Acting on feedback to improve.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.3.** Enacting new understanding through real-world connections
- **I.D.4.** Using reflection to guide informed decisions.

#### An Unusual Discovery
Two characters meet in a world and discover a surprising object. Students get to decide what happens next by creating a story with code.

- **I.A.1.** Formulating questions about a personal interest or a curricular topic
- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.B.3.** Generating products that illustrate learning.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.2.** Engaging in sustained inquiry

#### Animate a Name
Students pick a name or word and bring the letters to life through animation, sound, and music.

- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.2.** Devising and implementing a plan to fill knowledge gaps.
- **I.C.1.** Interacting with content presented by others.
- **I.C.2.** Providing constructive feedback.
- **I.C.3.** Acting on feedback to improve.
- **I.C.4.** Sharing products with an authentic audience.
- **I.D.1.** Continually seeking knowledge
- **I.D.4.** Using reflection to guide informed decisions.

#### Create Your Own Google Logo
Students bring the Google logo to life using code, utilizing programming and design.

- **I.A.1.** Formulating questions about a personal interest or a curricular topic
- **I.A.2.** Recalling prior and background knowledge as context for new meaning
- **I.B.3.** Generating products that illustrate learning.
- **I.C.1.** Interacting with content presented by others.
- **I.C.2.** Providing constructive feedback.
- **I.C.3.** Acting on feedback to improve.
- **I.C.4.** Sharing products with an authentic audience.
### National School Library Standards crosswalk with Code with Google's CS First curriculum

**A. THINK**
Learners display curiosity and initiative by:

- I.A.1. Formulating questions about a personal interest or a curricular topic.
- I.A.2. Recalling prior and background knowledge as context for new meaning.

**B. CREATE**
Learners engage with new knowledge by following a process that includes:

- I.B.2. Devising and implementing a plan to fill knowledge gaps.

**C. SHARE**
Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

- I.C.1. Interacting with content presented by others.
- I.C.3. Acting on feedback to improve.

**D. GROW**
Learners participate in an ongoing inquiry-based process by:


### Multi-Day Activities
Teach coding with lessons that include eight activities aligned with student passions.

#### INTRODUCTORY

- **Storytelling**
  - Students use code to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.

- **Music & Sound**
  - Students play musical notes, create a music video, and build an interactive music display.

#### INTERMEDIATE

- **Friends**
  - Students work in pairs, tell the story of how their friendship started, and imagine a company together.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.
  - I.B.2. Devising and implementing a plan to fill knowledge gaps.

- **Fashion & Design**
  - Students build fashion-themed programs, including a fashion walk, a stylist tool, and a pattern maker.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.
  - I.B.2. Devising and implementing a plan to fill knowledge gaps.

- **Art**
  - Students create animations, interactive artwork, photograph filters, and other exciting, artistic projects using code.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.

- **Sports**
  - Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.
  - I.B.2. Devising and implementing a plan to fill knowledge gaps.

- **Game Design**
  - Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.
  - I.B.2. Devising and implementing a plan to fill knowledge gaps.

### ADVANCED

- **Friends**
  - Students work in pairs, tell the story of how their friendship started, and imagine a company together.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
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- **Sports**
  - Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
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  - I.B.2. Devising and implementing a plan to fill knowledge gaps.

- **Game Design**
  - Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.
  - I.A.1. Formulating questions about a personal interest or a curricular topic.
  - I.A.2. Recalling prior and background knowledge as context for new meaning.
  - I.B.2. Devising and implementing a plan to fill knowledge gaps.
National School Library Standards crosswalk with Code with Google’s CS First curriculum

**SHARE FOUNDATION II. Include**

**KEY COMMITMENT:** Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.

### AASL STANDARDS FRAMEWORK FOR LEARNERS

<table>
<thead>
<tr>
<th>CODE WITH GOOGLE’S CS FIRST CURRICULUM</th>
<th>A. THINK</th>
<th>B. CREATE</th>
<th>C. SHARE</th>
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<tbody>
<tr>
<td><strong>Learners contribute a balanced perspective when participating in a learning community by:</strong></td>
<td><strong>Learners adjust their awareness of the global learning community by:</strong></td>
<td><strong>Learners exhibit empathy with and tolerance for diverse ideas by:</strong></td>
<td><strong>Learners demonstrate empathy and equity in knowledge building within the global learning community by:</strong></td>
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### ONE HOUR ACTIVITIES

**SUBJECT SPECIFIC**

**Characterization** Students provide details about a character who is missing a school assignment and use code to describe the character’s actions, thoughts, and words.

