**Virginia Department of Education**

**Planning for Remote Implementation of**

**Rich Mathematical Tasks**

| **Set the Stage for Learning** | |
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| **Determine**  **and establish learning goals** | * determine the content, language, and social learning intentions to be targeted in the task * identify prerequisite knowledge that may be necessary to access the grade level knowledge and skills to be targeted in the task |
| **Select a task that aligns to learning goals** | * choose a task that will support the established learning intentions and allow for access by learners at all levels * choose a task that may serve as an introduction to learning or as a culminating learning event following instruction * choose a task that supports the established learning intentions and multiple entry points for all students * solve the task and consider possible student strategies and potential misconceptions * plan for appropriate scaffolding of the task to meet the needs of all learners |
| **Create**  **student learning networks** | * work with students to form learning groups that blend various interests, abilities, and learning goals * provide students choice and voice when interacting digitally * work with students to customize the learning environment to enhance the learning of individual students |

| **Establish a Safe and Welcoming Online Environment** | |
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| **Establish**  **virtual learning norms and expectations** | * work together with students to establish ground rules for interacting in a digital or remote space (e.g., eliminate distractions; reduce background noise; use of microphones and cameras; etc.) * create opportunities for students to practice established norms and routines during shorter activities, such as number sense and reasoning routines * provide time and space for students to learn about one another and build a safe and trusting learning community * establish structures within the learning platform for students to share ideas collectively * utilize Universal Design for Learning (UDL) principles to provide multiple means of engagement, representation, and action and expression |
| **Leverage technology** | * provide time for students to learn about and interact with the technology to be used for learning * create opportunities for students to explore tools, including virtual manipulatives, that help to organize information and make connections * utilize technology with built-in accessibility features, such as screen readers and closed captioning, to meet the needs of all learners * collaborate and communicate with students using division approved technology tools and software available in the online environment, both asynchronously and synchronously |
| **Build digital citizenship** | * collaborate with students to create norms for student-to-teacher and student-to-student virtual dialogue (e.g., use of chat rooms and discussion boards, etc.) * ensure that students learn processes for using digital sources that support the learning process, including the evaluation of data (e.g., accuracy, credibility, relevance, etc.) * support students with engaging in and advocating for positive, safe, and ethical behavior when interacting online and collaborating with others |

| **Launch, Implement, and Close a Task** | |
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| **Launch a task** | * assist students with becoming familiar with the learning intentions and success criteria associated with the task, as appropriate without diminishing independent student thinking * digitally engage the students in an activity that launches and hooks the students into pursuing solutions |
| **Implement a task** | * support students in understanding the specific problem or issue presented in the task * ensure that students know their specific role within a virtual learning group to begin implementation of a task * collaborate with students to ensure they are able to establish ways to represent their work and thinking using the appropriate technology tools as they productively struggle with a task * provide virtual tools, as needed, that support conceptual understanding of mathematics and student dialogue to further student thinking * use anticipated student responses to strategically monitor the task in order to ask questions that promote and further student thinking using various virtual tools * ensure that technology is used to provide feedback that improves the ability to demonstrate learning in a variety of ways * select and sequence student responses, through the use of appropriate technology, to share with the whole class and facilitate connections to key mathematical ideas * provide equitable opportunities for all students to share their thinking in various ways that provide flexibility and choice |
| **Close a task** | * support students in using technology and engaging in reflective classroom dialogue that supports and deepens learning targeted in the task * provide choices to students to engage in individual reflection of their learning * provide meaningful feedback to the students * use student reflections to gauge understanding of targeted learning intentions |

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