

TASA Earth's Dynamic Surface

Name: _____ Period: ____ Teacher: _____

1. What is geomorphology?

2. What works to tear down landscapes? _____

3. In a drainage basin, erosion, transportation, and deposition of Earth's surface materials happens because of the action of _____, _____, _____ and _____.

4. What is the location of slide 16? _____

5. What shapes coastlines? _____, _____, _____

6. On slide 20, click on Weathering and Soils. What forms basalt? (it's not ba-pepper) _____

7. Why is New Mexico basalt different than Maryland Basalt? _____.

8. Since the engravings are still clear at El Morro, what climate do you think it is in? _____

9. Which rock is more resistant to weathering, limestone or granite? _____.

10. What is physical weathering? _____
_____.

11. What is chemical weathering? _____
_____.

12. Don't be a wimp! Click on the six areas on page 34. Describe the processes that you read about:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

13. PAY ATTENTION!!! Skip page 71 to 81. Simply type in 82 in the box on top and click “Jump.” On a separate piece of paper, draw and label the diagram on page 85.

14. Complete the following table:

	Moisture Content	Velocity (Speed)	Regolith (size of the stuff)	Comments
Debris Flow				
Landslide				
Solifluction				
Earthflow				
Rockfall				
Creep				

15. What is the most effective process for the erosion, transportation, and deposition of Earth surface materials? _____

16. On your separate piece of paper, draw and label the “tree” diagram.

17. On your separate piece of paper, draw, label, and define the terms of the diagram on page 144.

18. Is the zone of no fluvial erosion wide or narrow in areas where the infiltration is low? _____
 Why is this true? _____.

19. Is the zone of no fluvial erosion wide or narrow in areas where the infiltration is high? ____
 Why is this true? _____.

20. How might the following features make or influence a knickpoint?

- Sea level: _____

- Fault: _____

- Hard Sandstone: _____

21. What is an escarpment? _____

22. Why are rivers better at erosion? _____

23. What is a longitudinal profile? _____

24. What is the velocity of a river with a discharge of $12 \text{ m}^3/\text{S}$ and an area of 6 m^2 ? _____

Would this water be “liable to knock you down?” _____

25. What does it mean to have water that is “turbulent?” _____

26. What is saltation (and its not something you put on your food) _____

27. What is the difference between bed load and suspended load? _____

28. What is the “formula” for channel patterns?

_____ + _____ + _____

29. On slide 177, demonstrate all eight combinations of discharge, channel slope, and grain size to fill in the table

Discharge	Channel Slope	Grain size	Feature

30. On page 192, click on Eolian (deserts and winds), we will skip the section on coastlines for now. Do grains settle faster or slower in a container filled with air? _____
Why? _____
31. On your paper, draw a cross section of a sand dune. Make sure you include the backslope, slip face, angles, wind direction, crest, and cross-bed direction (page 303).
32. Describe the creation and life of loess (pronounced luss). _____

33. When the program describes the “hallmark of the Quaternary has been dramatic swings in global climate change, changes that we refer to as ice ages,” how long ago are they talking about? _____
34. When is the O^{18} concentration in the ocean sediment layers the highest? _____
35. On page 357 type in and “jump” to page 383. What is a glacier? _____

36. On a separate piece of paper, draw a diagram of a glacier, include the zone of accumulation, zone of melting, ice front, lodgement till, outwash plain, and end moraine.
37. Where are today’s great continental ice sheets? _____
& _____
38. Is it just me, or doesn’t Antarctica’s ice sheet look like a rubber ducky looking up and to the right? (page 409) _____
39. What would lead to the collapse of the ice shelf? _____
40. What is a physiographic province? _____

That was easy!