

CUB SCOUT TIME!

FEARFUL SYMMETRY

CASCADE PACIFIC COUNCIL

FEARFUL SYMMETRY

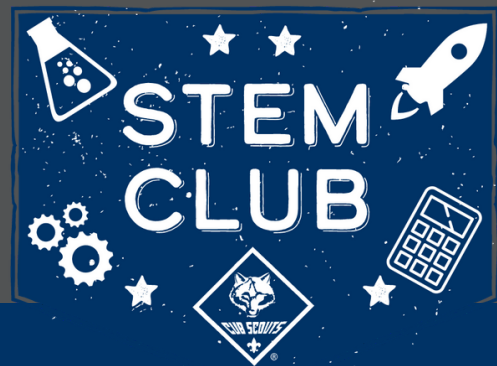
SYMMETRY IS ALL AROUND YOU!

TODAY'S AGENDA:

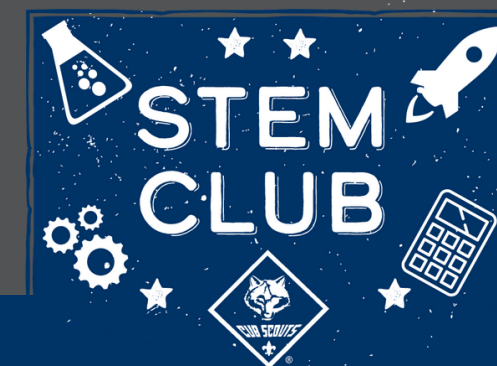
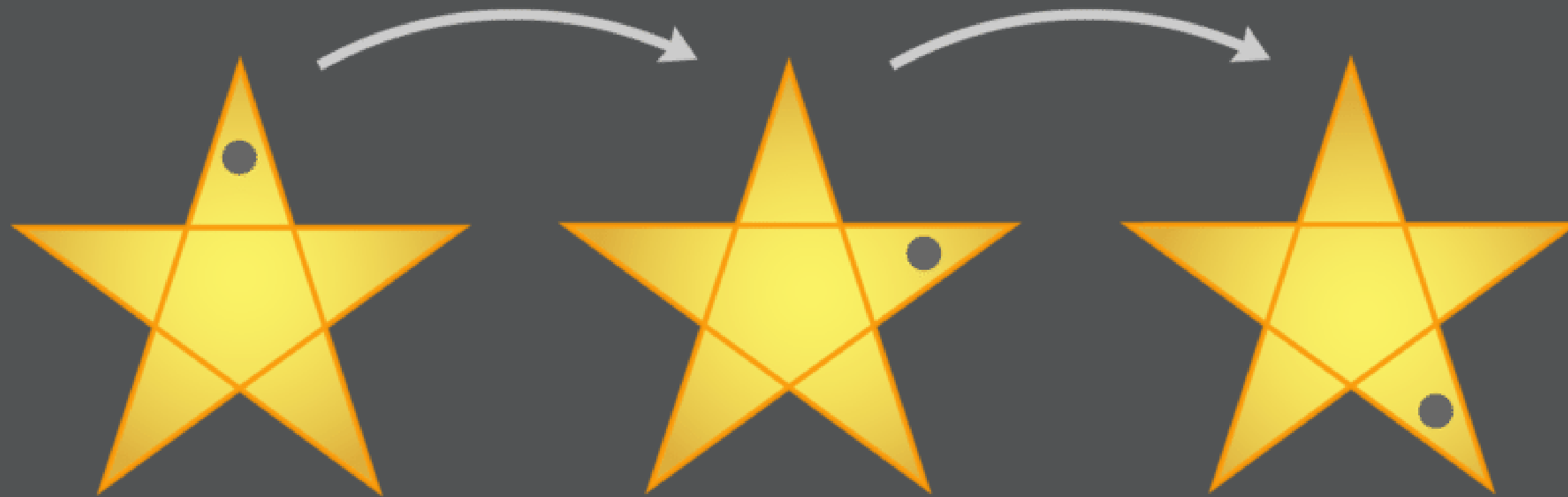
- REFLECTIONAL, ROTATIONAL AND TRANSLATIONAL SYMMETRY
- DIFFERENCE BETWEEN SYMMETRY OF A GERANIUM AND A PERIWINKLE
- REFLECTIONAL SYMMETRY ART PROJECT
- KOLAM ARTWORK



