

# Mining Minerals from Salt

## Learning objectives

By completing this activity, you will:

- Summarize the processes that act to make chemical sedimentary rocks.
- Diagram how the processes link together to form mineral resources, specifically with regards to evaporite (salt) deposits.
- Apply knowledge of sedimentary environment and operational processes to infer potential types and locations of mineral resources.

Step 1: Research how (a) salt is produced and mined in solar salt facilities in the Bahamas, and (b) how salt is mined from underground rock salt deposits, in places like Redmond, Utah.

Step 2: In your own words, write down the definitions of the italic words from the table on the right.

Evaporation	<i>Erosion</i>
<i>Deposition</i> (or deposit)	Minerals
Chemical <i>Weathering</i>	Rocks on Land Surface
<i>Crystallization</i>	Oceans
<i>Lithified</i>	Ion

Step 3: Create a concept map about how the solar salt is produced and how rock salt deposits form.

Alternate Step 3: Complete the concept map (on the following page) about how solar salt is produced and how rock salt deposits form.

Step 4: Answer the following questions:

- A. In what sorts of places do you think salt deposits are forming today? (Think about: what are the characteristics of places in which salt deposits can be found)?
- B. Use the completed concept map to help answer this question: Is "sea salt" really any different from normal (rock) salt? Explain your answer.
- C. What are the pros and cons of mining salt in each of the two locations?

