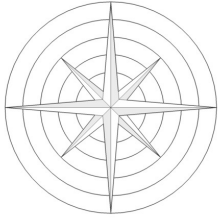


Name: _____

Period: _____

Mapping the Earth Notes

What is a map?	Label the compass directions: 
----------------	--

What does latitude measure? _____

What is the name of the 0° latitude line? _____

Where is 90° **north** latitude? _____

Where is 90° **south** latitude? _____



What does longitude measure? _____

What are longitude lines called? _____

What is the name of the 0° longitude line? _____

Are longitude lines parallel to each other? _____



What is a **topographic map**?

A topographic map shows: _____, _____, _____, _____, _____

What do **contour lines** show?

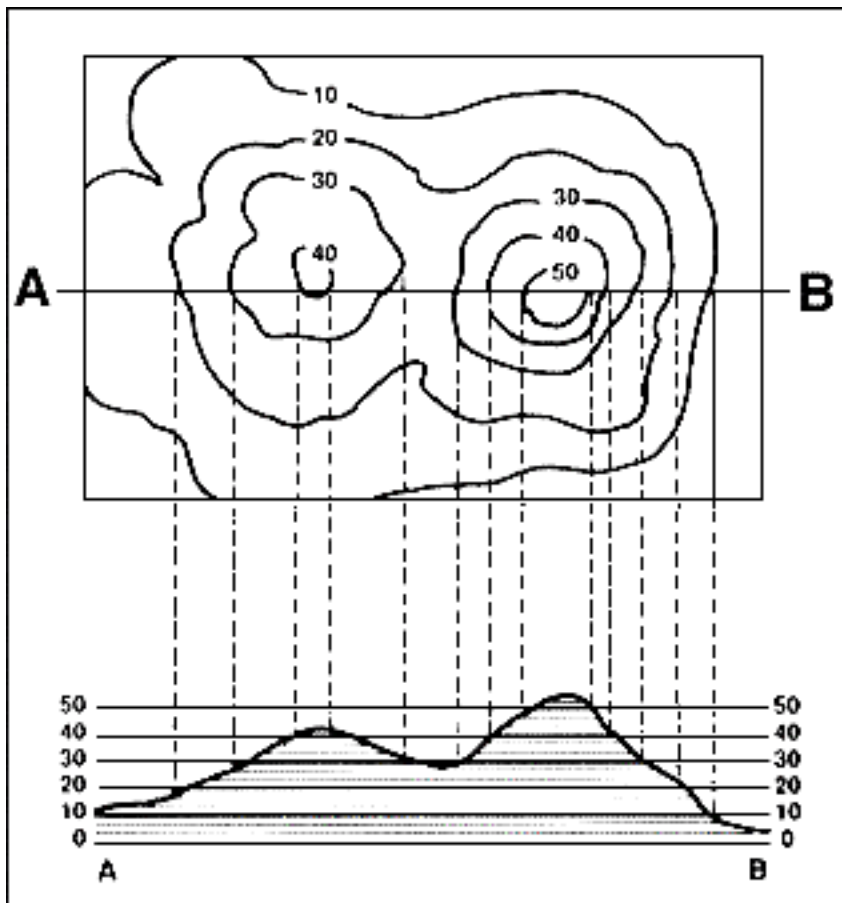
What is a **contour interval**?

Rules for Reading and Drawing Contour Lines:

Rule #1	Picture(s) or diagram(s):
Rule #2	Picture(s) or diagram(s):
Rule #3	Picture(s) or diagram(s):
Rule #4	Picture(s) or diagram(s):

Activity Sheet #4—How to Read a Topographic Map

One special kind of map is called a **topographic map**. It has contour lines to show the shape and elevation of the land. They are sometimes called "level lines" because they show points that are at the same level. Here's how contour lines work:



The top of this drawing is a contour map showing the hills that are illustrated at the bottom.

