The Rock Cycle

The earth is always changing. Processes like erosion, weathering, deposition and heat and pressure from the middle of the earth are all responsible for our changing earth. The rock cycle has been going on for millions of years and it takes millions of years for rocks to go through their cycle. The longest and slowest cycle on earth is the rock cycle. The rock cycle has been going on for as long as Earth has been around and it is going on right this minute. The rock cycle is the process on earth that causes rocks to continuously change from one rock type to another.

The three types of rock, igneous, sedimentary and metamorphic are found in the earth's crust which is over 40 miles deep (70 km) Below that is magma, molten or semi molten which means it is still too hot to harden. Melted rock in the form of hot magma from the inner core of the earth comes to the surface of the earth. This hot magma then cools which causes it to harden and form igneous rocks. Rocks will fall and then water, glaciers, weather and the wind will carry the rocks to different places which causes them to break up into smaller rocks. The broken rocks slowly build up into layers. When the rocks start to layer they become the next cycle of rock which is sedimentary rocks which is why when we see sedimentary rocks, we can see the various layers. Over many, many more years, the sedimentary rocks become buried deep into the earth's crust. The heat and pressure from the center of the earth heats this rock up and it then changes to metamorphic rocks. The metamorphic rock melts and then the process starts over again. Sedimentary rocks cover 70% of the earth's surface.

Questions:

1. **In your opinion, why does the rock cycle take so long?**
2. **What does heat and pressure have to do with the rock cycle?**
3. **How do rocks get moved from one place to another?**
4. **Why is the earth always changing?**
5. **Why are there many layers in sedimentary rocks?**
6. **Describe the rock cycle in your own words.**
7. **If rocks are always moving, why aren't they considered a living thing?**
8. **What processes on earth help with the rock cycle?**