

# Uncovering Cloud Computing Facilitation Guide

## Grades 4+

We can't wait to introduce you to the incredible technology and people who make Amazon possible. Use this facilitation guide to provide an excellent tour experience for students at home or in the classroom!

### 1. Prepare for the tour

- Review the key learnings and facilitation guide documents. Click through the tour (independent play link below) on your own.
- Distribute graphic organizers (PDF, Word, Google Doc) to students if desired.

### 2. Select your tour style and length

#### Host a tour with student devices

A host projects the tour to a group and students join to compete against each other from separate devices.

- [Full Tour \(~30 minutes\)](#)

#### Project the tour without student devices

The host projects tour to group without students joining on separate devices.

- [Full Tour \(~30 minutes\)](#)

#### Share the tour for independent student play

Students complete the tour by themselves on their own devices. Teacher cannot see student responses.

- [Full Tour \(~30 minutes\)](#)

For additional support in setting up Kahoot, including creating a FREE teacher account, visit: <https://support.kahoot.com/hc/en-us>

### 3. Facilitate the tour


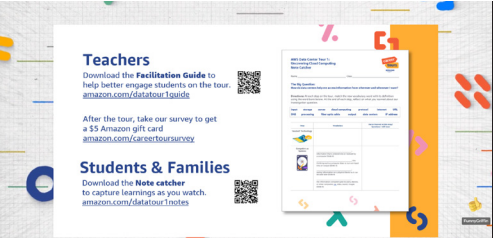
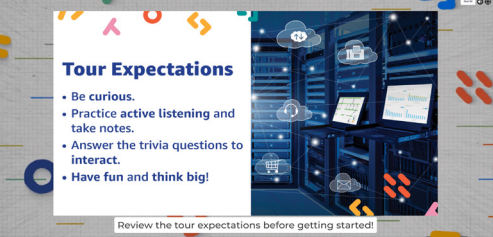
- Use the guide below to walk students through the tour. Ask students to share their thoughts or respond to questions to build more interaction.
- To advance slides, click "Got It" in the top right corner.
- Use our [Teacher Toolkit](#) for optional follow up activities and print completion certificates.

### Kahoot! Tips


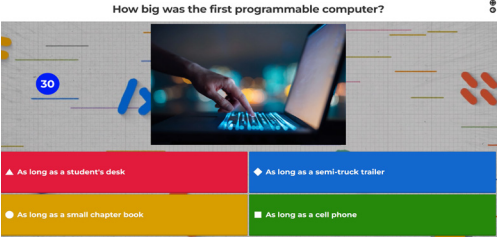
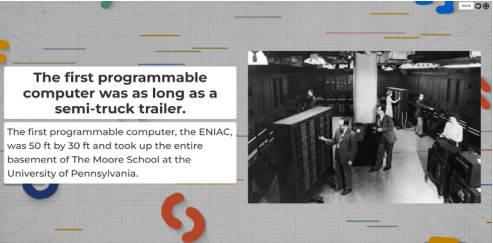
- If the video clips are playing too softly, check that the volume bar on the YouTube video is at maximum volume.
- There is no go back feature. If you need to go back to a video, the links to the segments on YouTube are provided in the facilitation guide below.
- Click the [ ] in the bottom right of the YouTube video to make full screen. Press esc to get out of full screen mode and return to the tour.
- **Warning:** Hitting space bar auto-advances the slide with no go-back feature.

**4. Get a Amazon Gift Card when you submit your feedback.** [Complete this survey](#) to help us improve future tours and receive a \$5 Amazon Gift Card. (US Only)

