Name: $\qquad$ .

## Introduction to English For Scientific Communication Opening Quiz

Please answer the following questions.
Section 1: Please add 'the', ' $a$ ' or ' $a n$ ' where necessary. There are some cases where no article is necessary, in this case please write 'none'.

1. We ignore $\qquad$ details of $\qquad$ frictional interaction.
2. This discussion provides us with $\qquad$ understanding of $\qquad$ more complicated case.
3. This procedure removes most of $\qquad$ ambiguities.
4. Thus, $\qquad$ above behaviour is described by $\qquad$ following equation:
$A=B$.
5. Riehle et al. applied $\qquad$ unitary analysis to $\qquad$ data obtained in such experiments.
6. We consider $\qquad$ linear equation $P \psi=\mu \psi$, where $\qquad$ $P$ belongs to
$\qquad$ class $\sigma \rho$.
7. We then transform into $\qquad$ spherical coordinates.
8. We now consider $\qquad$ right-handed neutrinos.
9. We carried out $\qquad$ detailed analysis in $\qquad$ Ref. [1].
10. $\qquad$ $20 \%$ of particles escape within $\qquad$ first $T$ units of time.

Section 2: Each of the sentences below has at least one incorrect use of a preposition. The mistakes are underlined. Please correct them. Note that it is sometimes necessary to rewrite part of the sentence to make the correction.
11. This effect results from the second term in the right-hand side.
12. Here, $a$ is equivalent with $a^{\prime}$.
13. This motion is always toward the most unstable direction.
14. This operator is understood as acting to even functions of $x$ only.
15. The momentum dependence in this function cannot be ignored.
16. However, this function is finite at $x \rightarrow \infty$.

Section 3: Fill the blanks with the correct word from the list. Note that each word should be used only once.

Maintained Conserved Preserved Retained
17. The question of why this asymmetry is $\qquad$ is not answered.
18. The delicate balance among the various influences is $\qquad$ by internal mechanisms.
19. Even after application of the conformal transform, the fundamental physics of the system is $\qquad$ .
20. In their model, the total angular momentum is not $\qquad$ .

Section 4: The sentences below contain some common English mistakes made by Japanese scholars. These mistakes are highlighted. Please try to correct the sentences.
21. We now make a method to treat such anomalous cases.
22. We have made numerical simulations of this system.
23. This equation was derived by the RG method.
24. This general solution is able to be extended by an analytic continuation.
25. The distance between the plates is decided by the size of the granular particles.

Section 4: Write a short passage explaining what you believe is the greatest scientific discovery. Please describe what that discovery is and why you believe it to be the greatest discovery.
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