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| **1. ACTIVITY INFORMATION** | |
| **Subject/Course:** **Geometry/Triangles** | **Teacher:** Mihaela Git |
| **Grade Level:** 6th | **Topic:** **The congruence of triangles** |
| **Length of Period:** 2 lesson |

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| **2. Expectations or Goals** |
| **Expectation(s) ( *from school Curriculum):***  Students will be able to understand the congruence of triangles and they will be able to recognize congruent triangles  Students will be able to demonstrate the congruence triangles using theorems of congruence (SAS, SSS, ASA) |

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| **3. Content** |
| * Definition. Two triangles are congruent if their corresponding sides are equal in length, in which case their corresponding angles are equal in size. * Theorems: * **SAS** (Side-Angle-Side): If two pairs of sides of two triangles are equal in length, and the included angles are equal in measurement, then the triangles are congruent. * **SSS** (Side-Side-Side): If three pairs of sides of two triangles are equal in length, then the triangles are congruent. * **ASA** (Angle-Side-Angle): If two pairs of angles of two triangles are equal in measurement, and the included sides are equal in length, then the triangles are congruent.   C:\Users\gugubau\Downloads\DUCK3.png |

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| **4.Description of Activity** |
| Give to pupils 15cm × 15 cm square papers; to use pencil, ruler, protactor.  It asks the students to build with each folding origami duck and recognize congruent triangles.  What are the congruent triangles after first folding? Determine the type/nature of these triangles.  What are the congruent triangles after the second folding?  What are the congruent triangles after the third folding? Determine the type of these triangles.  -the students will recognize congruent triangles by overlapping;  - the students will use theorems to demonstrate the triangles congruence.   |  |  |  | | --- | --- | --- | | Number of times folded | Congruent Triangles | Types of Triangles | | 1 | ΔACB≡ΔACD | Isosceles right triangle | | 2. | ΔABE≡ΔADF | Scalene right triangle | | 3. | ΔACE≡ΔACF | Scalene obtuse triangle | | 4. | ΔABE≡ΔAPE≡ΔAPF ≡ ΔADF | Scalene right triangle | | etc |  |  | |

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| **5. Photos** |
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| **5. youtube link:** |
| <https://youtu.be/n9U0sDHRsf8> |