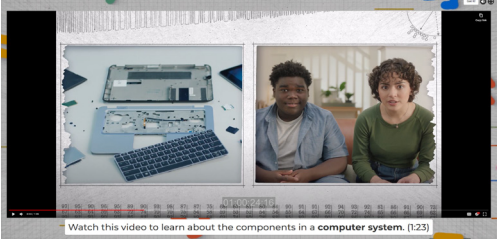
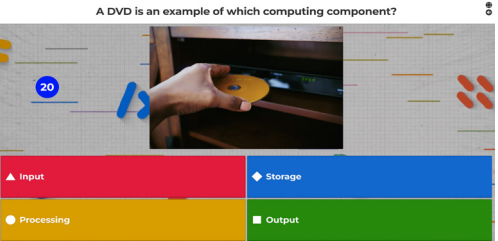
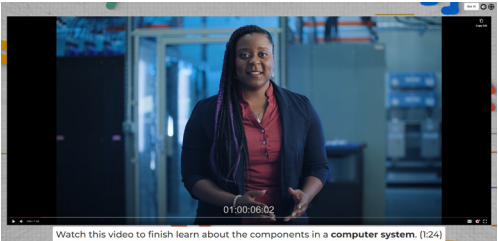
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
1 30 sec		<p><b>Say:</b> “Today we’re going to take you behind the scenes at Amazon to learn how you’re able to stream movies from anywhere at anytime, and some of the careers that make it happen!”</p> <p><b>Optional:</b> Ask a few students to share out what they have streamed lately or what streaming platforms they use.</p>	
2 0 sec		<p><b>Optional:</b> If you’d like your students to access digital notes, have them scan the QR code or access the doc at the tinyurl provided. Students should make a copy of the document. They’ll have to switch between the Google Docs and Kahoot tabs to answer questions and take notes.</p> <p>If using paper note catchers, this would be the best time to distribute.</p> <p>Tour Stop Organizer: <a href="#">PDF</a> <a href="#">Word</a></p>	
3 30 sec		<p><b>Set tour expectations with your class.</b></p> <p>Read the expectations to students.</p> <p><b>Say:</b> “As we go through the tour, you may find some careers that you are interested in - be sure to take notes on your notecatcher! There will be a mix of polls and quiz questions. Polls won’t count towards your points, but the quiz questions will - the fastest CORRECT answers get the most points. Let’s see who will win today!”</p>	

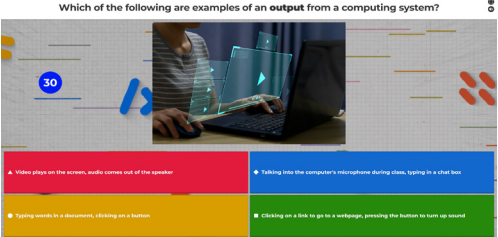
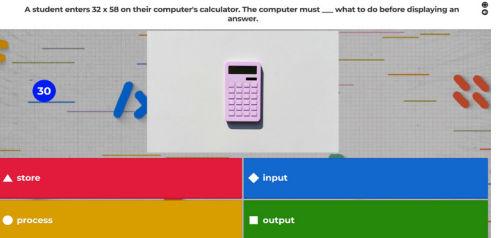
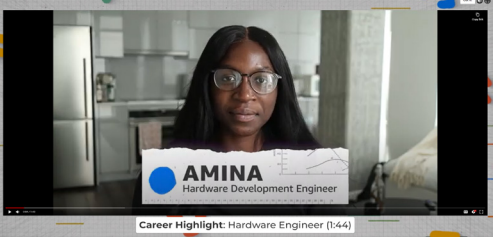
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
4 1 min 40 sec		<p><b>Play Video 1: Intro (1:38)</b></p> <p><b>Say:</b> "On the next slide, is a poll question. How big do you think the first programmable computer was?"</p>	
5 30 sec		<p><b>Read the poll question and answer choices to students: "How big was the first programmable computer?" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> As long as a semi-truck trailer</p>	
6 15 sec		<p><b>Quickly read the slide.</b></p> <p><b>Then Say:</b> "Let's now head to our first stop: the components of every computer."</p>	

