

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 My World GIS to determine the best place to locate a new solar power plant. You will

1. Learn some basic features of My World 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.

### Information for Countries Data Chart

Country Name	Perimeter (computed) m	SQMI (square miles)

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. Look at the **percent\_sunshine.shp** bar at the bottom of the map display.

Look at the value displayed at the arrow .

How much average sunshine does this area 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 **GIS**.