**Interactive Presentation** Students create a new presentation, or take an existing one, and make it interactive in Scratch.

**Dialogue** Students program a conversation between two characters to explore the role of dialogue in storytelling.

**Narration** Students take an existing story and explore first and third person point of view.

**Figurative Language** Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.

**HOUR OF CODE**

**Pitch Your Passion** Students will build a project about an idea, activity, item, or cause they feel strongly about.

**An Unusual Discovery** Two characters meet in a world and discover a surprising object. Students get to decide what happens next by creating a story with code.

**Animate a Name** Students pick a name or word and bring the letters to life through animation, sound, and music.

**Create Your Own Google Logo** Students bring the Google logo to life using code, utilizing programming and design.

**High Seas Activity** Students animate an ocean wave, then tell a story that takes place on the high seas.

**Gumball’s Coding Adventure** In this collaboration between Cartoon Network and CS First, students tell a story using the characters from “The Amazing World of Gumball.”
A review team from the American Association of School Librarians (AASL) determined that the Google CS First curriculum (2019), csfirst.withgoogle.com, aligns with the AASL Standards Framework for Learners featured within the National School Library Standards for Learners, School Librarians, and School Libraries (2018), standards.aasl.org. The Google CS First curriculum helps build the Competencies outlined for learners under the AASL Standards Domains—Think, Create, Share, and Grow—and within the Shared Foundations—Inquire, Include, Collaborate, Curate, Explore, and Engage. For more on how school librarians and school libraries support learning through technology, information media, and multiple literacies, see the AASL Standards Frameworks related to School Librarians and School Libraries.

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<td>Learners contribute a balanced perspective when participating in a learning community by:</td>
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<td>Learners demonstrate empathy and equity in knowledge building within the global learning community by:</td>
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### MULTI-DAY ACTIVITIES
Teach coding with lessons that include eight activities aligned with student passions.

#### INTRODUCTORY

**Storytelling**
Students use code to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day.

**Music & Sound**
Students play musical notes, create a music video, and build an interactive music display.

#### INTERMEDIATE

**Friends**
Students work in pairs, tell the story of how their friendship started, and imagine a company together.

**Fashion & Design**
Students build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker.

**Art**
Students create animations, interactive artwork, photograph filters, and other exciting, artistic projects using code.

**Sports**
Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event.

**Game Design**
Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.

#### ADVANCED

**II.D.1.** Seeking interactions with a range of learners.

**II.D.2.** Demonstrating interest in other perspectives during learning activities.

**II.D.3.** Reflecting on their own place within the global learning community.

**Key Commitment:** Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community.
### National School Library Standards Crosswalk with Code with Google’s CS First curriculum