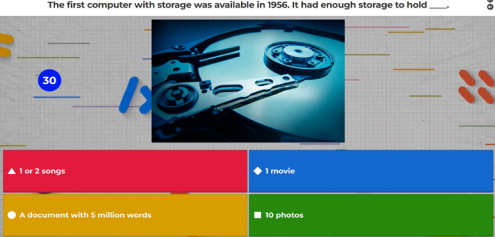
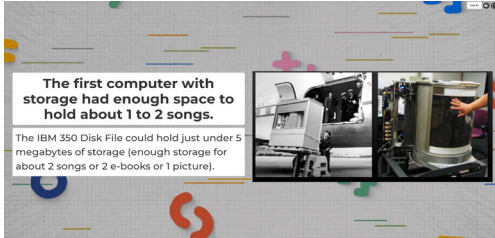
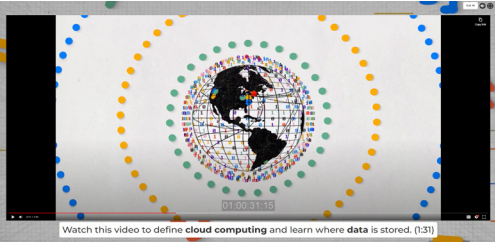
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
7 1 min 30 sec	 <p>Watch this video to learn about the components in a computer system. [1:23]</p>	<p><b>Play Video 2: Stop 1 Part A (1:22)</b></p> <p><b>Say:</b> "Time for another poll! What do you think a DVD was? Input, storage, processing, or output?"</p>	
8 30 sec	 <p>A DVD is an example of which computing component?</p> <p>20</p> <p>▲ Input      ◆ Storage</p> <p>● Processing      ■ Output</p>	<p><b>Read the poll question and answer choices to students. "A DVD is an example of which computing component?" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> Storage</p> <p><b>Say:</b> "Let's continue watching to learn more about the components of a computer."</p>	
9 1 min 30 sec	 <p>Watch this video to finish learn about the components in a computer system. [1:24]</p>	<p><b>Play Video 3: Stop 1 Part B (1:27)</b></p> <p><b>Say:</b> "Before we meet a hardware engineer, we have 2 review questions for you! This is worth points, so make sure you answer correctly and quickly!"</p>	

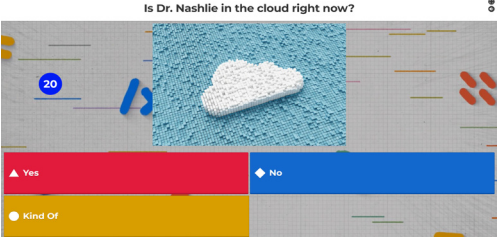
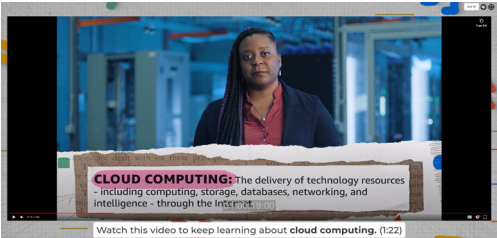
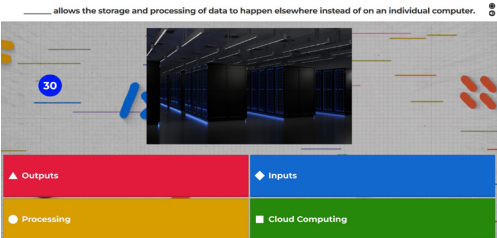
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
10 30 sec		<p><b>Read the question and on-screen answer choices to students. "Which of the following are examples of an OUTPUT from a computer system?"</b></p> <p><b>Answer:</b> Video plays on the screen, audio comes out of the speaker</p>	
11 30 sec		<p><b>Read the question and on-screen answer choices to students. "A student enters 32 x 58 on their computer's calculator. The computer must ___ what to do before displaying an answer."</b></p> <p><b>Answer:</b> Process</p> <p><b>Say:</b> "You're doing a great job of listening! Now it's time to learn about our first career: Hardware Engineer. Take down notes of any information that sounds interesting to you about this career!"</p>	
12 1 min 50 sec		<p><b>Play Video 4: Hardware Engineer (1:45)</b></p> <p><b>Say:</b> "Time for a poll question before our next stop."</p>	


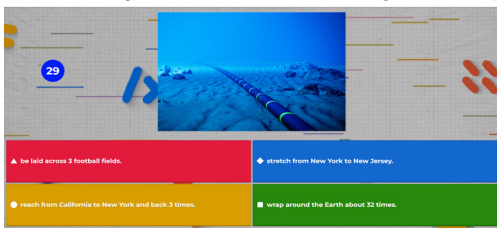

# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
13 30 sec		<p><b>Read the poll question and answer choices to students: "The first computer with storage was available in 1956. It had enough storage to hold__" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> 1 or 2 songs</p>	
14 15 sec		<p><b>Quickly read the slide.</b></p> <p><b>Then Say:</b> "That's not a lot of space! Technology has changed since then. Let's learn about a new way of storing and accessing files: cloud computing."</p>	
15 1 min 40 sec		<p><b><u>Play Video 5: Stop 2 Part A (1:32)</u></b></p> <p><b>Say:</b> "We have a poll question - what do you think, is Dr. Nashlie standing in the cloud?"</p>	

