

Name: _____

Date: _____ Period: _____

Lab Activity: Field Maps

INTRODUCTION:

A field is a region in which there is a definite physical property that can be measured at every point. On Earth's surface there are hundreds of different measurable quantities. Some examples of measurable field quantities are; air pressure, temperature, elevation, rainfall amounts, and humidity.

During your course of study you will see many different types of field maps. In this lab we will be introduced to field maps using temperature data in the classroom.

OBJECTIVE:

You will use data from temperature values for two different days in a classroom and construct isotherms to interpret the field map.

VOCABULARY:

Field -

Isoline-

Isotherm -

Isobar -

Isohyet -

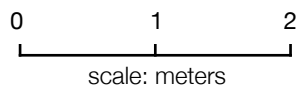
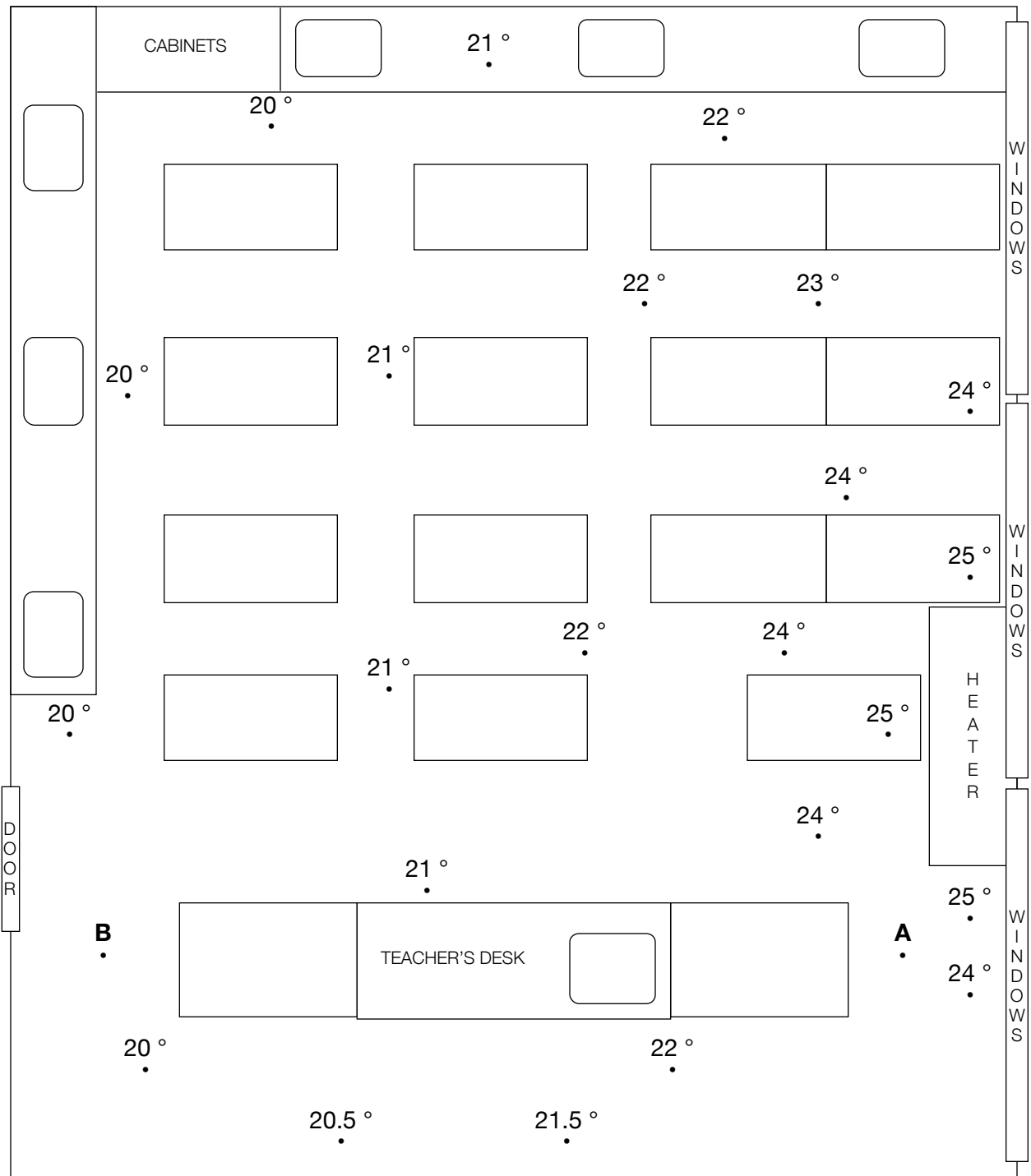
Gradient -

PROCEDURE A:

Using the Classroom Map, construct isotherms using 1° C intervals for the known temperature data provided on the map. Ignore the points with letters, they will be used in the discussion questions.