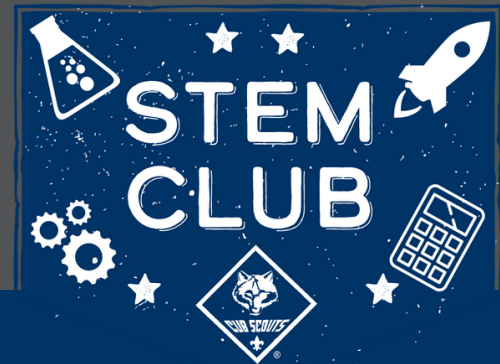
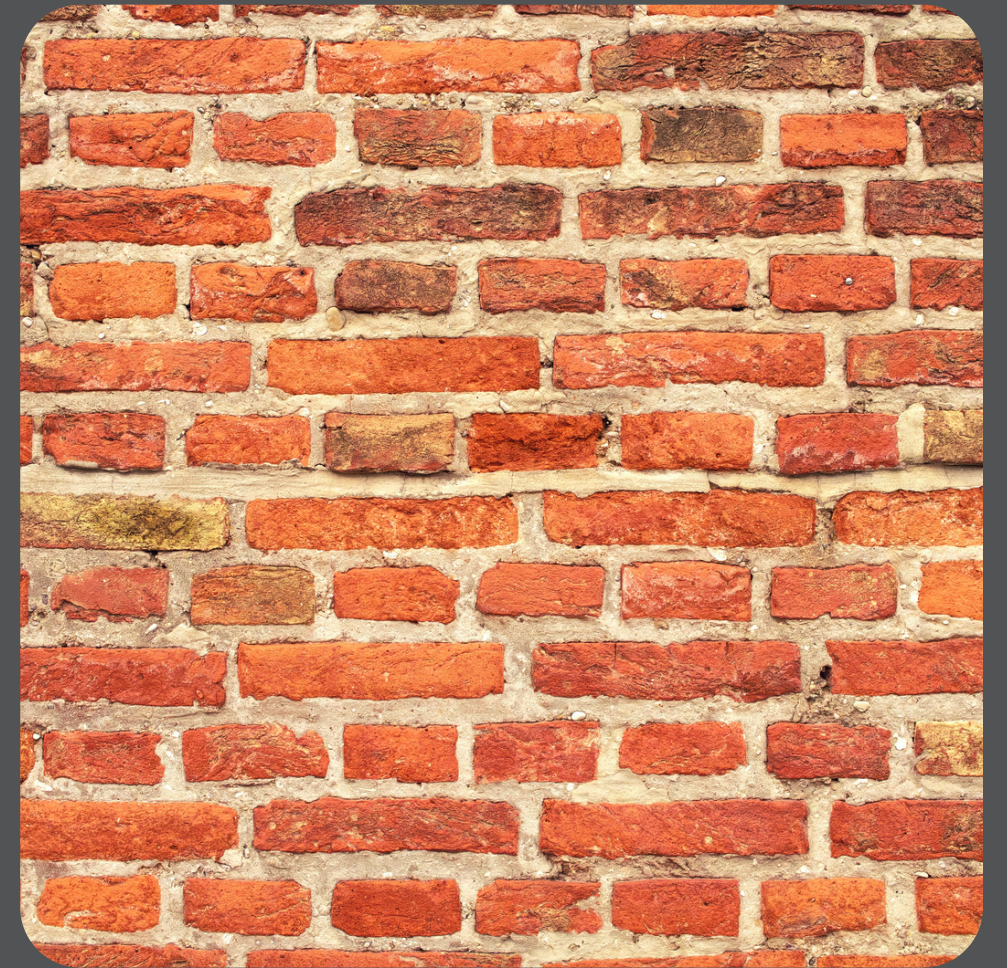
