

Standard: DA.S.01 Grade Band: K-2

Grade	Standard
K	Identify that information from our everyday lives can be stored and accessed via computing devices .
1	Identify, access, modify, and save an existing file with a computing device.
2	Create, copy, manipulate, and delete a file on a computing device. Identify the information stored as data .

Grade	Essential Skills
K	<p>Identify information that can be stored on a computing device.</p> <p>Identify the information that cannot be stored in a computing device.</p>
1	<p>Use and store files on a computing device.</p> <p>Find information in a file on a computing device (may be an image, text, etc.)</p>
2	<p>Create, copy, revise and delete files on a computing device.</p> <p>Identify various types of information stored on a computer as data.</p>

Explanation
<p>Students will recognize that all information stored and processed by a computing device is referred to as data. Data can take many forms: images, text documents, audio files, software applications, video files, etc.. By second grade, students will be able to find files on a computer in order to locate data, as well as create, save, copy and delete the files.</p>

Think of this as similar to....
<p>There are different kinds of clothes in a dresser. There may be socks, pajamas, shirts and more.</p>

Essential Questions
<p>What are different types of data that can be used and stored on a computing device?</p>
<p>How can you create, change, and delete different types of files on a computing device?</p>

Implementation Examples—What would this look like in the classroom?

Grade(s)	Title	Description	Link	Content Connection & Notes
K	Retelling Fairy Tales	Grade K--When students use Bee Bots or other floor robots they should recognize that when they press the buttons on the robot, they are giving the robot information that is saved. Once they press run, the information is used to direct the robot. Students can recognize that the robots understand only the information from the buttons and can brainstorm types of information the robots can't understand like verbal commands. In this lesson students use the robots to retell popular fairy tales by sequencing four to six events. The lesson is flexible enough to accommodate any narrative that students are studying. Other examples can be given, like Alexa that responds to voice commands and tablets or phones that respond to touch on the screen.	Retelling Fairy Tales	This lesson also aligns with ELA RL.K.2
K-2	Storage and Selfies	<p>Grade K- Students take selfies with a computing device, Students will realize that the selfies are stored on that device. Students love selfies! Contrast that with actual pictures that the students draw or color. Brainstorm ways that those pictures can be stored on a computing device (e.g., taking a photo of it)</p> <p>Grade 1--Students take and save selfies on a computing device and once stored, they locate the photos in the storage of the device possibly for use with another project.</p> <p>Grade 2--Students prune selfies (delete poor ones). Make copies of the ones they like best and crop or otherwise alter them in different ways possibly for a project. Write or record a short description of their favorite selfie. Students should understand that an image file, a text file and an audio file are all data stored on a computing device.</p>	Storage and Selfies	

Grade(s)	Title	Description	Link	Content Connection & Notes
1-2	File It!	<p>Grade 1--Students write a story or other assignment using a computing device, storing it locally. They return at another time to find the file for revision.</p> <p>Grade 2--Students store the story on the device or remotely (e.g., in the cloud). They make a copy of their story for peer and/or teacher revision and editing. Revise the assignment according to suggestions and when the final copy of the story is complete, students delete any unnecessary files. They can do this with any type of file—can be text document, audio, presentation-- or a combination of files such as inserting pictures into a text or presentation file.</p>		<p>This lesson also aligns with ELA W1.6, W2.5, W2.6; possibly W1.3, W2.3; and, depending on content, can be aligned with NGSS 2-PS 1-4; 2 ESS 1-1; or various SS standards</p>

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These annotations are a collaboration between [Maryland Center for Computing Education](#) and the [Maryland State Department of Education](#).