**AASL Standards Framework for Learners**

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<td><strong>A. THINK</strong></td>
<td>Start coding with a single activity.</td>
<td><strong>Characterization</strong> Students provide details about a character who is missing a school assignment and use code to describe the character’s actions, thoughts, and words.</td>
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<td><strong>B. CREATE</strong></td>
<td><strong>Interactive Presentation</strong> Students create a new presentation, or take an existing one, and make it interactive in Scratch.</td>
<td><strong>III.A.1.</strong> Demonstrating their desire to broaden and deepen understandings.</td>
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<td><strong>Dialogue</strong> Students program a conversation between two characters to explore the role of dialogue in storytelling.</td>
<td><strong>III.A.2.</strong> Demonstrating their desire to broaden and deepen understandings.</td>
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<td><strong>Narration</strong> Students take an existing story and explore first and third person point of view.</td>
<td><strong>III.A.3.</strong> Demonstrating their desire to broaden and deepen understandings.</td>
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<td><strong>Figurative Language</strong> Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.</td>
<td><strong>III.B.1.</strong> Using a variety of communication tools and resources.</td>
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<td><strong>Pitch Your Passion</strong> Students will build a project about an idea, activity, item, or cause they feel strongly about.</td>
<td><strong>III.B.2.</strong> Establishing connections with other learners to build on their own prior knowledge and create new knowledge.</td>
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<td><strong>An Unusual Discovery</strong> Two characters meet in a world and discover a surprising object. Students get to decide what happens next by creating a story with code.</td>
<td><strong>III.B.3.</strong> Using a variety of communication tools and resources.</td>
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<td><strong>Animate a Name</strong> Students pick a name or word and bring the letters to life through animation, sound, and music.</td>
<td><strong>I.I.D.1.</strong> Actively contributing to group discussions.</td>
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<td><strong>Create Your Own Google Logo</strong> Students bring the Google logo to life using code, utilizing programming and design.</td>
<td><strong>I.I.D.2.</strong> Recognizing learning as a social responsibility.</td>
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<td><strong>High Seas Activity</strong> Students animate an ocean wave, then tell a story that takes place on the high seas.</td>
<td><strong>I.I.D.2.</strong> Recognizing learning as a social responsibility.</td>
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<td><strong>Gumball’s Coding Adventure</strong> In this collaboration between Cartoon Network and CS First, students tell a story using the characters from “The Amazing World of Gumball.”</td>
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**National School Library Standards** crosswalk with Code with Google’s CS First curriculum

**SHARED FOUNDATION III. Collaborate**

**AASL STANDARDS FRAMEWORK FOR LEARNERS**

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<tr>
<td>Learners identify collaborative opportunities by:</td>
<td>III.A.1: Demonstrating their desire to broaden and deepen understandings.</td>
<td>III.B.1: Using a variety of communication tools and resources.</td>
<td>III.C.1: Using a variety of communication tools and resources.</td>
<td>III.D.1: Actively contributing to group discussions.</td>
</tr>
<tr>
<td>Learners participate in personal, social, and intellectual networks by:</td>
<td>III.A.2: Developing new understandings through engagement in a learning group.</td>
<td>III.B.2: Establishing connections with other learners to build on their own prior knowledge and create new knowledge.</td>
<td>III.C.2: Establishing connections with others to solve problems by:</td>
<td>III.D.2: Recognizing learning as a social responsibility.</td>
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<td>Learners work productively with others to solve problems by:</td>
<td>III.A.3: Deciding to solve problems informed by group interaction.</td>
<td>III.B.3: Using a variety of communication tools and resources.</td>
<td>III.C.3: Using a variety of communication tools and resources.</td>
<td>III.D.3: Actively contributing to group discussions.</td>
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<td>Learners actively participate with others in learning situations by:</td>
<td>III.A.4: Developing new understandings through engagement in a learning group.</td>
<td>III.B.4: Establishing connections with other learners to build on their own prior knowledge and create new knowledge.</td>
<td>III.C.4: Establishing connections with others to solve problems by:</td>
<td>III.D.4: Recognizing learning as a social responsibility.</td>
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**MULTI-DAY ACTIVITIES** Teach coding with lessons that include eight activities aligned with student passions.

**INTRODUCTORY**

| Storytelling | Students use code to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day. | III.A.1: Demonstrating their desire to broaden and deepen understandings. | III.B.1: Using a variety of communication tools and resources. |
| Music & Sound | Students play musical notes on a music video, and build an interactive music display. | III.A.2: Developing new understandings through engagement in a learning group. | III.B.2: Establishing connections with other learners to build on their own prior knowledge and create new knowledge. |