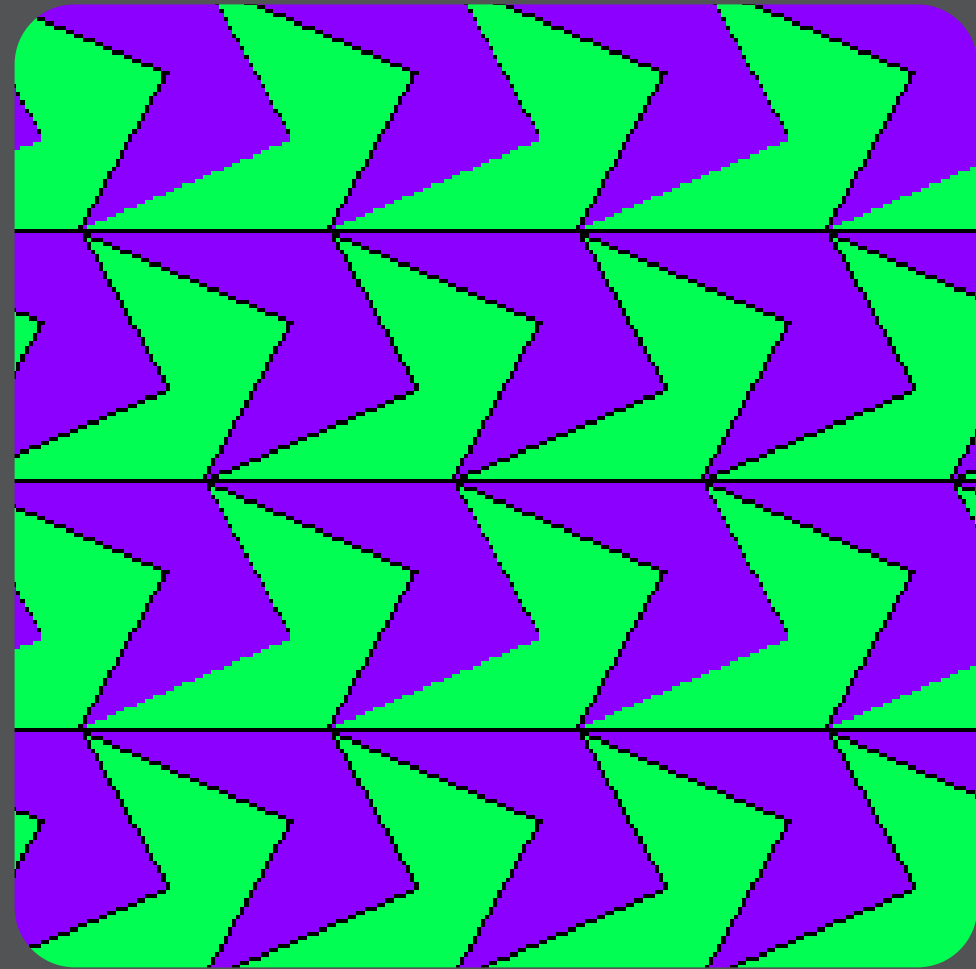
REFLECTIONAL SYMMETRY



