Science: Rocks & Minerals, and Paleontology Unit Plan Miss. Schabler

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| Lesson # | Topic | Lesson Length | Learning Outcomes | Objectives | Assessment | Resources and Materials |
| 1 | Rocks & Minerals introduction | 90 min | 3-13-23-43-5 | A-2A-44.1.1 | Students are introduced to the unit by completing a KWL chart for rocks, analyzing different kinds of rocks & minerals with magnifying glasses, and reading new information from books. | KWL ChartParticipation Rubric | SMART boardRulerPencilBlank PaperRocks & Minerals booksMagnify glassesRocks & mineral bags |
| 2 | Rock Properties | 90 min | 3-13-23-43-5 | A-2A-3A-4 | Students are introduced to the different properties to characterize rocks and minerals through a handout with online research and an experiment. | Rocks & Minerals Experiment SheetParticipation Rubric | SMART boardLap topsRocks boxTileScaleRulerHandout |
| 3 | Types of RocksRock Cycle | 90 min | 3-13-23-43-5 | A-1A-2A-3A-4 | Students will first review the properties of rocks and minerals. Students will remember, understand, and identify the three types of rock within the rock cycle. | WorksheetParticipation Rubric | SMART boardRock Cycle worksheetRock DefinitionsReview Worksheet |
| 4 | Minerals | 90 min | 3-13-23-33-43-5 | A-2A-3 | Students will understand the properties used to classify minerals by the use of centers and complete their “Conclusion” from their Rocks & Minerals experiment Sheet.  | Rocks & Minerals Experiment SheetParticipation Rubric | Mineral Box setMinerals PostersRocks BoxBooks |
| 5 | Crystal ExperimentRocks & Minerals Uses | 90 min | 3-13-23-33-43-5 | A-2A-3A-7 | Students will create a crystal experiment in table groups as one center, while also exploring the uses of rocks and minerals in our lives.  | Participation rubricExperiment worksheet | SMART boardExperiment worksheetSpongesSaltEpsom saltBlue DieSpoonsCupsPlatesLap topsMatching cut-outs |
| 6 | Weathering & Erosion | 90 min | 3-13-23-33-43-5 | A-2A-64.1.1 | Students will examine their crystals experiments from the day before (results / conclusion). Students will understand weathering and erosion and its effects in Alberta.  | Matching WorksheetParticipation Rubric | SMART boardWeathering and erosion matching worksheet |
| 7 | Soils | 90 min | 3-13-23-33-43-5 | A-5A-6 | Students will explore soils through the SMART board and center activities. Students will also review weathering & erosion within center activities and videos.  | Participation rubricSoils observation sheet | SMART board2-3 buckets of soil (clay, silt, sand)pencil crayonshandoutslaptops |
| 8 | FossilsSoil CakeIntroduce Final Project | 90 min | 3-13-23-33-43-5 | A-54.1.1 | Students will understand how fossils are created and analyze the sequence of fossil creation. Students will be introduced their their final project and create a soil cake.  | Participation rubricSMART board activity | SMART boardPuddingGummy wormsChocolate cakeOreosGraham crackersBowlSpoonscups |
| 9 | Galt Museum Trip | 90 min | 3-13-23-33-43-5 | 4.1.1 |  |  | Permission formsBus |
| 10 | Project Work Period | 90 min | 3-13-23-33-43-5 | A-1A-2A-3 | Students review previous knowledge in addition to conducting online research from provided websites to create a PowerPoint presentation of a birthstone (in pairs). | Participation rubric: 10% | Lap topsCheck listsPaperpencil |
| 11 | Project Work Period | 90 min |
| 12 | Project Presentation | 90 min | 3-43-5 | A-1A-2A-3 | Students will present their PowerPoint presentation.  | Participation rubric: 5%Performance task rubric weight: 15% | SMART boardRubricchecklist |