

KISS Logic ('18 6월 빈칸)

1. Interest in extremely long periods of time sets geology and astronomy apart from other sciences. Geologists think in terms of billions of years for the age of Earth and its oldest rocks — numbers that, like the national debt, are not easily comprehended. Nevertheless, the _____ are important for environmental geologists because they provide a way to measure human impacts on the natural world. For example, we would like to know the rate of natural soil formation from solid rock to determine whether topsoil erosion from agriculture is too great. Likewise, understanding how climate has changed over millions of years is vital to properly assess current global warming trends. Clues to past environmental change are well preserved in many different kinds of rocks.

- ① time scales of geological activity
- ② global patterns in species diversity
- ③ regional differences in time perception
- ④ statistical methods for climate projections
- ⑤ criticisms of geological period classifications

2. Politics cannot be suppressed, whichever policy process is employed and however sensitive and respectful of differences it might be. In other words, there is no end to politics. It is wrong to think that proper institutions, knowledge, methods of consultation, or participatory mechanisms can make disagreement go away. Theories of all sorts promote the view that there are ways by which disagreement can be processed or managed so as to make it disappear. The assumption behind those theories is that disagreement is wrong and consensus is the desirable state of things. In fact, consensus rarely comes without some forms of subtle coercion and the absence of fear in expressing a disagreement is a source of genuine freedom. Debates cause disagreements to evolve, often for the better, but a positively evolving debate does not have to equal a reduction in disagreement. The suppression of disagreement should never be made into a goal in political deliberation. A defense is required against any suggestion that _____.

[3점]

* consensus: 합의 ** coercion: 강압

- ① political development results from the freedom of speech
- ② political disagreement is not the normal state of things
- ③ politics should not restrict any form of difference
- ④ freedom could be achieved only through tolerance
- ⑤ suppression could never be a desirable tool in politics

3. To make plans for the future, the brain must have an ability to take certain elements of prior experiences and reconfigure them in a way that does not copy any actual past experience or present reality exactly. To accomplish that, the organism must go beyond the mere ability to form internal representations, the models of the world outside. It must acquire the ability to _____. We can argue that tool-making, one of the fundamental distinguishing features of primate cognition, depends on this ability, since a tool does not exist in a ready-made form in the natural environment and has to be imagined in order to be made. The neural machinery for creating and holding 'images of the future' was a necessary prerequisite for tool-making, and thus for launching human civilization. [3점]

- ① mirror accurate images of the world outside
- ② manipulate and transform these models
- ③ visualize the present reality as it is
- ④ bring the models back from memory
- ⑤ identify and reproduce past experiences faithfully

4. Since life began in the oceans, most life, including freshwater life, has a chemical composition more like the ocean than fresh water. It appears that most freshwater life did not originate in fresh water, but is secondarily adapted, having passed from ocean to land and then back again to fresh water. As improbable as this may seem, the bodily fluids of aquatic animals show a strong similarity to oceans, and indeed, most studies of ion balance in freshwater physiology document the complex regulatory mechanisms by which fish, amphibians and invertebrates attempt to _____. It is these sorts of unexpected complexities and apparent contradictions that make ecology so interesting. The idea of a fish in a freshwater lake struggling to accumulate salts inside its body to mimic the ocean reminds one of the other great contradiction of the biosphere: plants are bathed in an atmosphere composed of roughly three-quarters nitrogen, yet their growth is frequently restricted by lack of nitrogen. [3점]

* amphibian: 양서류 ** invertebrate: 무척추동물

- ① maintain an inner ocean in spite of surrounding fresh water
- ② attain ion balance by removing salts from inside their body
- ③ return to the ocean to escape from their natural enemies
- ④ rebuild their external environment to obtain resources
- ⑤ change their physiology in accord with their surroundings