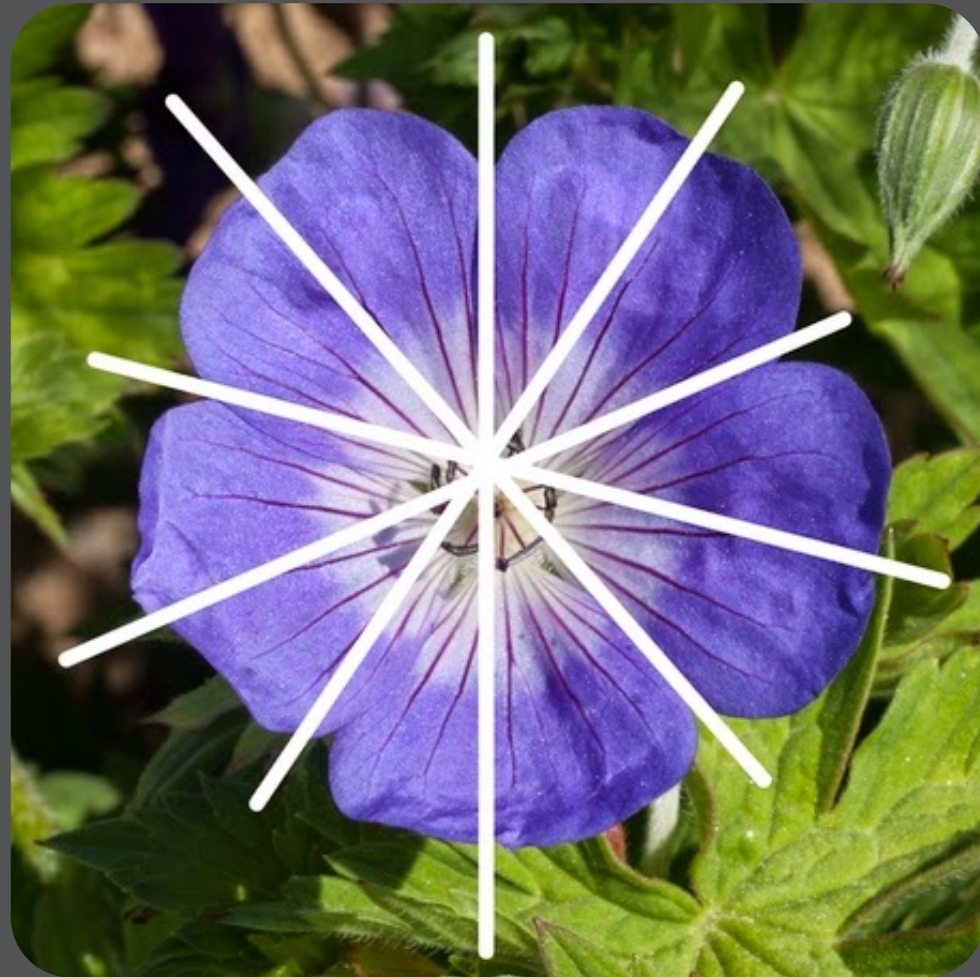
ROTATIONAL SYMMMETRY



TRANSLATIONAL SYMMETRY



SYMMETRY DIFFERENCES OF PLANTS



GERANIUM

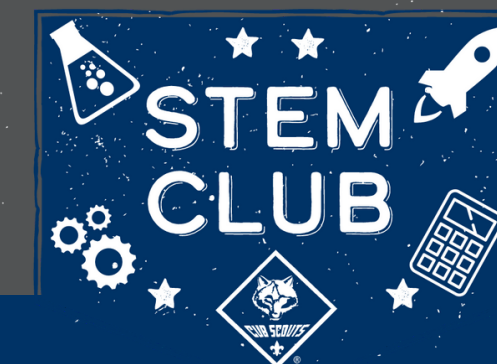
