





Nevada 1st Grade Computer Science Report Card – LEGO Education Solutions

Note: This is an example. A full K-5 alignment offering is available. Contact your Account Manager, Danna Hollander - Danna.Hollander@LEGO.com

Concept: Algorithms and Programming			
Indicator	Standard	Meeting the Standard Students will...	LEGO Solutions
1.AP.PD.1	Describe the iterative process of program development (including terminology, steps taken, and the logic of choices).	Describe a program's sequence of events, goals, and expected outcomes including: --applicable necessary terms --sequence of events/steps taken --logic to support choices made	SPIKE Essential - Cave Car 
1.AP.V.1	Model the way programs store and manipulate data by using numbers or other symbols to represent information.	Modify an existing solution (using data and numbers) to represent how to solve a variety of problems.	SPIKE Essential – Spinning Ferris Wheel  Other supporting lessons: SPIKE Essential - The Perfect Swing

Concept: Computing Systems			
Indicator	Standard	Meeting the Standard Students will...	LEGO Solutions
1.CS.D.1	Select and operate appropriate device and software to perform a variety of tasks and recognize that users have different needs and preferences for the technology they use.	Select and operate a device to perform a variety of different tasks. Recognize and identify the needs/preferences of different users to support the technology they will choose to support those users. Modify a solution, considering user preferences, to perform a specific goal or outcome.	SPIKE Essential - Twirling Teacups  Other supporting lessons: SPIKE Essential - Spinning Ferris Wheel

Concept: Data and Analysis			
Indicator	Standard	Meeting the Standard Students will...	LEGO Solutions
1.DA.S.1	Recognize that a variety of data (e.g., music, video, images, text) can be stored in and retrieved from a computing device.	Recognize and identify that data that can be stored in and retrieved from a computing device such as music, video, images, text, icon/word code.	SPIKE Essential - Spinning Ferris Wheel SPIKE Essential - Animal Alarm 

Concept: Impacts of Computing			
Indicator	Standard	Meeting the Standard <i>Students will...</i>	LEGO Solutions
1.IC.SI.1	Work respectfully and responsibly with others online.	Respectfully and responsibly work and collaborate with others online.	All SPIKE Essential solutions include objectives for safe and respective collaboration with peers when working both on and offline.

Concept: Networks and the Internet			
Indicator	Standard	Meeting the Standard <i>Students will...</i>	LEGO Solutions
1.NI.C.1	Explain why we keep personal information (e.g., name, location, phone number, home address) private.	<p>Explore and explain why it is important to keep personal information private.</p> <p>Additional Skills:</p> <ul style="list-style-type: none"> • Communication • Critical Thinking • Computer Science: <ul style="list-style-type: none"> ○ Networks and Security ○ Digital Citizenship ○ Communication 	<p>LEGO Education Unplugged Activity</p> <p>Guiding Questions:</p> <ul style="list-style-type: none"> • What type of information do we keep private? Why? • Why is it important to keep this information private? • What could happen if we don't protect this information? <p>Description: Working in pairs, Student A select three different colored LEGO® bricks. Without their partner seeing, Student A selects one brick for their password, then hides all of the bricks. Student B tries to guess Student A's password by naming the color of the selected brick. Students repeat activity to try and create more complex passwords by increasing the length of the password and the criteria needed (i.e., color, number of studs, function, DUPLO or system)</p> <p>Guiding questions:</p> <ul style="list-style-type: none"> • How difficult was it to guess a short password? • What additional criteria did you add to make your password difficult to guess? <p>Conclusion: Have students write a reflection about why we keep personal information private and why and what could happen if we don't. Have them share with a partner.</p>