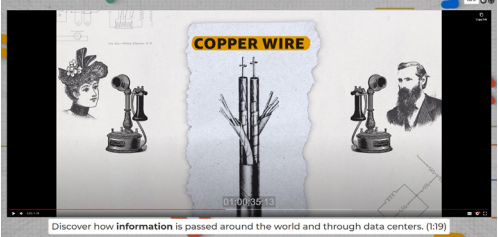
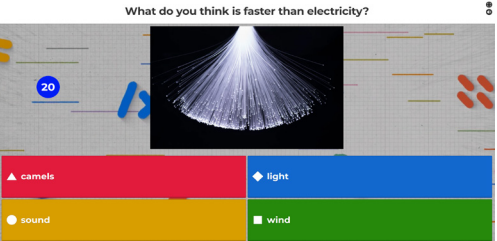
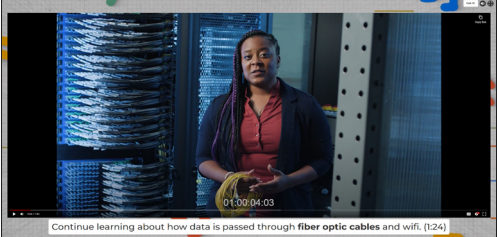
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
16 20 sec	 <p>Is Dr. Nashlie in the cloud right now?</p> <p>20</p> <p>Yes No Kind Of</p>	<p><b>Read the poll question and answer choices to students: "Is Dr. Nashlie in the cloud right now?" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> Kind of</p>	
17 1 min 30 sec	 <p>Watch this video to keep learning about cloud computing. (1:22)</p>	<p><b>Play Video 6: Stop 2 Part B (1:22)</b></p> <p><b>Say:</b> "Before we meet our next professional, it's time to answer a review question to make sure you're paying attention! This is worth points, so answer correctly and quickly!"</p>	
18 30 sec	 <p>___ allows the storage and processing of data to happen elsewhere instead of on an individual computer.</p> <p>30</p> <p>Outputs Inputs Processing Cloud Computing</p>	<p><b>Read the question and on-screen answer choices to students. "___ allows the storage and processing of data to happen elsewhere instead of on an individual computer."</b></p> <p><b>Answer:</b> cloud computing</p> <p><b>Say:</b> "Our next video highlights another career: Data Center Operations Technician. Take down notes of any information that sounds interesting to you about this career!"</p>	

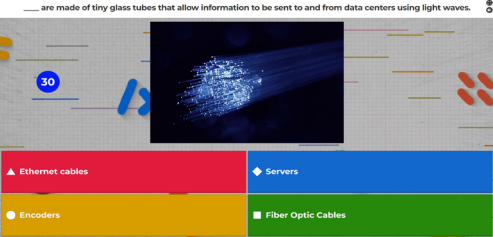

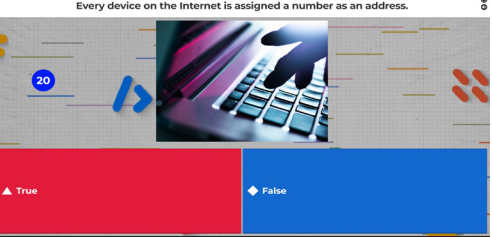
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Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
19 1 min 45 sec		<p><b><u>Play Video 7: Data Center Operations Technician (1:40)</u></b></p> <p><b>Say:</b> "I hope you enjoyed learning about that career. We have a poll question before our next stop."</p>	
20 30 sec		<p><b>Read the poll question and answer choices to students: "The total length of underwater cables that the internet runs through can__" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> Wrap around the Earth about 32 times.</p>	
21 15 sec		<p><b>Quickly read the slide.</b></p> <p><b>Then Say:</b> "That's a lot of wire! That's enough wire to go back and forth between the Earth and the Moon 3 times! Our next stop will teach us more about how wires keep us connected."</p>	



