

30. Describe the father's varied experiences in your own words.

31. Read lines 230, 231. Quote from "Evangeline" a companion picture.

32. How does Whittier describe the marshes? Write a few lines on "tales of witchcraft," "gundalow."

33. How did the mother spend her evening? Compare with modern mothers. What were the mother's experiences? Compare with the father's.

34. Examples of the "common, unrhymed poetry of simple life and country ways."

35. Explain "Old hearths grew wide to give us room." How could they?

35. What book was beloved in every Quaker home? Why? Tell one of its interesting stories.

37. Read lines 305 and 306. Tell the story.

### NATURE STUDY FOR DECEMBER.

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While the vegetable world is asleep, would not our school children enjoy a few lessons on geology? Do not call it geology, however, lest the word frighten them. Call it soil study, or rock study, or nature study, as you choose.

During winter, the action of frost on soils and rocks is everywhere evident. Have the children observe the crumbling soil in the roadside ditches during a thaw. Have them observe, also, large rocks breaking away from the face of a cliff and falling to its base. At what season is this most likely to happen? Notice these loosened stones breaking into smaller and smaller pieces until pebbles and, finally, sand or clay is the result.

Several short lessons could be devoted to this one phase of the subject—"Origin of Soils." The action of plant growth as well as that of frost can easily be observed in this work. What other agencies assist?

The next thing in logical order is the "Transportation of Soils." Some soils remain where they are formed. More, however, are carried elsewhere. What are the carrying agencies? Every child has observed muddy streams after a rain. Why are they muddy? Are they equally muddy near their source and far from it?

These provinces furnish abundant examples of brooks that start on high hills; flow, at first, through rocky gorges with a few large rocks at the bottom; then reach lower levels, where they

widen, flow more slowly, and have gravelly or muddy beds; and, finally, lose themselves in some larger stream which at last reaches the ocean.

A visit to such a stream furnishes topics for many useful lessons. We see the deep "trout holes." How did they get there? Are they at a curve or where the brook is straight? Are they on the convex or concave side of the curve? Is the brook still undermining the bank? What becomes of the soil thus carried away? Do farmers ever do anything to prevent this wearing?

Notice in the swiftest part of the stream only large stones. In a quiet pool at one side of the main current, one may see a bed of sand or mud. [One may observe that snow drifts from exposed places, and accumulates in sheltered places.]

From the foregoing, it is evident that water not only makes soil, but carries large quantities of it to lower levels, or into the ocean. This may seem wasteful. In some ways, it is. The law of compensation, however, works even here; for, though the hillsides may be left barren, valleys elsewhere are enriched. Even the mud carried into the ocean is not, necessarily, forever lost. The deltas at the mouths of rivers have become or will become cultivated land. Much of the soil, even, of our own Maritime Provinces was once under the sea. Land at present under the sea may at some future time be elevated and cultivated. What does Tennyson say about this in "In Memoriam"?

Alluvial soils of our river valleys are instructive. Compare the shape of the pebbles in such soil with those in the river-bed. After studying the disposition of gravel in a river-bed relative to the direction of the river, see if the children can determine the location and direction of an ancient river by the gravel in the soil. This, of course, cannot be observed everywhere; but is worth looking for. Gravelly pieces of land exist along the course of every brook. Study the pebbles in these. Students near the sea-shore or on a lake shore should examine the pebbles there to see how they differ in shape from those in a brook or river.

Where one has access to a "gravel pit," one should try to decide whether it was of river or shore origin. Look for lines of stratification also. That is, are the beds of gravel in layers or not? If so, how did they get there? Similar lines of stratification show in old snow drifts where the snow accumulates at different times. Would this