Lab Activity: Field Maps

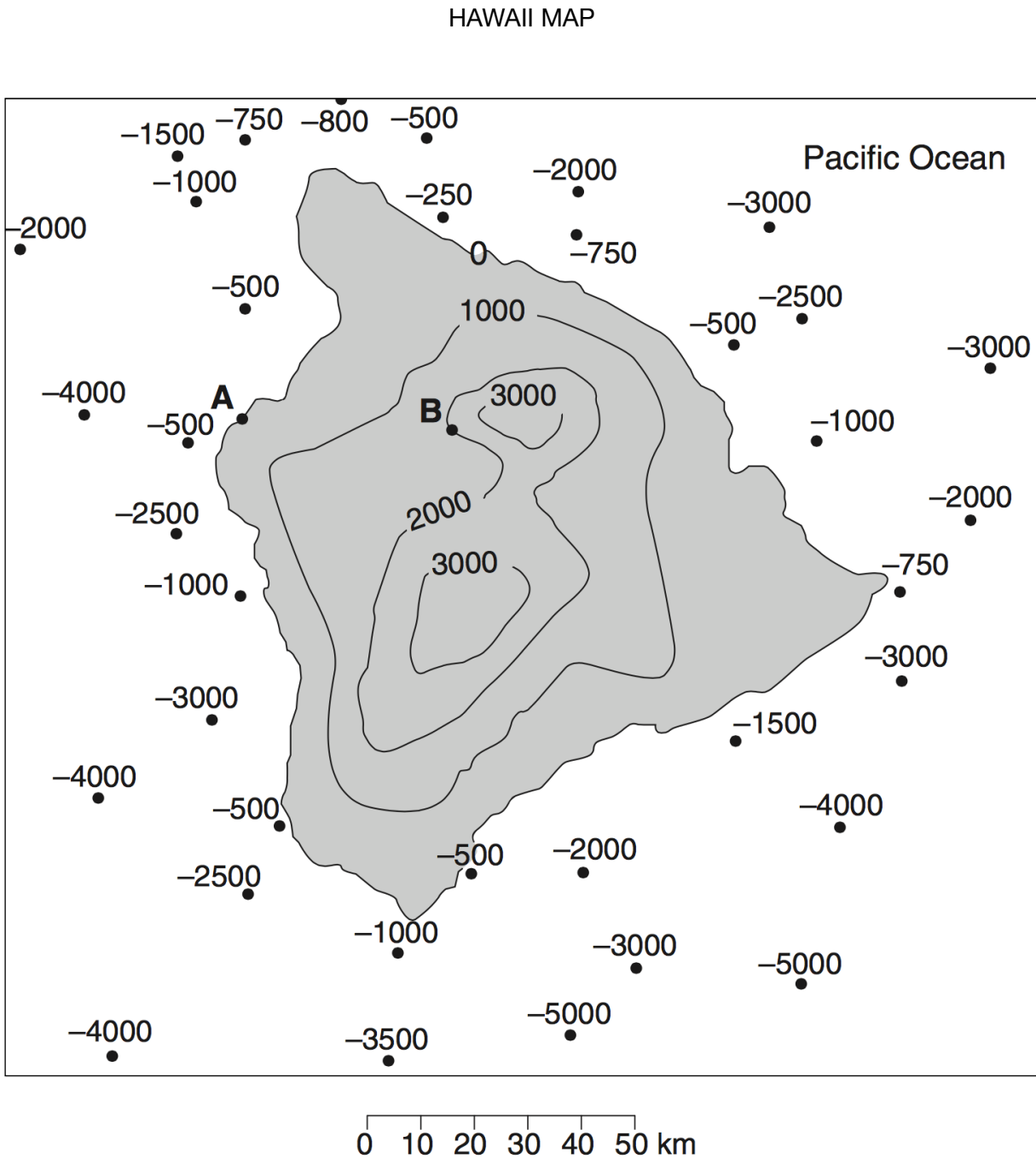
CLASSROOM MAP



Lab Activity: Field Maps

PROCEDURE B:

Using the Hawaii Map, construct ocean floor depths using 500 meter intervals on the map. Letter A and B will be used in the discussion questions. Elevations are in meters.



Lab Activity: Field Maps

DISCUSSION QUESTIONS:

1. Do the field maps in this lab represent a two dimensional or three dimensional map?
2. Is a temperature field map, such as the Classroom Map, a static or dynamic field?
3. What factors may have caused the temperature variations in the classroom?
4. Using the Classroom Map, calculate the gradient between points A and B.
5. Using the Hawaii Map, calculate the gradient between points A and B.

CONCLUSION: Describe, step by step, how we can map the field of a variable quantity?