

Looking closely at: MINING & GEOLOGICAL ENGINEERS

MINING & GEOLOGICAL ENGINEERS: Determine the location and plan the extraction of coal, metallic ores, nonmetallic minerals, and building materials, such as stone and gravel. Work involves conducting preliminary surveys of deposits or undeveloped mines and planning their development; examining deposits or mines to determine whether they can be worked at a profit; making geological and topographical surveys; evolving methods of mining best suited to character, type, and size of deposits; and supervising mining operations.

TASKS INCLUDE:

- Inspect mining areas for unsafe structures, equipment, and working conditions.
- Select locations and plan underground or surface mining operations, specifying processes, labor usage, and equipment that will result in safe, economical, and environmentally sound extraction of minerals and ores.
- Examine maps, deposits, drilling locations, or mines to determine the location, size, accessibility, contents, value, and potential profitability of mineral, oil, and gas deposits.
- Monitor mine production rates to assess operational effectiveness.
- Design, implement, and monitor the development of mines, facilities, systems, or equipment.
- Select or develop mineral location, extraction, and production methods, based on factors such as safety, cost, and deposit characteristics.

RELATED OCCUPATIONS: Engineering Managers, Civil Engineers, Industrial Safety and Health Engineers, Marine Engineers, Petroleum Engineers, Electrical Drafters, Civil Engineering Technicians, Mechanical Engineering Technicians, Geoscientists

ONET. Accessed 22 February 2011.

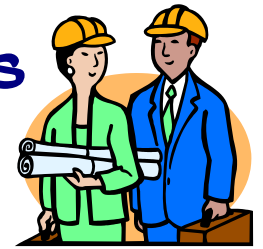
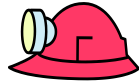


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FAST FACTS:

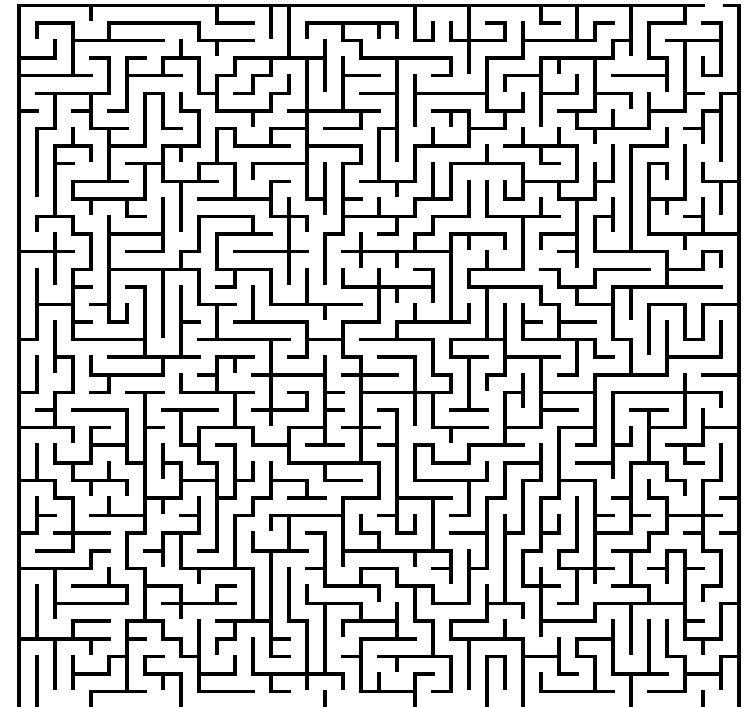
Average salary: \$82,080

Education: 4-year college degree

Job Growth: Faster than average



Pretend you are a mining & geological engineer and you are working to design an escape route from a mine. Complete the maze below.



Escape route successful!

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