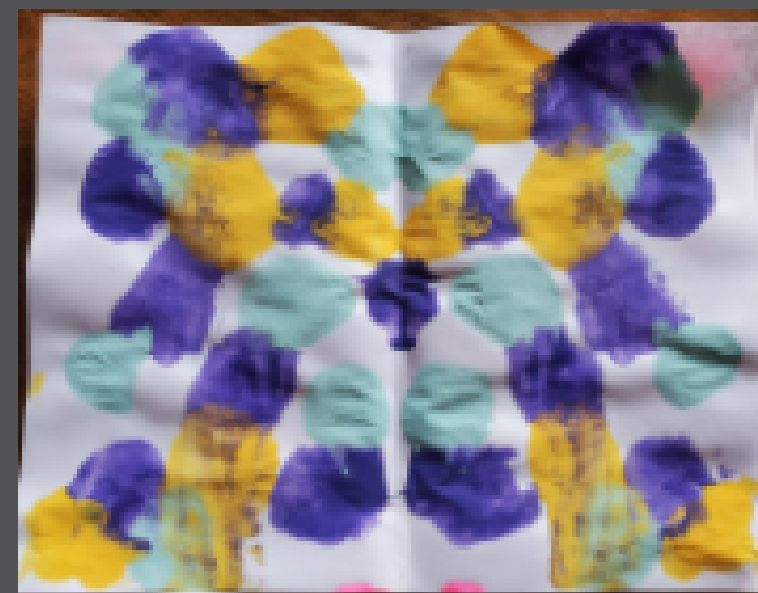
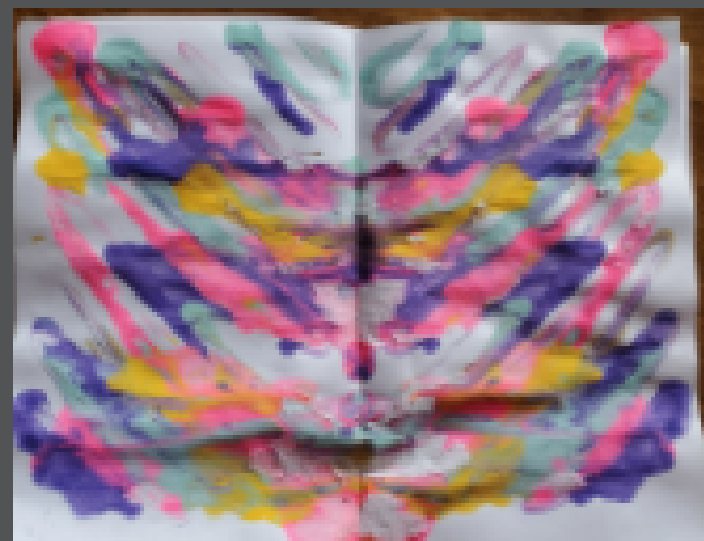
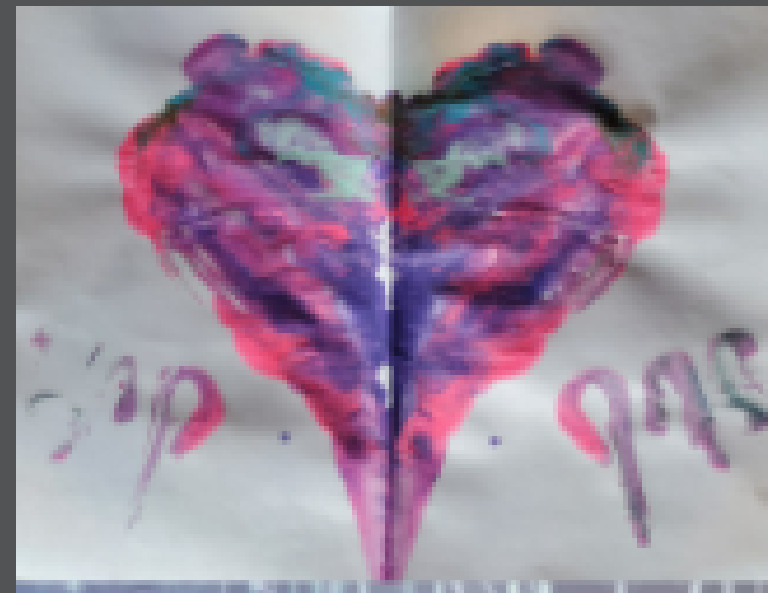
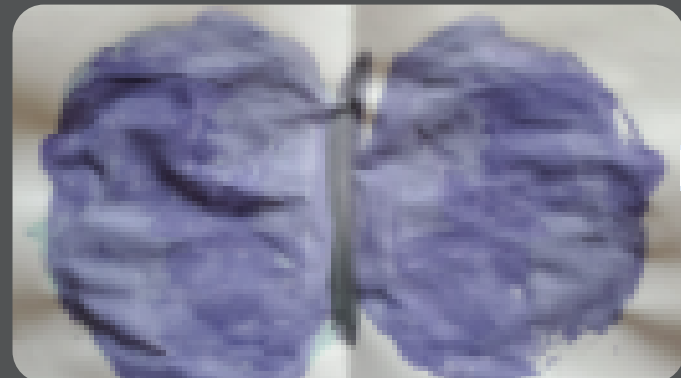