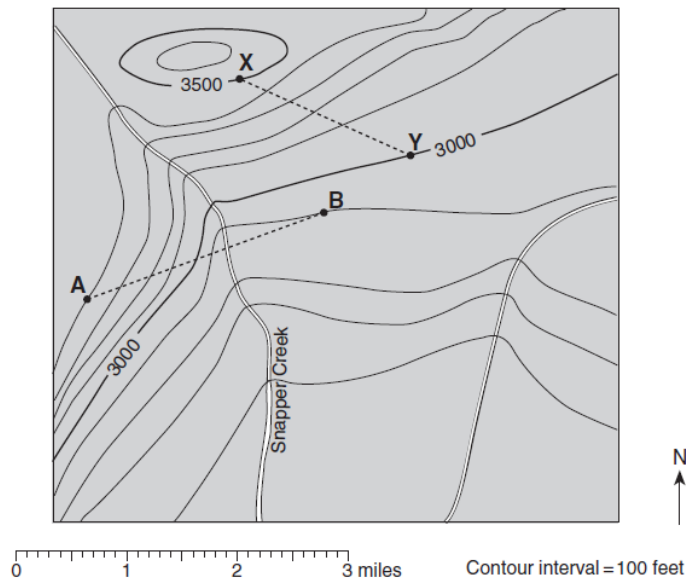
On this map, the vertical distance between each contour line is 10 feet.

1. Which is higher, hill A or hill B? _____
2. Which is steeper, hill A or hill B? _____
3. How many feet of elevation are there between contour lines? _____
4. How high is hill A? _____ Hill B? _____
5. Are the contour lines closer together on hill A or hill B? _____

Name _____ Period _____ Date _____

Topographic Map Reading Worksheet

Use the following topographic map to answer questions 1-8.

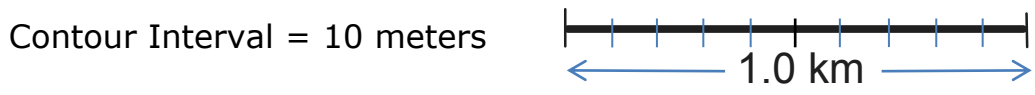
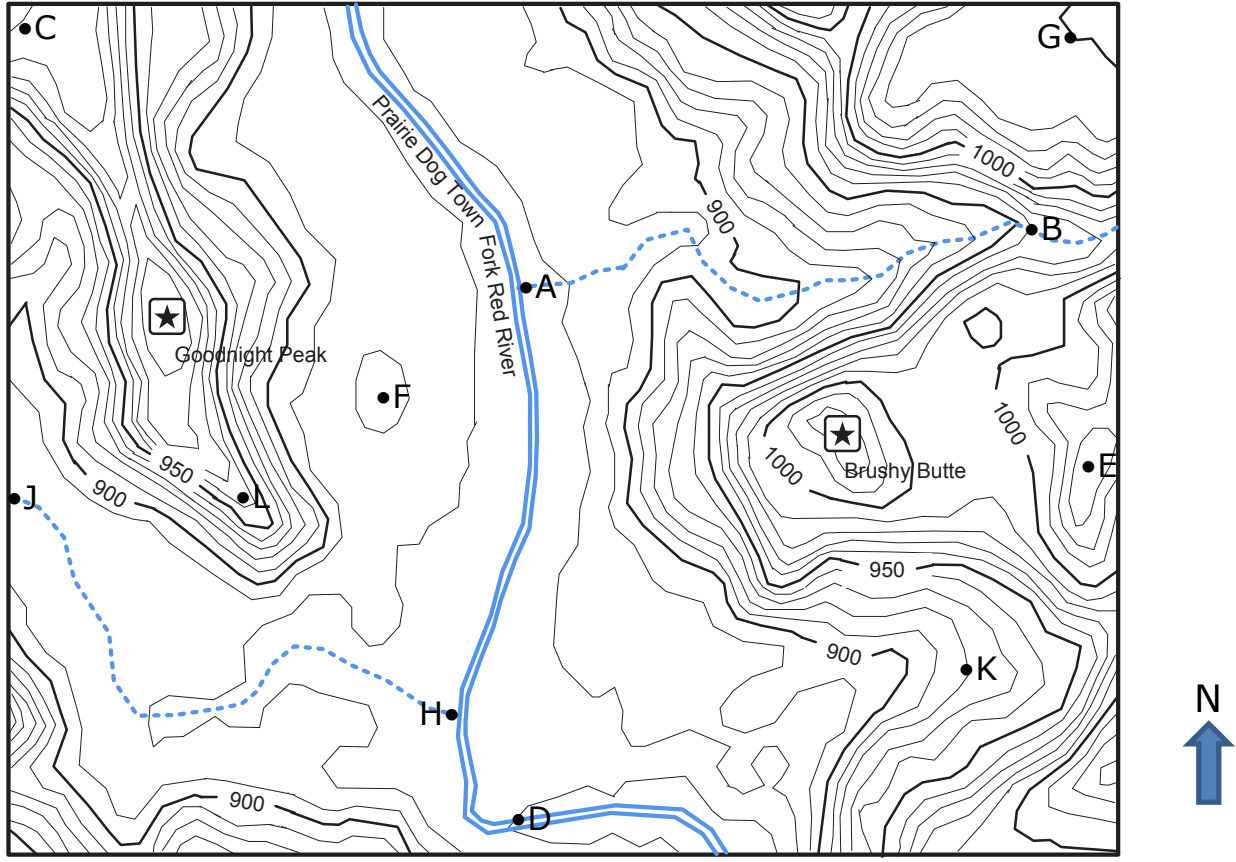


