






# LANDFORM SALT CELLAR ACTIVITY





Visit [giftedguru.com/landforms-salt-cellar](https://giftedguru.com/landforms-salt-cellar) for more instructions.

<p>Lesson Topic:</p> <h2>Landforms</h2>	<p>Objectives/Standards:</p> <ul style="list-style-type: none"><li>• Learners will categorize landforms into groups</li><li>• Learners will create salt cellars of landforms from the group of landforms they categorized</li><li>• Learners will exchange and evaluate landform salt cellars</li></ul>
<p>Background/Previous Knowledge/Skill:</p> <ul style="list-style-type: none"><li>• The 53 landforms</li><li>• How to create and fold a salt cellar</li><li>• How to use ProProfs to create flashcards</li><li>• Depth &amp; Complexity Elements: Ethics, Multiple Perspectives, Unanswered Questions, Over Time, Patterns, Language of the Discipline, Rules</li></ul>	
<p>Pre-assessment:</p> <ul style="list-style-type: none"><li>• Landform individual <i>Jeopardy!</i>   Tier III: 90%; Tier II: 70% Tier III: 69% and lower</li><li>• Make a salt cellar (if they can't, let them review with a video &amp; then demonstrate)</li></ul>	
<p>Materials:</p> <ul style="list-style-type: none"><li>• paper</li><li>• white boards for working on their categories</li><li>• paper for making their brace map and writing the descriptions of the categories</li><li>• colored pencils/crayons/markers</li><li>• scissors</li><li>• devices for <i>Jeopardy!</i> game, creating flashcards and watching TED talks</li><li>• all copies needed from lesson plan</li></ul>	<p>Notes:</p> <ul style="list-style-type: none"><li>• The differentiation plan means that Tier III will be different in order than Tiers I &amp; II.</li><li>• Write the question constraints for each tier on the board or screen because the instructions are generic.</li><li>• As an option, you can play the <i>Jeopardy!</i> game as a class and have students keep track of their own results using the sheet.</li><li>• Get the <i>Jeopardy!</i> game at <a href="https://jeopardylabs.com/play/landforms-for-the-win">https://jeopardylabs.com/play/landforms-for-the-win</a></li><li>• PREP!!!! Ask for volunteers to create flashcards for all 52 landforms to be used by other students and shared with the 4<sup>th</sup> grade for GT extension. Donate \$5.20 (ten cents per landform) to the charity of the grading period.</li></ul>





### Tier III:

1. Students work in groups of three to  categorize the landforms
2. Individually, they will create a salt cellar with 8 landforms from one category, one large picture and four small pictures
  - Questions must be formed *Jeopardy!* style with the answer in the form of a question
  - Only four questions may be knowing/understanding level
  - Answers may not be the definition from the list
3. They will take turns playing the salt cellar
4. They will evaluate their salt cellar & compare it with other students' salt cellars
5. They will answer these reflection questions:
  -  Would the Earth be more affected if there were no dunes or if there were no fjords?
  - How differently does a delta see the ocean  than a peninsula sees the ocean?
  - Describe the development of one of the landforms  from the perspective  of the landform.
  - Scholar Opportunity: Make the argument that there is only one ocean. Share your argument in the form of a 30 second educational video/screencast
6. When finished, students will choose one of three TED talks on landforms to watch and they will summarize the talk for the other Tier III students (may work in small groups to create the summary).

### Tier II:

1. For the landforms they missed, they are going to create digital flashcards at <https://www.proprofs.com> for those landforms, review them three times, and quiz themselves.
2. Students work in groups of three to  categorize the landforms
3. Individually, they will create a salt cellar with 8 landforms from one category, one large picture and four small pictures
  - Questions must be formed in *Jeopardy!* style with the answer in the form of a question
  - Only six questions may be knowing/understanding level
  - Answers may not be the definition from the list
4. They will take turns playing the salt cellar
5. They will evaluate their salt cellar & compare it to other students' salt cellars
6. They will answer these reflection questions:
  - Why would it be better  to live on a plateau than on the coast?
  - What landform do you think was the first one that people named ? Why would they have needed to name it?
  - Describe the development of one of the landforms  over time.

