STEAMERs

Colours exploration

| Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Date |  | Total duration | 80 minutes |
| Subject | - Students will be engaged in science [physics) and particularly about the colours by exploring and mixing the basic colours in hands-on activities . |  |  |
| Year Group or Grade Level | 3-6 years old |  |  |
| Main topic | - The students will learn what are the basic colours and what are the what are their derivatives. <br> - The students will predict, explore colour mixture with water and they will record the results on a worksheet. |  |  |
| Subtopics or Key concepts | - Additive mixing <br> - Color theory <br> - The color wheel | - Color terms <br> - Cooperative learning <br> - Constructivism |  |
| Learning Objectives |  |  |  |

- To introduce preschoolers to the concept of primary colors and color mixing.
- To demonstrate to preschoolers how combining primary colors can create new colors.
- To encourage preschoolers to predict and experiment with mixing colors.
- To provide preschoolers with an opportunity to document and reflect on their color mixing observations.
- To enhance preschoolers' fine motor skills through painting and coloring activities.
- To foster creativity and artistic expression in preschoolers.


## Material needed

- Containers or cups filled with red, yellow, and blue water
- Food coloring
- Droppers
- White coffee filters
- Tray or plate
- Recording sheet
- Watercolors or tempera

| Lesson Outline |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Duration | Guide | Remarks |
| warm-up | 10 minutes | Begin by introducing the concept of primary colors (red, blue, and yellow) to the preschoolers. Show them pictures or real-life examples of objects that are primary colors. |  |
|  | 05 minutes | Fill the three cups or jars with water. Label one cup "red," one cup "blue," and one cup "yellow." |  |
|  | 05 minutes | Add several drops of red food coloring to the "red" cup, several drops of blue food coloring to the "blue" cup, and several drops of yellow food coloring to the "yellow" cup. Mix each cup with a spoon until the water is colored. |  |
| main activity | 05 minutes | Place a white coffee filter on the tray or plate. Invite the preschoolers to predict what will happen when they mix the primary colors together. Allow them to make their predictions. |  |
|  | 05 minutes | Have the preschoolers dip one end of a coffee filter into the "red" cup and the other end into the "blue" cup. Then, dip another coffee filter into the "yellow" cup. | ely, children can use to mix the colours dipping. the coffee |


| main activity | $\begin{aligned} & \text { 05-10 } \\ & \text { minutes } \end{aligned}$ | Place the coffee filters on the tray or plate and allow them to dry completely. |  |
| :---: | :---: | :---: | :---: |
|  | 10 minutes | Once the coffee filters are dry, show the preschoolers how the colors have mixed together to create new colors. Ask them to identify the new colors they see. | Encourage the preschoolers to experiment with mixing the colors themselves by dipping the coffee filters into different cups and creating their own color combinations. |
| Assessment exercise |  |  |  |
| assessment | $\begin{gathered} \text { 10-15 } \\ \text { minutes } \end{gathered}$ | Students can document their color experiment observations on a recording sheet, using either watercolors or tempera paint. This enables them to witness how the merging of two colors generates a distinct hue. |  |
| extension | $\begin{gathered} \text { 10-15 } \\ \text { minutes } \end{gathered}$ | If time allows, have the preschoolers create a piece of artwork using the coffee filters they have colored. Provide them with glue and construction paper to create a collage or allow them to decorate the coffee filters however they like. | This will allow them to express their creativity while also reinforcing the concept of color mixing. |
| Conclusions and recommendations |  |  |  |

- In conclusion, this lesson plan, is based on the color experiment that introduces preschoolers to the concept of color mixing and enhances their fine motor skills, creativity, and artistic expression. By engaging in the experiment and documenting their observations, preschoolers can develop a deeper understanding of the properties of colors and how they interact with one another.

Further reccomendations for the teachers:

Some recommendations for this lesson plan include providing ample time for preschoolers to explore and experiment with the materials, encouraging them to ask questions and make predictions, and adapting the activity to accommodate different learning styles and abilities.

