

Name: _____

Where is the Best Place to Locate a New Solar Power Plant? Investigation Sheet

Solar energy comes from the sun. In this activity, you will use Web GIS to determine the best place to locate a new solar power plant. You will

1. Learn some basic features of Web GIS to visualize data and obtain information.
2. Analyze annual average sunshine data to determine good locations for solar plants.

Read **all** instructions on your handout and answer **each** question.

1. What map **color** represents locations that receive the **least amount** of annual average sunshine?

2. What parts of the world receive the **least amount** of annual average sunshine?

3. What parts of the world receive the **most amount** of annual average sunshine?

4. What parts of the continental United States (lower 48 states) receive the **least amount** of annual average sunshine?

5. What parts of the continental United States (lower 48 states) receive the **most amount** of annual average sunshine?

6. What is the **latitude** and **longitude** of the solar plant location in Pennsylvania?

7. How much average sunshine does this area of Pennsylvania receive? _____ %

Solar Power Plants Data Chart

Name of Solar Power Plant	Location	Latitude	Longitude	Status	Annual Average Sunshine
1. Pennsylvania Solar Park	USA	40.8616 N	-75.8305 W	Proposed	51%
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

8. Which solar power plant is located at the **highest latitude**? _____
9. Which solar power plant is located at the **lowest latitude**? _____
10. How many solar plants receive **more than 70% of annual average sunshine**? _____
11. How many solar plants receive **less than 70% of annual average sunshine**? _____
12. Are all solar plants located in places where they receive **a lot of sunshine**? _____
13. Why do you think the **Pennsylvania Solar Park** is being built in Carbon County, PA?

14. Where do you think is the **best place** in the world to locate a new solar power plant?

15. Why did you select that location? Support your decision with **evidence** from the **Web GIS** map.