### Tier I:

1. They will use the flashcards created by Tier III students to review **all** landforms.
2. Students work in groups of three to  categorize the landforms with guidance and support from me
3. Individually, they will create a salt cellar with 8 landforms from one category, one large picture and four small pictures
4. They will take turns playing the salt cellar
5. They will evaluate their salt cellar & compare it with other students' salt cellars
6. They will answer these reflection questions:
  - Which landform would you  most like to visit and why?
  - Explain the  difference between a piedmont and foothills.
  - Describe what it would be like  if the Earth had no landforms?

### Assessment:

All tiers will have the same rubrics.

### Additional Accommodations:

- May need to help students with set up of ProProf for flashcards.
- Tell students to cover up the sections of the salt cellar example that they aren't working on if all of the writing is confusing them.

### Order of Execution:

- All students preassess with the *Jeopardy!* review
- Assign to tiers based on score: 50+ = Tier III; 35 - 49 = Tier II; 34 or fewer = Tier I
- Tier III begins categorizing activity; Tiers I & II begin with flashcard review
- Students categorize the landforms & record on brace map
- Students create salt cellars of the landforms
- Students share with two other students (do not have to be in same Tier)
- Students complete the Salt Cellar Evaluation and the reflection for their Tier
- Tier III watches and shares TED talks when finished





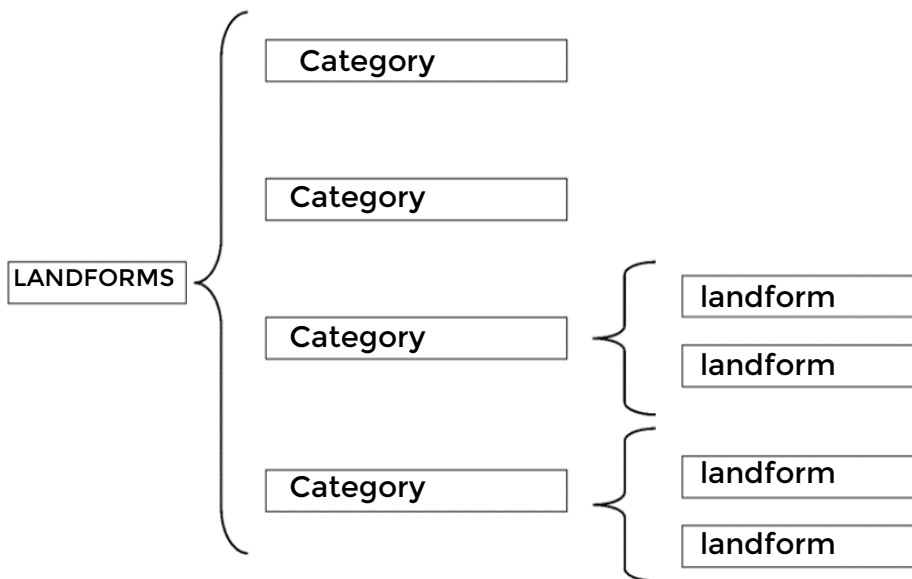
## THE EXTRAORDINARY LIST OF LOVELY LANDFORMS!

archipelago	a large group or chain of islands; also a large area of water containing several islands	lagoon	shallow body of water separated from a larger body of water by barrier islands or reefs
bank	the border of any stream	lake	a body of water completely surrounded by land
bay	any inlet of an ocean, sea or lake that extends into the land; smaller than a gulf	mesa	a flat topped, rocky hill with steeply sloping sides
bayou	a slow, sluggish stream that meanders through lowlands and marshes	mountain	natural raised part of the Earth's surface, usually rising more or less abruptly and has a peak
beach	the shore of an ocean or a lake that is covered by sand or pebbles	mountain range	a chain of connecting mountains
bluff	a steep bank beside a body of water	ocean	any of the largest connecting bodies of salt water on the earth's surface; usually Atlantic, Pacific, Indian & Arctic
branch	a small stream or creek emptying into a larger stream	pass	an opening through hills or mountains used as a route for travel
canyon	a deep, narrow valley with steep sides, often with a river flowing through it	peak	the pointed top of a mountain higher than surrounding points; can be more than one
cape	headland or promontory of large size extending into a body of water with change in shape & direction from rest of coastline	peninsula	piece of land nearly surrounded by water and attached to a larger area of land
cave	a deep, hollowed out area under the Earth's surface	piedmont	an area of rolling land along the foot of a mountain range
channel	a narrow, relatively shallow strip of water or the deeper part of a stream or body of water which is navigable	plain	a large, level area of land
cliff	the steep, rocky face of a bluff	plateau	high, flat landform with steep sides; larger than a mesa
coast	land along the ocean	pond	body of water surrounded by land, but smaller than a lake
cove	a small, sheltered bay in the shoreline of any body of water	rapids	the part of a stream or river where the water flows very swiftly over rocks
crag	projecting point of rock, usually perpendicular	reef	a ridge of rocks or coral in a body of water, which lies slightly beneath or at the surface