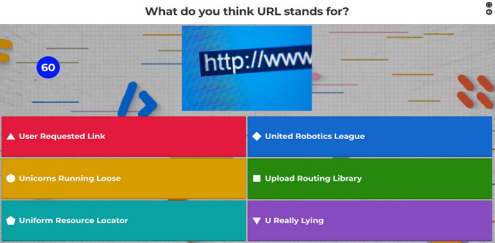
# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
22 1 min 30 sec	 <p>Discover how <b>information</b> is passed around the world and through data centers. (1:19)</p>	<p><b>Play Video 8: Stop 3 Part A (1:19)</b></p> <p><b>Say:</b> "What do you think moves faster than electricity through wires?"</p>	
23 20 sec	 <p>What do you think is faster than electricity?</p> <p>20</p> <p>▲ camels    ◆ light</p> <p>● sound    ■ wind</p>	<p><b>Read the poll question and answer choices to students: "What do you think is faster than electricity?" Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> light</p>	
24 1 min 30 sec	 <p>Continue learning about how data is passed through <b>fiber optic cables</b> and wifi. (1:24)</p>	<p><b>Play Video 9: Stop 3 Part B (1:24)</b></p> <p><b>Say:</b> "Before we meet someone who splices wires, we have a trivia question!"</p>	

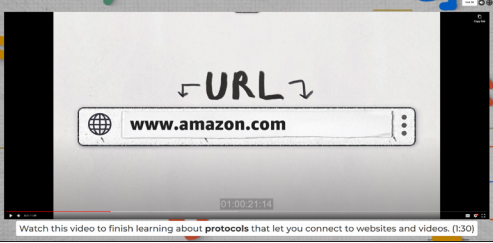
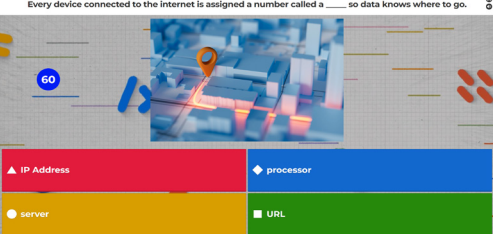

# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
25 30 sec		<p><b>Read the question and on-screen answer choices to students. “___ are tiny glass tubes that allow information to be sent to and from data centers using light waves.”</b></p> <p><b>Answer:</b> Fiber Optic Cables</p> <p><b>Say:</b> “Our next video highlights a career that keeps us connected: A fiber splicer. Take down notes of any information that sounds interesting to you about this career!”</p>	
26 2 min		<p><b>Play Video 10: Fiber Splicer (1:50)</b></p> <p><b>Say:</b> “What a cool career! Time for another poll before our last stop.”</p>	
27 20 sec		<p><b>Read the poll question and answer choices to students: “True or False: Every device on the internet is assigned a number as an address.”</b></p> <p><b>Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> True</p>	

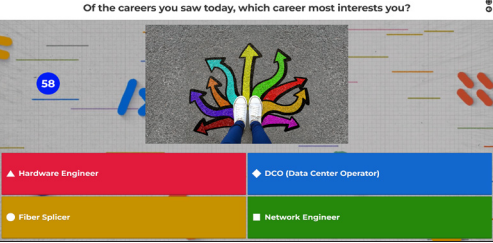


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Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
28 15 sec		<p><b>Quickly read the slide.</b></p> <p><b>Then Say:</b> “The next stop will teach us more about those special numbers assigned to devices.”</p>	
29 1 min 45 sec		<p><b>Play Video 11: Stop 4 Part A (1:34)</b></p> <p><b>Say:</b> “You enter URLs all the time - like Kahoot.com or Amazon.com but what do you think URL means?”</p>	
30 30 sec		<p><b>Read the poll question and answer choices to students: “What do you think URL stands for?” Students answer poll question. Acknowledge the poll answers.</b></p> <p><b>Correct Answer:</b> Uniform Resource Locator</p>	