1. What is the elevation at point A? _____
2. What is the elevation at point B? _____
3. What is the elevation at the point on line A-B where it crosses Snapper Creek?

4. If you walked from point A to point B along line A-B, would you be walking downhill or uphill, or both? In what direction would you be walking? Explain your answer, stating the elevations at point A, Snapper Creek and point B.

5. What is the elevation of the highest point shown on the map? _____
6. What is the elevation at point X? _____
7. What is the elevation at point Y? _____
8. If you walked from point X to point Y along line X-Y, would you be walking downhill or uphill, or both? In what direction would you be walking? Explain your answer, stating the elevations at point X and point Y. _____

Use the following topographic map from Palo Duro Canyon State Park in west Texas to answer questions 9 - 33.



9. What is the elevation of Goodnight Peak? _____
10. What is the elevation of Brushy Butte? _____
11. What is the elevation of point A? _____
12. What is the elevation of point B? _____
13. If you walked along the creek from point A to point B, what would be the total change in elevation? _____ In what direction would you be walking? _____
14. What is the elevation of point C? _____
15. What is the elevation of point D? _____
16. What is the elevation of point E? _____
17. What is the elevation of point F? _____

18. What is the elevation of point G? _____
19. What is the elevation of point H? _____
20. What is the elevation of point J? _____
21. If you walked along the creek from point H to point J, what would be the total change in elevation? _____ In what direction would you be walking? _____
22. What is the lowest labeled point on the map? _____
23. What is the highest labeled point on the map? _____
24. In what direction is the river at the center of the map flowing? _____
25. Put a small star on the map where the slope is the steepest.
26. Put a small triangle on the map where the slope is the flattest.
27. Is point K in a valley or a ridge? _____
28. Is point L in a valley or a ridge? _____
29. What is the distance from point A to point F, to the nearest tenth of a kilometer?

30. What is the distance from point H to point D, to the nearest tenth of a kilometer? _____
31. What is the distance from point B to point E, to the nearest tenth of a kilometer? _____
32. What is the distance from Goodnight Peak to point L, to the nearest tenth of a kilometer? _____
33. If you could travel in time and visit the park shown on the map 100,000 years in the future, what changes do you think will have taken place to the elevations of Goodnight Peak and Brushy Butte? Explain your answer. _____