**INTERMEDIATE**

| Friends | Students work in pairs, tell the story of how their friendship started, and imagine a company together. | III.A.3: Demonstrating their desire to broaden and deepen understandings. | III.B.3: Using a variety of communication tools and resources. |
| Fashion & Design | Students build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker. | III.A.4: Developing new understandings through engagement in a learning group. | III.B.4: Establishing connections with other learners to build on their own prior knowledge and create new knowledge. |
| Art | Students create animations, interactive artwork, photograph filters, and other exciting, artistic projects using code. | III.A.5: Using a variety of communication tools and resources. | III.B.5: Using a variety of communication tools and resources. |

**ADVANCED**

| Sports | Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event. | III.A.6: Developing new understandings through engagement in a learning group. | III.B.6: Establishing connections with other learners to build on their own prior knowledge and create new knowledge. |
| Game Design | Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching. | III.A.7: Using a variety of communication tools and resources. | III.B.7: Using a variety of communication tools and resources. |

**KEY COMMITMENT:** Work effectively with others to broaden perspectives and work toward common goals.
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<td>Learners act on an information need by:</td>
<td>Learners gather information appropriate to the task by:</td>
<td>Learners exchange information resources within and beyond their learning community by:</td>
<td>Learners select and organize information for a variety of audiences by:</td>
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#### ONE HOUR ACTIVITIES

**SUBJECT SPECIFIC**

- **Characterization**
  - **Pitch Your Passion** Students will build a project about an idea, activity, item, or cause they feel strongly about.
  - **An Unusual Discovery** Two characters meet in a world and discover a surprising object. Students get to decide what happens next by creating a story with code.
  - **Animate a Name** Students pick a name or word and bring the letters to life through animation, sound, and music.
  - **Create Your Own Google Logo** Students bring the Google logo to life using code, utilizing programming and design.
  - **High Seas Activity** Students animate an ocean wave, then tell a story that takes place on the high seas.
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- **Interactive Presentation**
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- **Dialogue**
  - **Dialogue** Students program a conversation between two characters to explore the role of dialogue in storytelling.

- **Narration**
  - **Narration** Students take an existing story and explore first and third person point of view.

- **Figurative Language**
  - **Figurative Language** Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.

**IV.D.2. Integrating and depicting in a conceptual knowledge network their understanding gained from resources**
# National School Library Standards Crosswalk with Code with Google’s CS First curriculum

## AASL Standards Framework for Learners

### A. Think
Learners act on an information need by:

### B. Create
Learners gather information appropriate to the task by:

### C. Share
Learners exchange information resources within and beyond their learning community by:

### D. Grow
Learners select and organize information for a variety of audiences by:

## Multi-Day Activities
Teach coding with lessons that include eight activities aligned with student passions.

### Introductory

**Storytelling**
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**Music & Sound**
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### Intermediate

**Friends**
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**Fashion & Design**
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**Art**
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### Advanced

**Sports**
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**Game Design**
Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.

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**Shared Foundation IV. Curate**

**Key Commitment:** Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.

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<th>Code with Google’s CS First Curriculum</th>
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</thead>
<tbody>
<tr>
<td><strong>A. Think</strong></td>
<td>Learners act on an information need by:</td>
</tr>
<tr>
<td><strong>B. Create</strong></td>
<td>Learners gather information appropriate to the task by:</td>
</tr>
<tr>
<td><strong>C. Share</strong></td>
<td>Learners exchange information resources within and beyond their learning community by:</td>
</tr>
<tr>
<td><strong>D. Grow</strong></td>
<td>Learners select and organize information for a variety of audiences by:</td>
</tr>
</tbody>
</table>

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**Multi-Day Activities**
Teach coding with lessons that include eight activities aligned with student passions.

**Introductory**

- **Storytelling**
  - Students use code to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day.

- **Music & Sound**
  - Students play musical notes, create a music video, and build an interactive music display.

**Intermediate**

- **Friends**
  - Students work in pairs, tell the story of how their friendship started, and imagine a company together.

- **Fashion & Design**
  - Students build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker.

- **Art**
  - Students create animations, interactive artwork, photograph filters, and other exciting, artistic projects using code.

**Advanced**

- **Sports**
  - Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event.

