

THE HEATING POWER OF THE SUN

NAME _____ hr _____

SCIENTIFIC QUESTION:

What Earth material does the sun heat faster-- land or water?

A] HYPOTHESIS: (What is your guess?) *I think* _____

B] PROCEDURE/EXPERIMENT:

Design and carry out an experiment to determine if the sun heats land or water faster. Write out your steps below. You may or may not need all 5 steps below. Add any if needed on a separate sheet of paper.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

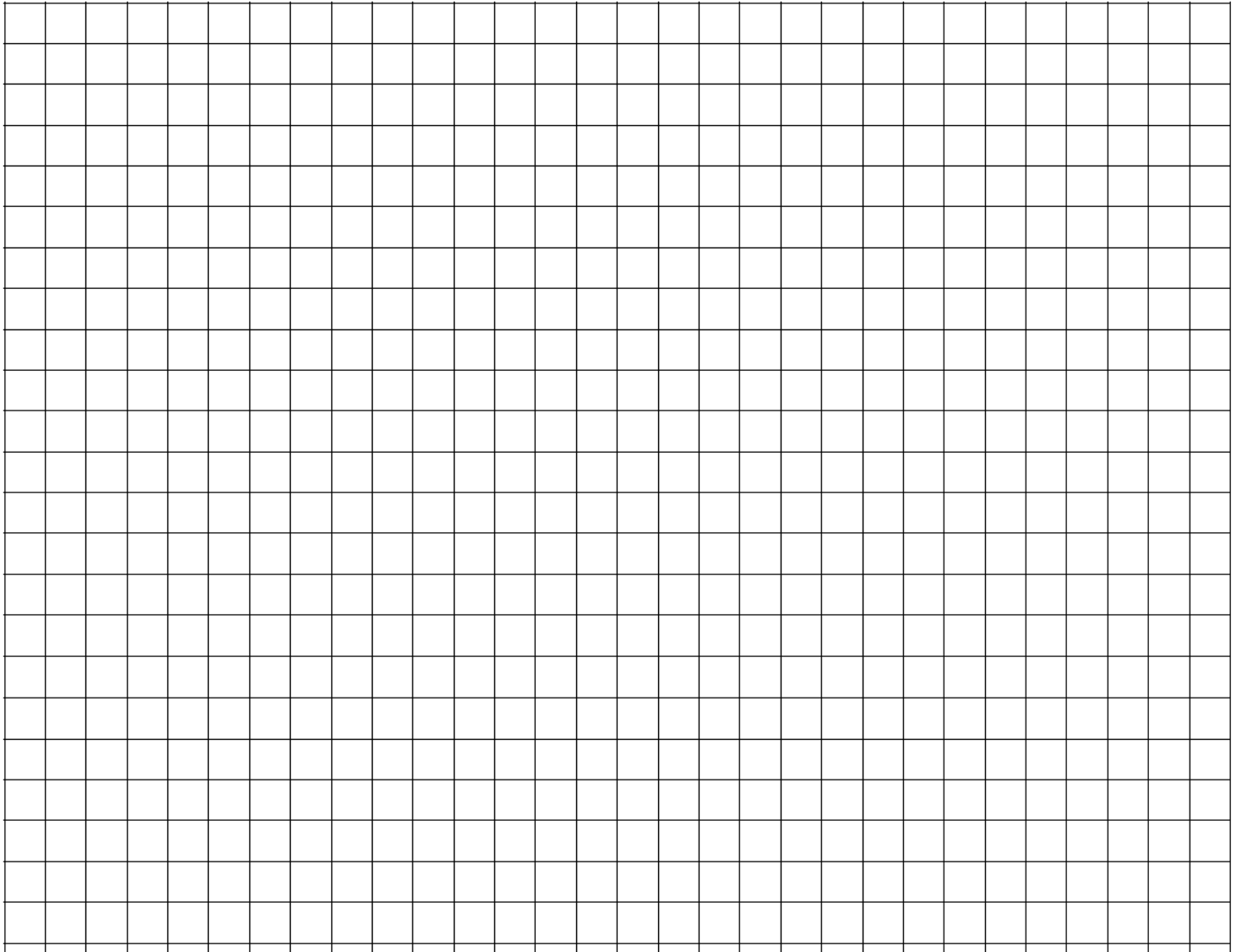
C] RESULTS/ DATA: Make a data table for your experiment. (5 pts)

D] ARGUMENT: Make a claim about what you have found. What Earth material does the sun heat faster-- land or water? Create a statement of truth that is supported by evidence you found in this lab. (2pts)

E] What parts of this experiment were the controlled variables? (3pts)

F] What are the potential problems with our experiment? (2pts)

G] Make a line graph of your data below. Be sure to label the x axis (2pts), the y axis (2pts), make a key to distinguish between the two lines (2pts), and give the graph a good title (2pts)



H] If land heats up faster than water, what will the beach feel like when the sun's waves are hitting it during the day? What will the water feel like?

I] Which air would be hotter—air above the beach or air above the water?

J] If an air mass is hot, how does it behave? If an air mass is cold, how does it behave?

K] When cold and warm air collide, what do we get?

L] Will the air on Earth ever get mixed completely and become the same temperature? Why or why not?