

**Common Teaching Unit Plan  
(structure and contents)**

Apps4EL

Mobile Applications for Effective Learning

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| <b>Name of school</b>      | Liceo Artistico “Bruno Munari” - Castelmassa (RO) ITALY  |
| <b>Theme of the lesson</b> | Basic geometry objects:<br>polygons, circles and geometric solids.   |
| <b>Pupils' age range</b>   | 14-16  |
| <b>Timeline</b>            | 6 hours from December 2017 to January 2018   |
| <b>Objectives</b>          | <ul style="list-style-type: none"><li>• Drag points; draw parallel, perpendicular and transversal lines; construct triangles; intersect circles;</li><li>• Create constructions with points, lines, angles, polygons and circles;</li><li>• Measure lengths and areas;</li><li>• Transform shapes by rotating, mirroring and dilating them;</li><li>• Try advanced constructions with conics and solid figures;</li><li>• Save, share and compare the obtained results.</li></ul>  |
| <b>Methods</b>             | <ul style="list-style-type: none"><li>• Lessons depend on the need and interest of the classes and also the students' ability;</li><li>• Lessons are planned and presented so that new material is integrated with the old. What has been learnt is practised;</li><li>• The teacher provides a real motivation based on the students' curiosity, interest and discovery;</li><li>• At first GeoGebra works produced by the students are controlled by the teacher, then as progress is made there is less guidance culminating in a situation where the students are free to produce.</li></ul> |
| <b>Materials Used Apps</b> | <ul style="list-style-type: none"><li>• Computer or tablets;</li><li>• GeoGebra or App GeoGebra;</li><li>• Students' book.</li></ul>   |
| <b>Assessment</b>          | <ul style="list-style-type: none"><li>• Oral test;</li><li>• Group work.</li></ul>   |
| <b>Remarks</b>             | Through these activities the teacher stimulates the students and promotes an atmosphere of relaxation and cooperation. The students learn a new method to construct geometric shapes.  |