***Title: CATHERINE WHEEL***

***Age category:* 6 -12 years old**

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***Competences :***

* **The students will use mathematics and geometry of shapes.**
* **The students will know that they can bend shapes and obtain different ones.**
* **The students will know to use their manual dexterity and act properly in relation to the objects and different shapes in order to create something new.**
* **The students will learn to make simple geometrics calculations in order to obtain the correct materials needed for making the Catherine wheel.**

***Competences according to European curriculum:***

[***http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Ac11090***](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Ac11090)

***Formative assessment:***

* **Identify the tools**
* **Explain the actions to do on the materials: what to do first and the different phases**
* **Define new terms and what do they mean: Catherine wheel, square, rectangle…**

***Summative Assessment:***

* **Use geometry and logic on shapes in order to create new objects and games.**

***Specific vocabulary list/Keywords:***

* **Catherine wheel, square, creativity, precision, geometry, logic, measure, cut, wooden stick, pin.**

***Short description of the educational context/scenario:***

**The teacher will collect the materials needed in order to build a Catherine Wheel: coloured papers, wooden stick and a pin. The teacher will ask to the children if they think we can change the shape of papers in order to create a new object, and what they think they can create.**

**After discussion with them, the teacher will propose to make a Catherine Wheel, similar to those they can see in some stories (Don Quixote) and places (the Netherlands).**

**The teacher can help the children in both actions, the imaginative one about the mental imagination on how to give the paper the right shape and the practical one.**

**The teacher will assist the students.**

***Materials needed/Technical requirements:***

* **Scissors, colored papers, wooden stick and a pin.**





***Focus on sign language:***

* **Sign the new vocabulary, sign the materials needed to make the Catherine wheel, sign the steps to take.**



1. **Circle the shapes that has same length sides.**

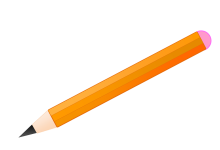
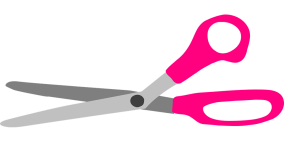
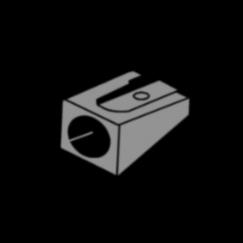


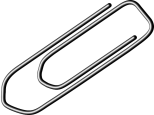
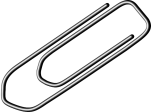
1. **Each shape, its colour! Colour the man.**
2. **Cut and re-build the square as in the image.**





1. **What do you need to make a Catherine wheel?**

**C:\Users\Carolina\AppData\Local\Microsoft\Windows\INetCache\IE\MTDF5S9T\Righello[1].jpg**



1. **Cut the images and make the puzzle.**

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**Extend / Enrichment / Prolongations Web links with others digital tools:**

1. <https://www.youtube.com/watch?v=jhd5WcWBcBk>
2. <https://www.youtube.com/watch?v=C-84mZwATbw>
3. <https://www.youtube.com/watch?v=lBCIGY3dWXQ>