**地球科学英語　期末試験**（Reading）　　2012年2月9日　　　試験時間：60分（09:05-10:05）

学籍番号　　　　　　　　　　　　氏名

授業のReading教材、The Geological Society （London）が2004年に刊行したレポート、Super-eruptions: global effects and future threatsを基した、以下の問に答えなさい。

注意：上記の教材、辞書、ノート、資料、メモなどの持ち込みは禁止します。

ただし、上記の教材の内容をまとめたマインドマップ（A3;片面）は持ち込み可です

**１．英文和訳**（括弧内も訳して下さい。）

1）Preparedness is the key to mitigation of the advert effect of colossal eruptions termed super-eruptions.

2）The collapsed caldera of the Jemez Mountain, known as the Valles Caldera,　is 24 kilometres in diameter and is the result of two super-eruptions 1.6 and 1.1 million years ago (i.e., 500,000 years apart).

3) Several of the largest volcanic eruptions of the past few hundred years (Tambora, 1815; Krakatou, 1883; Pinatubo, 1991) have caused major climatic anomalies in the two to three years after the eruption by creating a cloud of sulphic acid droplets in the upper atmosphere.

4) We can work to better understand the mechanisms involved in super-eruptions, with the goal of being able to predict them ahead of time and provide a warning for society.

5) Dr. Stephen Sparks recommends more research activities at Chiba University to determine more accurately the composition and amounts of volcanic gases and dust released in super-eruptions; these are the major factors governing widespread environmental effects.

6) Impacts of asteroids and comets ("Near Earth Objects" or NEOs), and eruptions from super-volcanoes, are the two prime examples of potentially disastrous natural events.

7) One impact of the Laki gas and aerosols over the UK during 1783 was to increase deaths, possibly due to respiratory disorders, and English parishes experienced "Crisis Mortality", much-above-average numbers of deaths per month during the Laki fissure eruption.

8) It is highly unlikely that Vesuvius will ever produce a super-eruption, but across the Bay of Naples lies Europe's only proven super-volcano, which has erupted in the past 100,000 years.

9) The super-eruption in the Phlegaen Fields covered large areas of southern Europe with an ash deposit, mostly delivered from pyroclastic flows, that spread out over southen Italy and crossed part of the Appenine Mountains.

10) This photo shows a visible wavelength view of the top of the Mount Pinatubo eruption cloud as it was spreading out in the stratosphere about 1.5 hours after the start of the climactic eruption on 15 June, 1991.

**２．和文英訳**

1. 超巨大噴火を避ける技術は現在のところ存在しないが、監視を改善し、人々の自覚を増やし、研究に基づいた計画を立てる事が、数百万の人々の災いを減らすだろう。

2）過去から現在まで、全地球規模に影響を及ぼすような超巨大噴火が平均して10万年ごとに起こっている。

3）人間と文明は全地球的で予期せぬ自然災害に対し、とても弱い。

4) 1000立方キロメートルのマグマを産する中間サイズの超巨大噴火は、大ロンドンの全てを厚さ700メートルの火山灰の下に埋めるのに相当する火砕流堆積物を生み出す。

5) 火山学者は火山噴火の大きさを対数的な尺度を使って記述する。