



Rocks, Minerals & Earth's Crust Answer Key

PART 1:

Complete the table by adding the missing information from each of the career profiles provided. Read the "What I do at work" and "How I affect peoples' lives" sections to find the missing information. *While responses will vary somewhat, possible responses include:*

Worker's Name & Job Title	What the person does (From What I do at Work)	How this job relates to the Rocks, Mineral's & Earth's Crust (From How I affect people's lives)
Caroline Richard - Geotechnical Engineer	<i>Collects information and reports on different aspects of the mine.</i>	<i>Uses understanding of minerals and structures in the Earth's crust.</i>
Jason Carignan - Mine Technician	<i>Uses drones to collect information and then creates 3D models of the surface for possible mining.</i>	<i>Uses understanding of the different features of the Earth's crust to interpret information and locate mineral deposits.</i>
Bronwyn Azar - Geoscientist	<i>Collects data about the minerals and structures of the Earth's crust and creates maps others can use.</i>	<i>Adds to our knowledge of the rocks, minerals and Earth's crust.</i>
Megan Laracy - Geologist	<i>Uses data to create models of Earth's crust under the ocean to identify where deposits of fossil fuels are located.</i>	<i>Uses models of the Earth's crust, plate tectonics, etc.</i>
Kelsey Privett - Exploration Project Geologist	<i>Uses core samples to identify areas that may contain deposits of minerals for mining.</i>	<i>Uses an understanding of minerals and how minerals form.</i>
Lisa T. Phiri - Mining Geologist	<i>Collects data to identify the safest and most efficient ways to extract gold from the mine.</i>	<i>Understanding of rocks, how minerals are formed and Earth processes.</i>
Joel Shank - Geoscientist	<i>Interprets geologic data to identify the most likely places to find oil deposits under the ocean bed.</i>	<i>Understand the processes that take place to form minerals and the forces that act on the Earth.</i>



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Natalie Swanson - Petroleum Geologist	<i>Analyzes rock samples to create maps and models to identify where to find deposits of oil and gas.</i>	<i>Uses understanding of minerals, how minerals form, forces that act on the Earth's crust, etc.</i>
Linda Duncan - Corporate Senior Metallurgist	<i>Performs laboratory tests on soil and ore samples to identify the types and amounts of minerals present.</i>	<i>Uses knowledge of the chemical and physical properties of minerals.</i>
Steve Copeland - Power Distribution Supervisor	<i>Make sure the maintenance team has the tools and materials they need to keep the power running at the mine site.</i>	<i>While he works at a mine site, his work does not connect or need knowledge of the Earth's crust.</i>

PART 2:

Based on the career profiles you reviewed, make a list of the skills, abilities and knowledge that people working in these careers should have. [Some possible responses include:](#)

Skills or Abilities	Knowledge
<ul style="list-style-type: none"> • <i>Problem-solving and planning</i> • <i>Communication and collaboration</i> • <i>Making and recording observations</i> • <i>Collecting and analysing data</i> 	<ul style="list-style-type: none"> • <i>Types of rocks and minerals</i> • <i>Characteristics (physical and chemical) of different rocks and minerals</i> • <i>How forces of plate tectonics change the structure of the Earth's crust</i>