

**INTERNATIONAL MATHEMATICS AND SCIENCE OLYMPIAD  
FOR PRIMARY SCHOOLS (IMSO) 2008  
Science Contest in Taiwan (2)**

Name: \_\_\_\_\_ School: \_\_\_\_\_ Grade: \_\_\_\_\_ ID number: \_\_\_\_\_

**Section C : Science Experiment (40 marks) Time limit: 50 minutes**

<b>I.</b>	<p>answer (a). (b).  Method 1 :  experiments : Measure the air pressure difference between ground and top.  materials : Any pressure gauges  explanations : Air pressure decreases as the height increase.  Method 2 :  experiments : Measure the time interval from voice to echo.  materials : A stopwatch.  explanations : Sound speed multiple two the time interval equal to 2 times of height.  Method 3 :  experiments : Measure the period of a simple pendulum at the top of tower 101.  materials : A rope, a stopwatch, a small metal ball, a ruler, a holder.  explanations : The gravitational acceleration depends on the height, and we can get the gravitational acceleration from the period of a simple pendulum.</p>				
<b>II.</b>	<p>Cut out a square from a shape-memory plastic sheet.  Measure the area of this square.  Abbreviate the square plastic sheet by a hot-wind-machine.  Measure the area of the abbreviated piece.  Calculate the size abbreviation from the two areas.  Check it whether it is abbreviated uniformly or not.</p>				
<b>III.</b>	Animalia	Plantae	Fungi	Protista	None of Four Kingdoms
	Spider Sea star	Moss Fern	Mushroom Aspergillus	Amoeba Paramecium	Bacteria Archaea
<b>IV</b>	<p>1.A: Artiodactyla; B: Carnivora; C: Primates; D: Perissodactyla; E: Poboscidea  2. The opposite statements are written so that the organisms being classified match one choice or the other. This situation leads the user either to a correct classification of to the next step in the process. Each pair of statement is written to cover all possible choices.  3.No.The key is designed only for classifying the five groups of mammals into appropriate orders.  4.No. The key is designed to classify animal within each order of mammals.</p>				