crater	the bowl-shaped opening at the top of a volcano	ridge	a long narrow hilltop, mountain range, or watershed
delta	a deposit of sand, silt, and pebbles that forms at the mouth of a river; often shaped like a triangle	river	a large stream of water that drains an area of land and flows into another river or body of water; usually fresh water
divide	the elevated boundary between areas that are drained by different river systems	river mouth	the point where a river empties and ends its course
dune	hill or ridge of sand heaped up by the wind	sandbar	a long, narrow bank of sand in a body of water
fjord	a deep, narrow inlet of the sea, between high, rocky banks	sea	the expanse of salt water that covers most of the earth's surface and surrounds its landmasses; or a body of saltwater
foothills	the hilly area at the base of a mountain	shoreline	the edge of a body of water
glacier	a large sheet of ice, usually at high elevations, which moves slowly over land or down a valley	summit	highest part of a hill or mountain
gorge	a narrow passage between steep mountains or hills; a steep, rocky ravine	tributary	a stream or river that flows into another stream or river
gulf	water bordering on, and lying within, a curved coastline; usually larger than a bay and smaller than a sea; sometimes nearly surrounded by land	valley	an area of land between hills or mountains
hill	a raised landform, not as high as a mountain	volcano	1. A cone shaped mountain formed by lava and cinders that erupted through a crater. 2. An opening in the earth's surface from which lava, steam, cinders, gas and rock fragments are released.
inlet	an indentation on a shoreline, usually leading to an enclosed body of salt water, such as a sound, bay, lagoon or marsh	waterfall	a flow of water falling from a high place to a low place
island	a body land completely surrounded by water	There are even more cool landforms than this just waiting for you to learn them!	

# Group Your Lovely Landforms!

- As a group, divide your lovely landforms into categories.
- You need to categorize all 53 of the landforms.
- Create between 4 and 9 categories.
- One of the categories needs at least 8 landforms in it.
- On a piece of paper, create a brace map with the word “LANDFORMS” in the far left box, then list your categories, and then list the landforms themselves.
- Below your brace map, write a short description for each category explaining what types of landforms belong in the category.





## Landforms Salt Cellar

Today is your lucky day! Do you know why? Because you get to create a landforms salt cellar and play it! I know! It's amazing.

You know how to make salt cellars in general, so here are the specifics for this one:

- You will write 8 questions and answers about landforms using the landforms from the Extraordinary List of Lovely Landforms.
- The 8 landforms should all be from **one** of the categories you sorted the landforms into with your group. Get it? All 8 from one group.
- You will draw one large image and four small images. Your images can be of any landforms you wish, and they **don't** need to match the landforms you choose for your questions and answers.
- Follow the pattern in the picture below. Pay careful attention: the direction of the image and text matter. Follow the orientation as shown in the image, or you will be sad.
- Be sure to write your name on the back of your salt cellar.

Draw an image here.	Question 1 here	Answer 1 here	Answer 2 here	Question 2 here	Draw an image here.
Question 8 here	Answer 8 here	Draw a larger image here.		Answer 3 here	Question 3 here
Answer 7 here	Question 7 here	Answer 4 here	Question 4 here	Answer 4 here	Question 4 here
Draw an image here.	Question 6 here	Answer 6 here	Answer 5 here	Question 5 here	Draw an image here.