- **Game Design**
  - Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.
A review team from the American Association of School Librarians (AASL) determined that the Google CS First curriculum (2019), csfirst.withgoogle.com, aligns with the National School Library Standards related to School Librarians and School Libraries.

Explore, and Engage. For more on how school librarians and school libraries support learning through technology, information media, and multiple literacies, see the AASL Standards Frameworks build the Competencies outlined for learners under the AASL Standards Domains—Think, Create, Share, and Grow—and within the Shared Foundations—Inquire, Include, Collaborate, Curate, and Design.
### National School Library Standards Crosswalk with Code with Google’s CS First curriculum

**AASL STANDARDS FRAMEWORK FOR LEARNERS**

#### CODE WITH GOOGLE’S CS FIRST CURRICULUM

<table>
<thead>
<tr>
<th><strong>A. THINK</strong></th>
<th>Learners develop and satisfy personal curiosity by:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B. CREATE</strong></td>
<td>Learners construct new knowledge by:</td>
</tr>
<tr>
<td><strong>C. SHARE</strong></td>
<td>Learners engage with the learning community by:</td>
</tr>
<tr>
<td><strong>D. GROW</strong></td>
<td>Learners develop through experience and reflection by:</td>
</tr>
</tbody>
</table>

#### High Seas Activity

- **Students** animate an ocean wave, then tell a story that takes place on the high seas.

  - **V.A.1.** Reading widely and deeply in multiple formats and write and create for a variety of purposes.
  - **V.B.1.** Problem solving through cycles of design, implementation, and reflection.
  - **V.C.3.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

#### Gumball’s Coding Adventure

- In this collaboration between Cartoon Network and CS First, students tell a story using the characters from “The Amazing World of Gumball.”

  - **V.A.3.** Engaging in inquiry-based processes for personal growth.
  - **V.B.2.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.2.** Co-constructing innovative means of investigation.
  - **V.D.2.** Recognizing capabilities and skills that can be developed, improved, and expanded.

#### MULTI-DAY ACTIVITIES | Teach coding with lessons that include eight activities aligned with student passions.

**INTRODUCTORY**

- **Storytelling**
  - Students use code to tell fun and interactive stories.
  - Storytelling emphasizes creativity by encouraging students to tell a unique story each day.

  - **V.A.1.** Reading widely and deeply in multiple formats and write and create for a variety of purposes.
  - **V.B.1.** Problem solving through cycles of design, implementation, and reflection.
  - **V.C.1.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

**MUSIC & SOUND**

- **Students** play musical notes, create a music video, and build an interactive music display.

  - **V.A.1.** Reading widely and deeply in multiple formats and write and create for a variety of purposes.
  - **V.B.1.** Problem solving through cycles of design, implementation, and reflection.
  - **V.C.1.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

**INTERMEDIATE**

- **Friends**
  - Students work in pairs, tell the story of how their friendship started, and imagine a company together.

  - **V.A.2.** Persisting through self-directed pursuits by tinkering and making.
  - **V.B.2.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.2.** Co-constructing innovative means of investigation.
  - **V.D.3.** Open-mindedly accepting feedback for positive and constructive growth.

- **Fashion & Design**
  - Students build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker.

  - **V.A.3.** Engaging in inquiry-based processes for personal growth.
  - **V.B.3.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.3.** Collaboratively identifying innovative solutions to a challenge or problem.
  - **V.D.3.** Open-mindedly accepting feedback for positive and constructive growth.

**ADVANCED**

- **Art**
  - Students create animations, interactive artwork, photographic filters, and other exciting, artistic projects using code.

  - **V.A.2.** Persisting through self-directed pursuits by tinkering and making.
  - **V.B.2.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.1.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

- **Sports**
  - Students use computer science to simulate extreme sports, make their own commercials, and create commentary for a sporting event.

  - **V.A.3.** Engaging in inquiry-based processes for personal growth.
  - **V.B.3.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.1.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

- **Game Design**
  - Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.

