Plugging In to STEM Professional Development
What is Computer Science?

• What do you think of when you see the term “computer science”?

• What is “computational thinking”? Why is this important for our students?

• How does computer science relate to everyday life?
What is Computer Science?

- Devices
- Typing
- Being able to play games, text, do social media, navigate apps, etc.
- Knowing how to use applications (Word, Google Docs, etc.)
- Being “good with technology”
- Computer Literacy
- Educational Technology
What is Computer Science?
Why computer science?

90% of parents want their child to study computer science

35% of high schools teach computer science*
# Code.org Curriculum Pathway

<table>
<thead>
<tr>
<th>Elementary school</th>
<th>Middle school</th>
<th>High school</th>
</tr>
</thead>
<tbody>
<tr>
<td>K 1 2 3 4 5</td>
<td>6 7 8</td>
<td>9 10 11 12</td>
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<tr>
<td>CS Fundamentals</td>
<td>CS Discoveries</td>
<td>CS Principles</td>
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<tr>
<td>Pre-reader Express</td>
<td>CS Fundamentals: Express</td>
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Code.org Program Features

• Engaging workshop experiences
• Teaching and learning in context
• A collaborative, participant-centric approach
• One cohesive set of resources
• An active community of CS educators
CS Fundamentals Overview

- In-person instruction from an experienced computer science facilitator.
- An intro to computer science and pedagogy for the K-5 educator.
- An overview of the online curriculum and teacher dashboard.
- A printed curriculum guide containing course lesson plans.
- Strategies for teaching "unplugged" classroom activities.
# CS Principles and Discoveries

## Overview

- Plan to teach the course in the 2022-23 school year
- For CS Discoveries, teach students between 6th and 10th grade
- For CS Principles, teach students between 9th and 12th grade
- Support the recruitment and enrollment of a diverse group of students in the course, representative of the school's student population

## Summer Workshop

<table>
<thead>
<tr>
<th>Summer Workshop</th>
<th>Ongoing Support</th>
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<tbody>
<tr>
<td><strong>Summer</strong></td>
<td><strong>School Year (September - June)</strong></td>
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<tr>
<td>• 5-day in-person session in your region (travel may be required)</td>
<td>• 4 in-person sessions in your region (usually on Saturdays)</td>
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<td>• Continued professional development and resources</td>
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[Code.org Regional Partner]
Apply Now!

• Applications are now available for:
  o **CS Discoveries: July 18\textsuperscript{th} - 22\textsuperscript{nd}**
  o **CS Principles: July 25\textsuperscript{th} - 29\textsuperscript{th}**
• Principal must verify application.
• [https://code.org/educate/professional-learning/middle-high](https://code.org/educate/professional-learning/middle-high)
Elementary Teachers - Request a Training in Your District!

**CS Fundamentals** –

- Scholarships are currently available for public school teachers
- No application necessary – contact classes@osc.org to request a training today.
- A minimum of 10 teachers is required to book an event.
Questions?
Drawing Challenge

Look at the picture on the next slide.

Explain it to the presenter so that they may replicate it on their paper.
Plotting Shapes Activity

You each have different sets of pictures to describe to your partner. Take turns describing the pictures for your partner to draw.

**Describer:** Describe the drawing in detail, but do not look at your partner’s paper!

**Drawer:** Listen carefully to the instructions, but do not look at your partner’s paper!
Contact Information

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