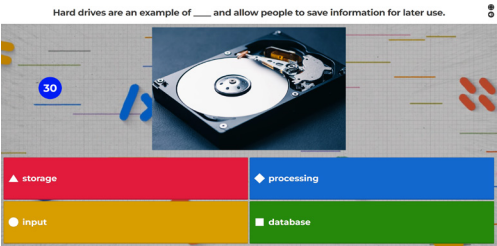
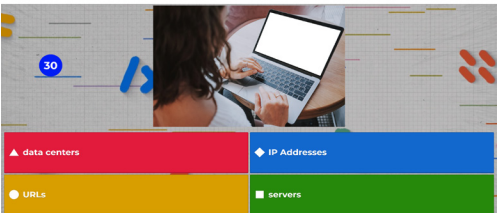
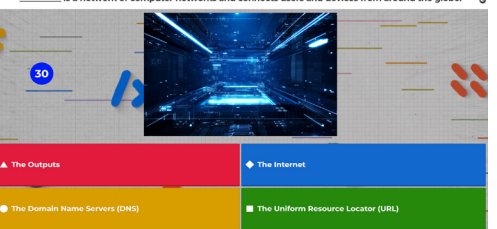
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Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
31 1 min 35 sec		<p><b>Play Video 12: Stop 4 Part B (1:32)</b></p> <p><b>Say:</b> "Let's review 1 more vocabulary word before our final career spotlight."</p>	
32 30 sec		<p><b>Read the question and on-screen answer choices to students. "Every device connected to the internet is assigned a number called a __ so data knows where to go."</b></p> <p><b>Answer:</b> IP Address</p> <p><b>Say:</b> "Our final career video highlights a career that engineers where data goes: a network engineer. Take down notes of any information that sounds interesting to you about this career!"</p>	
33 1 min 35 sec		<p><b>Play Video 13: Network Engineer (1:32)</b></p> <p><b>Say:</b> "Before we finish up the tour videos and do some rapid review trivia, I'm interested to know: What career interested you the most today?"</p>	

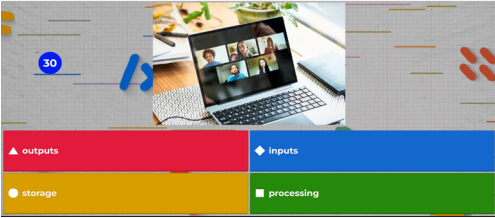
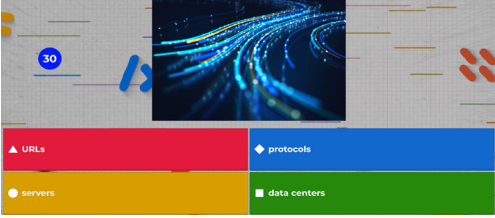
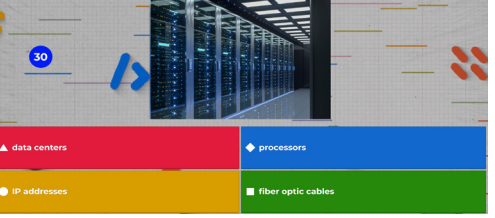
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34 1 min		<p><b>Read the poll question and answer choices to students.</b></p> <p><b>Optional:</b> Hold a discussion now or after the tour about which career most interests students and why.</p>	
35 1 min 35 sec		<p><b>Play Video 14: Tour Closer (1:29)</b></p> <p><b>Say:</b> "You learned a LOT of information today about the cloud and careers. Let's do some rapid-fire review questions before we see who was the top of today's leaderboard!"</p>	
36 20 sec		<p><b>Say:</b> "The first few questions will be quiz questions worth points, then a few poll questions to help make tours even better in the future!"</p>	

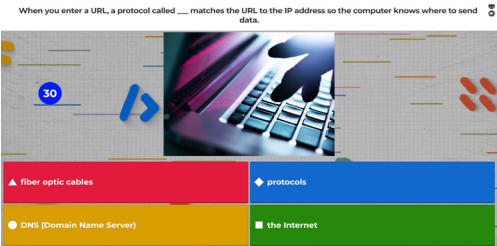
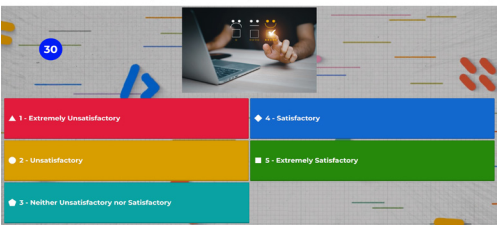
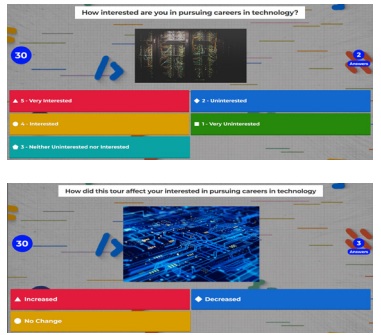
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Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
37 30 sec	<p>Hard drives are an example of ___ and allow people to save information for later use.</p>  <p>▲ storage    ◆ processing ● input    ■ database</p>	<p><b>Read the question and on-screen answer choices to students. "Hard drives are an example of ___ and allow people to save information for later use."</b></p> <p><b>Answer:</b> storage</p>	
38 30 sec	<p>Instead of entering numbers, people enter an easy to remember address called ____, like Amazon.com, to visit a website.</p>  <p>▲ data centers    ◆ IP Addresses ● URLs    ■ servers</p>	<p><b>Read the question and on-screen answer choices to students. "Instead of entering numbers, people enter an easy to remember address called ____ like Amazon.com to visit a website."</b></p> <p><b>Answer:</b> URLs</p>	
39 30 sec	<p>_____ is a network of computer networks and connects users and devices from around the globe.</p>  <p>▲ The Outputs    ◆ The Internet ● The Domain Name Servers (DNS)    ■ The Uniform Resource Locator (URL)</p>	<p><b>Read the question and on-screen answer choices to students. "___ is a network of computer networks and connects users and devices from around the globe."</b></p> <p><b>Answer:</b> The Internet</p>	