  - **V.A.3.** Engaging in inquiry-based processes for personal growth.
  - **V.B.3.** Persisting through self-directed pursuits by tinkering and making.
  - **V.C.1.** Expressing curiosity about a topic of personal interest or curricular relevance.
  - **V.D.1.** Iteratively responding to challenges.

---

**Note:** This crosswalk is a collaborative effort by the American Association of School Librarians (AASL) and Google to help educators align the AASL Standards Frameworks with the CS First curriculum. It is intended to support educators in integrating coding and computational thinking into their library and classroom practices. For more information on how to use this crosswalk, please visit the AASL and Google websites.
**National School Library Standards crosswalk with Code with Google's CS First curriculum**

**AASL STANDARDS FRAMEWORK FOR LEARNERS**

<table>
<thead>
<tr>
<th>CODE WITH GOOGLE'S CS FIRST CURRICULUM</th>
<th>A. THINK</th>
<th>B. CREATE</th>
<th>C. SHARE</th>
<th>D. GROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners follow ethical and legal guidelines for gathering and using information by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.A.1.</td>
<td>VI.C.2.</td>
<td>VI.C.2.</td>
<td>VI.D.1.</td>
<td></td>
</tr>
<tr>
<td>Responsible applying information, technology, and media to learning</td>
<td>Disseminating new knowledge through means appropriate for the intended audience</td>
<td>Personalizing their use of information and information technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VI.A.2.</td>
<td>VI.C.2.</td>
<td>VI.D.1.</td>
<td></td>
</tr>
<tr>
<td>Students create a new presentation, or take an existing one, and make it interactive in Scratch</td>
<td>Personalizing their use of information and information technologies</td>
<td>Disseminating new knowledge through means appropriate for the intended audience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students program a conversation between two characters to explore the role of dialogue in story telling</td>
<td>Sharing information resources in accordance with modification, reuse, and remix policies</td>
<td>Personalizing their use of information and information technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narration</td>
<td>VI.A.1.</td>
<td>VI.A.1.</td>
<td>VI.D.2.</td>
<td></td>
</tr>
<tr>
<td>Students take an existing story and explore a first and third person point of view</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Reflecting on the process of ethical generation of knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figurative Language</td>
<td>VI.A.1.</td>
<td>VI.A.1.</td>
<td>VI.D.3.</td>
<td></td>
</tr>
<tr>
<td>Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Inspiring others to engage in safe, responsible, ethical, and legal information behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students will build a project about an idea, activity, item, or cause they feel strongly about.</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Reflecting on the process of ethical generation of knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two characters meet in a world and discover a surprising object: Students get to decide what happens next by creating a story with code.</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Inspiring others to engage in safe, responsible, ethical, and legal information behaviors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animate a Name</td>
<td>VI.A.1.</td>
<td>VI.A.1.</td>
<td>VI.D.5.</td>
<td></td>
</tr>
<tr>
<td>Students pick a name or word and bring the letters to life through animation, sound, and music.</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Personalizing their use of information and information technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Your Own Google Logo</td>
<td>VI.A.1.</td>
<td>VI.A.1.</td>
<td>VI.D.5.</td>
<td></td>
</tr>
<tr>
<td>Students bring the Google logo to life using code, utilizing programming and design.</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Personalizing their use of information and information technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Seas Activity</td>
<td>VI.A.1.</td>
<td>VI.A.1.</td>
<td>VI.D.5.</td>
<td></td>
</tr>
<tr>
<td>Students animate an ocean wave, then tell a story that takes place on the high seas</td>
<td>Responsible applying information, technology, and media to learning</td>
<td>Personalizing their use of information and information technologies</td>
<td></td>
<td></td>
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**SHARED FOUNDATION VI**

**Engage**

**KEY COMMITMENT:** Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.

**ONE HOUR ACTIVITIES:** Start coding with a single activity.

**SUBJECT SPECIFIC**

**Characterization**

Students provide details about a character who is missing a school assignment and use code to describe the character’s actions, thoughts, and words.

