

Ideas for Designing Station Rotation Lessons for Science		
Teacher-led Station	Online Station	Offline Station
#1 Hook the Group • Present a problem, challenge, image, or graphic • Ask students to pair up to discuss & solve or explain • Debrief as a small group • Follow up with instruction and/or modeling #2 Present, Pause, Discuss (Repeat) • Present a bite-size chunk of new information • Pause and allow students to process the information, fill in their notes, and ask questions • Facilitate an informal discussion of the content using the students' questions #3 I do, We do, You do • Explain and model • Run through an example as a group • Pair students to tackle another problem • Continue to practice and apply individually	#1 TED-Ed Video Lessons • TED-Ed has produced a vast collection of high-quality, short videos on science topics. The videos are part of a more complete lesson with questions and tasks designed to encourage students to think more deeply about scientific topics. #2 Make Digital Flashcards with Quizlet • Ask students to create a collection of digital flashcards pairing words with definitions and images for each chapter of the text or each unit of study. • Encourage students to return to earlier collections to review scientific terms repeatedly over the course of the year. #3 Design a Digital Flowchart or Infographic • Ask students to select a scientific phenomenon or system to analyze closely and create a digital flowchart or infographic visually	#1 Compare, Contrast, or Classify • Give students—individually if working remotely or collaboratively if working in a classroom—to think critically about the information they are learning • Provide graphic organizers to support this work #2 Field Work • Ask students to observe and collect data about their natural environments ◦ Document with data tables, drawings, and written notes #3 Labs, Experiments, STEM Challenges • Challenge students—individually if working remotely or collaboratively if working in a classroom—to conduct a lab, simple experiment, or complete a STEM challenge • Ask them to document their process (e.g., pictures, videos,

#4 Quick Assessment & Targeted Instruction ● Use an online tool (e.g., Google Form) to administer a quick assessment to assess what students know or retained from a previous lesson, video instruction, or reading assignment ● Collect data to assess students' understanding of key ideas and scientific terms ● Use that quick data to drive targetted instruction ● Support students who need additional instruction and scaffolds and release students who are ready to move on #5 Homework Check & Review ● Provide a model, exemplar, or answer key ● Give students time to check, correct, & capture questions ● Review as a group & provide a follow-up explanation ● Build with additional instruction	communicating what they learned #4 <u>Thinking Routine: Parts, People, Interactions</u> ● Encourage students to understand and explore systems ● Ask students to select a system and then think through the what, who, how, and why of that system #5 Online Discussions ● Post discussion questions on Flip for a video-based discussion, or use your learning management system (e.g., Schoology, Google Classroom) to facilitate a text-based discussion. ● Give students time in a station to respond thoughtfully to the question and to their peers. ○ Use your questions to drive higher-order thinking (analyze, synthesize, compare/contrast) #6 Online Science Scavenger Hunt ● Provide teams of students with a list of scavenger hunt items that ask them to find information, define scientific terms, curate media on specific topics, and/or watch experiments on YouTube #7 Tell Me Why ● Present students with a scientific phenomenon and ask them to record a Flip video explaining it in	hand-written notes) ● Reflect on the experience in writing ○ What did they learn? ○ What was surprising? ○ What questions do they have? #4 Read and Take Notes ● Give students time to engage with offline texts (e.g., articles or chapters in the text) and capture their notes ○ Provide a guided note template to help students identify and record key ideas #5 Makerspace ● Encourage students to tinker and build to explore concepts, ideas, and processes ● Pair makerspace activities with a reflection so students surface their thinking and learning #6 Flowcharts for Scientific Processes Students can outline processes like the scientific method, photosynthesis, cellular respiration, or the water cycle. They'll fill in each step, ensuring they understand the sequence of events. #7 Microscope Exploration Provide a variety of slides for students to observe under microscopes. They can sketch and label what they see, creating
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	their own words. ○ What is happening? ○ Why is it happening? ○ What questions do you have? ● Ask students to reply to their peers' videos asking questions, making connections, suggesting alternative explanations, etc.	an observation journal. #8 Concept Maps for Interrelated Ideas Students connect these terms using lines and arrows, then label each connection to explain the relationship. For instance, in an ecosystem map, they might connect "plants" to "herbivores" with a labeled arrow indicating "are eaten by."
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