# Critical and Creative Thinking Family Edition

→ Directions: Look over these activities and choose the ones which seem most interesting to you.

# Habits of Mind - Gathering Data Through All Senses

Can we do more than **see** a color? This activity will give you a chance to explore how you can use our other senses to experience color.

**Choose a color.** Brainstorm the following lists for your color.

- List 1: What things LOOK (color)?
- List 2: What things SOUND (color)?
- List 3: What things SMELL (color)?
- List 4: How does (color) FEEL?
- List 5: What things TASTE (color)?

We can do much more than simply **see** a color. We can hear, smell, taste, and feel color. How can you share what the color means to you?

Can you create a poem? A picture? A model? A song? Something else?

#### **Visualization**

Let's visualize **the idea of gratitude**. Close your eyes and imagine what it means to be grateful.

- What are you seeing?
- What are you feeling?
- What are you beginning to understand about gratitude?

Other ideas - replace the idea of gratitude with:

- trustworthiness
- honesty
- hope
- persistence
- joy

## **Plus - Minus - Interesting**

# Fluency, Flexibility, Originality, Elaboration

#### The Situation:

Your teacher has assigned a research project. What are your thoughts about the process of doing research?

Plus	Minus	Interesting

If you don't love that option, consider using P-M-I to explore these ideas.

- The grocery store ran out of candy.
- Your teacher gave you control to lead your Microsoft Teams class for the day.
- You won a private tour of the National Zoo for your entire family.

- 1. Make a list of verbs that describe speaking, but are much more descriptive than the verb "said."
- 1. You have lost your voice. How else can you effectively communicate with the people (and pets, perhaps) in your house?
- 1. You've developed a new product called the Communicatinator to help people who lose their voice. How will it work and what features will it have?
- 1. Create a commercial in which you advertise your new product. Highlight all the features that will make someone want to buy it.



#### Gathering Data Through All Senses

When we gather data through our senses, we stop to notice what we hear, see, taste, smell, and touch. The more we observe, the more information we gather.



#### Visualization

Stated simply, visualization is technique that involves forming images in our mind. Visualizing helps us imagine situations, events, or ideas even when what we are thinking about is not actually present.



### Plus-Minus-Interesting

Learners use the PMI structure to keep an open-minded attitude and consider an issue from multiple perspectives. Younger learners may consider what would make a certain idea interesting (i.e. What if books were round?), older learners may use the "I" to consider implications.



#### Fluency, Flexibility, Originality, Elaboration (FFOE)

These thinking strategies and processes help students brainstorm, make connections, and develop creative ideas.

**Fluency** – The ability to generate numerous ideas or alternatives to solve a problem that requires a novel solution.

*Flexibility* – The ability to consider a number of different perspectives in an effort to generate a wide variety of ideas or alternatives.

**Originality** – The ability to generate novel, unique, and rare ideas or alternatives to solve a problem that requires an innovative solution.

**Elaboration** – The ability to generate a large number of details or descriptions that explain a specific and novel solution to a problem.



## S.C.A.M.P.E.R.

S.C.A.M.P.E.R. is a model that helps us create unique thoughts, explore relationships, and search for new or different combinations. SCAMPER involves a variety techniques (**S**ubstitute – **C**ombine – **A**djust or **A**dapt – **M**odify – **P**ut to Other Uses – **E**liminate *or* **E**laborate – **R**everse or **R**earrange) that help to change and improve something by changing one or more parts of the original idea.