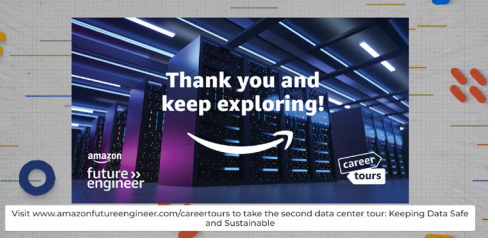
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Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
40 30 sec	<p>Someone attending online class types words into the chat and speaks into a microphone. These are examples of computer ____.</p> 	<p>Read the question and on-screen answer choices to students. "Someone attending online class types words into the chat and speaks into a microphone. These are examples of computer ____."</p> <p><b>Answer:</b> inputs</p>	
41 30 sec	<p>Computing devices follow a set of rules called ____ to determine how data is transmitted.</p> 	<p>Read the question and on-screen answer choices to students. "Computing devices follow a set of rules called __ to determine how data is transmitted."</p> <p><b>Answer:</b> protocols</p>	
42 30 sec	<p>Businesses can store information on servers in ____ so people can access data in the cloud.</p> 	<p>Read the question and on-screen answer choices to students. "Businesses can store information on servers in ____ so people can access data in the cloud."</p> <p><b>Answer:</b> data centers</p>	

# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
43 30 sec		<p><b>Read the question and on-screen answer choices to students. "When you enter a URL, a protocol called ___ matches the URL to the IP address so the computer knows where to send data."</b></p> <p><b>Answer:</b> DNS (Domain Name System)</p> <p><b>Say:</b> "The next questions are some polls to give Amazon some information to help make their tours even better in the future. Then we'll find out the winner! The first questions asks about your tour experience on a scale from 1 to 5, with 1 meaning you did not like it, and 5 meaning you really liked it."</p>	
44 30 sec		<p><b>Read the poll question and answer choices to students.</b></p> <p><b>Say:</b> "The next question asks if you now are interested in having a career in technology. 1 means you really don't want a career in technology and 5 means you really do want a career in technology. Then we'll answer if the tour increased, decreased, or didn't change your desire to have a career in technology."</p>	
45 - 46 30 sec		<p><b>Read the poll question and answer choices to students.</b></p> <p><b>Say:</b> "The final question asks if you feel like you belong in a career in technology. 5 means you strongly agree that you belong in a career in technology, 1 means you don't feel like you belong in a career in technology."</p>	

# AWS Data Center Tour: Uncovering Cloud Computing

Slide # (suggested time)	Slide Image	Facilitation Tips	Notes
46 30 sec		<p><b>Say:</b> "Really great job today! Once I go through these next 2 slides we'll see the winner on our podium!"</p>	
47 0 min		<p><b>Teachers only:</b> Scan the QR code on this slide or visit the link to take a survey and receive a \$5 Amazon Gift Card. (US Only)</p>	
48 0 min		<p><b>Optional:</b> Lead students in a discussion using the discussion questions or your own questions.</p> <p>Be sure to assign or take students on AWS Data Tour 2: Keeping Data Safe and Green to teach students about the infrastructure and careers that keep data centers and information safe and sustainable.</p> <p>Show the podium. Celebrate the winners and all students for participating.</p> <p>Print and distribute <a href="#">certificates</a> for students.</p>	