



## विज्ञान प्रज्ञा

(विज्ञान के प्रचार एवं शोध के लिए स्थापित गैर-लाभकारी संस्था)

वेब साइट: [www.vipraa.org](http://www.vipraa.org)

ई-मेल: [admin@vipraa.org](mailto:admin@vipraa.org)

मो: ८५८७८२१५८२

## VIGYAN PRAGYA

(An institute to popularize and conduct research in Science)

website: [www.vipraa.org](http://www.vipraa.org)

email: [admin@vipraa.org](mailto:admin@vipraa.org)

Mob: 8587821582

## GROOM THE SCIENTIST IN YOU / YOUR CHILD

***CULTIVATE THE SKILLS OF "OBSERVING", "EXPERIMENTING" & "THINKING ORIGINALLY" LIKE A SCIENTIST***

**MODULE: EXPERIMENTS IN ASTRONOMICAL GEOGRAPHY**

**LEARNING GROUP: PRIMARY (GRADE 3 TO 5)**

No age bar for other learners

**DATES: 9<sup>th</sup> and 10<sup>th</sup> May, 2020 (Saturday – Sunday)**

Topics covered	After this module, the learner will be able to	Credits/ Certification	Learning Schedule & Requirements
<ol style="list-style-type: none"> <li>1. Introduction to Map and Globe</li> <li>2. Lines, Arcs, Angles and Planes</li> <li>3. Circle and Sphere: difference between a 2D circle and a 3D sphere</li> <li>4. Coordinates and Reference Frames</li> <li>5. Equator and Poles</li> <li>6. Introduction to Solar System</li> <li>7. Force of Gravity</li> <li>8. Earth's rotation and Revolution</li> <li>9. Day, Night and Year</li> <li>10. Formation &amp; Properties of Shadow</li> <li>11. Way to the next module</li> </ol>	<ol style="list-style-type: none"> <li>1. Create a 3D model of Earth (with axis) and specify its major reference coordinates (<b>Nature Designer</b>)</li> <li>2. Apply Perpendicular Orientation and place the Lilliputians at various places on earth (<b>Play Gulliver</b>)</li> <li>3. Tell why ocean water does not <i>fall off</i> the earth (<b>Gravity Magic</b>)</li> <li>4. Calculate the height of a building or a tree (<b>Civil Engineer</b>)</li> <li>5. Have fun &amp; experiment with circles and spheres: (i) rotating circle becomes a sphere; (ii) ride at equator is more thrilling than at poles; (iii) ceiling light experiment (<b>Fun with Geometry</b>)</li> <li>6. Make a shadow long, short or even disappear (<b>Fun with shadows</b>)</li> <li>7. Tell the exact direction of true North (<b>Navigator/ दिक्पाल</b>)</li> <li>8. Tell the importance of Reference Frames, Time duration and Relative motion (<b>Navigator/ दिक्पाल</b>)</li> <li>9. Tell the effects of earth's rotation and revolution</li> <li>10. Tell his/her future line of thought on the topic</li> </ol>	<ol style="list-style-type: none"> <li>1. VIPRA <b>Certificate</b> upon scoring 75% or more in the Assessment. Outstanding candidate (&lt;11 years age), if any, will be awarded <b>Sub-Junior Geo Champ</b> title.</li> <li>2. <b>Discount</b> on next level module in Astronomical Geography</li> <li>3. <b>Participation</b> Certificate to rest of the candidates</li> <li>4. <b>Continued Assessment:</b> VIPRA assesses its Learners throughout the year. The best in each Group (P/S/A) in each year are awarded <b>VIPRA budding Scientist</b> title, which carries a host of privileges.</li> </ol>	<p><b>Duration:</b> 4 hours</p> <p><b>Schedule:</b> 2 hours on each weekend</p> <p><b>Mode:</b> Online</p> <p><b>Module Charges:</b> Rs 500 per learner</p> <p><a href="#">Click here to Register and Pay</a></p> <p>For queries, write to <a href="mailto:admin@vipraa.org">admin@vipraa.org</a></p>