## Salt Cellar Rubric


Name: \_\_\_\_\_

Descriptor	Extraordinary	On Target	Nearly There	Emerging
Question Quality	The questions and answers are interesting & reflect strong understanding of landforms.  10 9	The questions and answers are thoughtful & reflect strong understanding of landforms.  8 7 6	The questions and answers reflect sufficient understanding of landforms.  5 4 3	The questions and answers reflect some understanding of landforms.  2 1
Image Quality	The images are of high quality or unique and add to the overall quality of the salt cellar.  8 7	The images are appropriate and align with the overall quality of the salt cellar.  6 5	The images are appropriate.  4 3	The images may be lacking in execution or alignment with the rest of the project.  2 1
Construction	The salt cellar is constructed well, with sharp lines and excellent ease of use.  8 7	The salt cellar is well constructed and is easy to use.  6 5	The salt cellar is adequately constructed and reasonably easy to use.  4 3	The salt cellar's construction is lacking in some way (sloppily done, etc.) or may be difficult to use.  2 1
Creativity	The salt cellar has a quality of originality that is unexpected. Either the questions or the images or both are unique in a valuable way.  10 9	The salt cellar has at least one aspect that reflects a creative element in design or question phrasing.  8 7 6	The salt cellar has at least one aspect that reflects a creative element in design or question phrasing.  5 4 3	The salt cellar was created with little creativity or is overly simplistic in the design or the questions.  2 1
<b>TOTAL SCORE:</b>		<b>NOTES:</b>		

## Salt Cellar Evaluation


Name: \_\_\_\_\_

After playing with your salt cellar and that of at least two other students, answer the following questions with as much honesty as you can.

1.  What is something you would have done differently to your salt cellar after having seen what other people did or after using the one you made?


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2. What was the best  question/answer combination you saw/heard? What made it so good? It's fine if it's yours.

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3. Think about  whether you learned more from making it or from playing it. After you decide, explain why you think that is.

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4. What were some  patterns you noticed in how other students (and yourself, even) created questions or chose images?

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5.  Think of something I could have done to make the activity more valuable to you or an instruction I could have explained better. How can I make it better?

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What else would you like me to know?

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- Would 🤖 the Earth be more affected if there were no dunes or if there were no fjords?

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- How differently does a delta see the ocean 🐼 than a peninsula sees the ocean?

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- Describe the development of one of the landforms 🌐 from the perspective 🐼 of the landform.

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Scholar Opportunity: Make the argument that there is only one ocean. Share your argument in the form of a 30 second educational video/screencast

	Extraordinary	On Target	Nearly There	Emerging
Reflection Response Quality	The responses are thorough and thoughtful. They reveal deep thinking & and a full understanding of landforms.	The responses are thorough and reasonably thoughtful. They reveal some deep thinking & and an acceptable understanding of landforms.	The responses are not fully thought out or may not reveal sufficient thinking. The level of understanding is not clear.	The responses are weak or too short or display a lack of real thinking. The level of understanding is unclear or lacking.
	10 9	8 7 6	5 4 3	2 1

- Why would it be better  to live on a plateau than on the coast?


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- What landform do you think was the first one that people named ? Why would they have needed to name it?

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- Describe the development of one of the landforms  over time.

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Reflection Response Quality	The responses are thorough and thoughtful. They reveal deep thinking & and a full understanding of landforms.	The responses are thorough and reasonably thoughtful. They reveal some deep thinking & and an acceptable understanding of landforms.	The responses are not fully thought out or may not reveal sufficient thinking. The level of understanding is not clear.	The responses are weak or too short or display a lack of real thinking. The level of understanding is unclear or lacking.
	10 9	8 7 6	5 4 3	2 1

- Which landform would you  most like to visit and why?

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- Explain the  difference between a piedmont and foothills.

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- Describe what it would be like if  the Earth had no landforms.

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	Extraordinary	On Target	Nearly There	Emerging
Reflection Response Quality	The responses are thorough and thoughtful. They reveal deep thinking & and a full understanding of landforms.	The responses are thorough and reasonably thoughtful. They reveal some deep thinking & and an acceptable understanding of landforms.	The responses are not fully thought out or may not reveal sufficient thinking. The level of understanding is not clear.	The responses are weak or too short or display a lack of real thinking. The level of understanding is unclear or lacking.
	10 9	8 7 6	5 4 3	2 1

# Salt Cellar Template

