Planning Tool: Teaching with Remote Resources – Fayette County Public Schools

Unit: Rock Transformations

Chapter 3 Question:  How could rock from one of the regions have transformed into a different type of rock in the other region?

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| @Home Unit lesson #: 11 Platform lessons: 3.2 and 3.4 |
| Date/Dates: Dec. 7, 8 |
| Investigation Question: How do rock formations move between the surface and Earth’s interior? (Lessons 9-11)Learning Intention: I am learning to model and describe how rocks can move between the surface and Earth’s interior. |
| 3D Statement: Students analyze and interpret new evidence about plate motion and how it can cause rock transformations (cause and effect). They construct visual models and write scientific explanations about how the Rocky Mountains and Great Plains formed. (3.4)Success Criteria: I’ll know I am successful when I can use a model and evidence to support an explanation about how the Rocky Mountains and Great Plains formed. |
| Key Activities from @ Home Lesson  (and date/dates if lesson is split)* Do: Students use the Rock Transformations Sim, or watch a video of the Sim investigation, to complete additional missions showing all the different ways rock can transform. 12/7
* Talk: Students engage in the Write and Share routine, in which they respond to different prompts and then talk to a partner in order to apply their understanding of how uplift and subduction move rock formations. 12/8
* Reviewing Key Concepts and Vocabulary: Students review the @Home Science Wall, including the Chapter Questions, key concepts, and vocabulary. 12/8
* Reflect: Students evaluate a model made by a fictional student, showing a possible explanation for how the rock in the Great Plains and Rocky Mountains formed. Students reflect on which claim they think is best supported by the evidence they have gathered. 12/8
 | Delivery (Synchronous/ Asynchronous)SSSS | NotesOptions – students access demo from home, teacher demo of the Sim sharing screen, or show @Home video 3.2, Act. 4, Parts A and B. Or demo first, allow students time to access Sim and find solutions. Students can keep notes in notebook.Write and share routine – let students write their response in notebook to a prompt they select, share several out loud. Optional – could do breakout rooms. Note especially slides 19-20 for summarizing discussion.Student sheets for Lesson 11 have a type of digital word wall. I might project those. Students could add to the word wall in their notebook.Group discussion – allow students to choose which claim they feel is best supported. |
| @ Home Video Usage (assign for certain activities or the whole lesson, view for best practices before recorded or synchronous session, assign for students who are absent for synchronous sessions)View video sections for best practices and teacher demo of the Sim, (3.2, Act. 4, Parts A and B)Assign video sections for students who missed the synchronous session (3.2, Act. 4, Parts A and B) |
| From the corresponding platform lesson:Differentiation strategies:ELL students may need extra time/support for writing, and they may be encouraged to incorporate drawings, labeled diagrams, etc. with their explanations. They may meet with a paraeducator in a small group or join office hours to share ideas orally and complete the writing.Students who need more support – allow open ended diagramming, different representations.Formative Assessments: An On-The-Fly Assessment is found in Lesson 3.4, Activity 2. There is an opportunity to assess a student’s understanding of the Cross-Cutting Concept of Energy and Matter during the Write and Share. I will listen for comments that show if students are keying in on the interaction of energy with rock materials. Are they recognizing that an energy source is necessary for one kind of rock to transform into another? (Earth’s interior… subduction, melting, Sun – driving weathering to break down rock on the surface). Guiding questions to help see if students are thinking through this context are listed in the OTFA. Discuss with students to confirm their ideas, revisiting the Sim to look for energy interactions as necessary.Use any original slides from the platform lesson? Not this lesson |
| Use word wall? (Digital slide or chart, might include Unit Question, Chapter Question, Investigation Question, Vocabulary, Key Concepts)Slides for @Home 11and Student Sheets contain elements of the word wall, which will be used in the review. Students can add to the word wall they are keeping in their notebook. |
| Technologies to implement? (Jamboard, PearDeck, Nearpod, Google Classroom, etc.)Could use Jamboard for REFLECT activity, assign student slides through Canvas so students can access their own version of the digital wall to add to their notebook |
| Notes for alternate methods of deliveryOptions on DO activity listed above – could do individual use of sim, teacher demo, watch the videosCould do break out rooms to discuss the Write and Share, instead of class discussion |

Using Amplify Resources for Planning

1. @Home Units and @ Home Videos can be accessed through the Program Hub.

2. Beside the Teacher Overview link for the @Home Unit there is a Lesson Index, that cross references @Home Units and Platform Lessons, Students Sheets and Student Investigation Notebook Pages.

3. The Chapter @Home at a Glance Outline at the beginning of each chapter shows chapter questions, investigation questions, key concepts, and vocabulary and the @Home Lesson where they are introduced or used to guide instruction.

4. Learning Intentions can often be written from the Investigation Question. The Investigation Questions are found in the Chapter @Home at a Glance Outline or on the Coherence Flowchart on the Unit Landing Page on the platform, as well as within the lessons.

5. Success Criteria can often be written from the 3D Statement on the Lesson Brief page, listed under the Standards tab.

6. For a complete listing of formative assessments, look on the Unit Landing Page, under the Embedded Formative Assessments tab.