**Interactive Presentation**

Students create a new presentation, or take an existing one, and make it interactive in Scratch.

**Dialogue**

Students program a conversation between two characters to explore the role of dialogue in story telling.

**Narration**

Students take an existing story and explore a first and third person point of view.

**Figurative Language**

Students explore Figurative Language with an emphasis on metaphors, similes, personification, hyperbole, and idioms.

**Pitch Your Passion**

Students will build a project about an idea, activity, item, or cause they feel strongly about.

**An Unusual Discovery**

Two characters meet in a world and discover a surprising object: Students get to decide what happens next by creating a story with code.

**Animate a Name**

Students pick a name or word and bring the letters to life through animation, sound, and music.

**Create Your Own Google Logo**

Students bring the Google logo to life using code, utilizing programming and design.

**High Seas Activity**

Students animate an ocean wave, then tell a story that takes place on the high seas.
## National School Library Standards crosswalk with Code with Google’s CS First curriculum

September 2019

**AASL STANDARDS FRAMEWORK FOR LEARNERS**

### CODE WITH GOOGLE’S CS FIRST CURRICULUM

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<th>C. SHARE</th>
<th>D. GROW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Learners follow ethical and legal guidelines for gathering and using information by:</td>
<td>Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:</td>
<td>Learners responsibly, ethically, and legally share new information with a global community by:</td>
<td>Learners engage with information to extend personal learning by:</td>
</tr>
<tr>
<td>VI.A.1.</td>
<td>VI.C.1. Sharing information resources in accordance with modification, reuse, and remix policies.</td>
<td>VI.C.2. Disseminating new knowledge through means appropriate for the intended audience.</td>
<td>VI.D.3. Inspiring others to engage in safe, responsible, ethical, and legal information behaviors.</td>
<td></td>
</tr>
<tr>
<td>VI.B.2.</td>
<td>VI.D.1. Personalizing their use of information and information technologies.</td>
<td>VI.D.2. Reflecting on the process of ethical generation of knowledge.</td>
<td>VI.D.3. Inspiring others to engage in safe, responsible, ethical, and legal information behaviors.</td>
<td></td>
</tr>
<tr>
<td>VI.C.1.</td>
<td>VI.C.1. Sharing information resources in accordance with modification, reuse, and remix policies.</td>
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<td>VI.D.3. Inspiring others to engage in safe, responsible, ethical, and legal information behaviors.</td>
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<td>VI.C.2.</td>
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### MULTI-DAY ACTIVITIES

**Teach coding with lessons that include eight activities aligned with student passions.**

**INTRODUCTORY**

#### Storytelling

- Students use code to tell fun and interactive stories. Storytelling emphasizes creativity by encouraging students to tell a unique story each day.
- **Gumball’s Coding Adventure**: In this collaboration between Cartoon Network and CS First, students tell a story using the characters from “The Amazing World of Gumball.”

#### Music & Sound

- Students play musical notes, create a music video, and build an interactive music display.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.A.2.** Understanding the ethical use of information, technology, and media.

### INTERMEDIATE

#### Friends

- Students work in pairs, tell the story of how their friendship started, and imagine a company together.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.C.2.** Disseminating new knowledge through means appropriate for the intended audience.

#### Fashion & Design

- Students build fashion-themed programs including a fashion walk, a stylist tool, and a pattern maker.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.A.2.** Understanding the ethical use of information, technology, and media.

#### Art

- Students create animations, interactive artwork, photograph filters, and other exciting, artistic projects using code.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.A.2.** Understanding the ethical use of information, technology, and media.

### ADVANCED

#### Sports

- Students use computer science to simulate extreme sports, make their own commercial, and create commentary for a sporting event.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.A.2.** Understanding the ethical use of information, technology, and media.

#### Game Design

- Students learn basic video game coding concepts by making different types of games, including racing, platform, and launching.
- **VI.A.1.** Responsible applying information, technology, and media to learning
- **VI.A.2.** Understanding the ethical use of information, technology, and media.

**KEY COMMITMENT:** Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.