HERBACEOUS PERIWINKLE

REFLECTIONAL SYMMETRY ART

GATHER YOUR SUPPLIES

- PAPER
- PAINT (3-5 COLORS)
- PAINTBRUSH



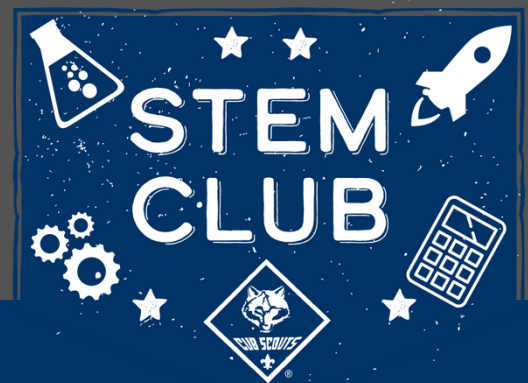
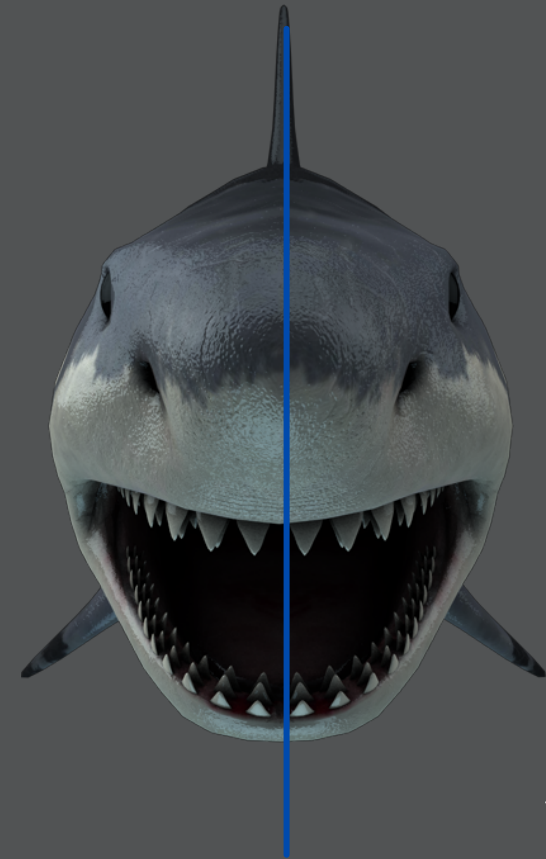
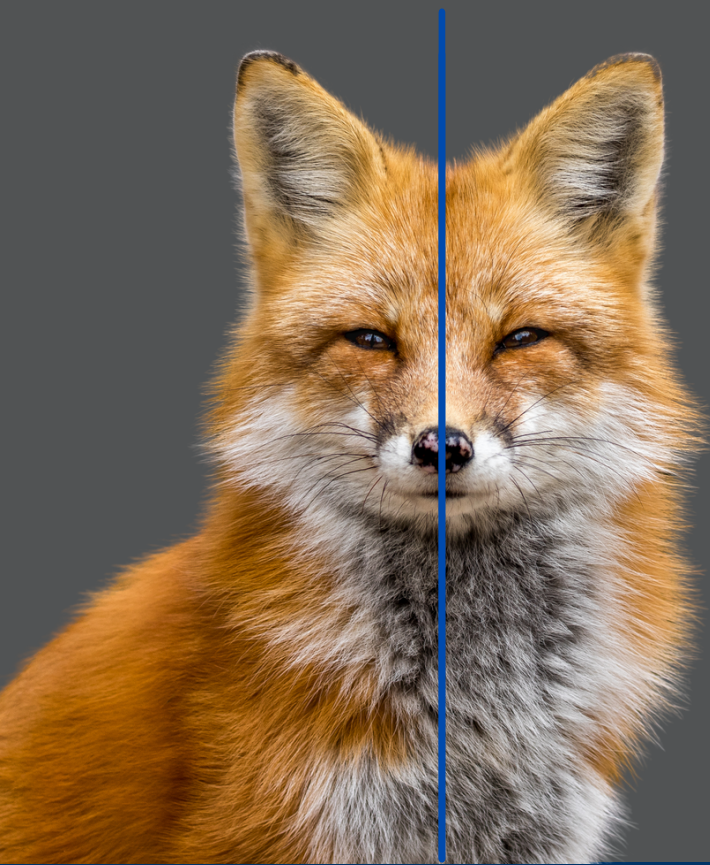
BILATERAL SYMMETRY

- BILATERAL SYMMETRY IS FOUND IN SOME ANIMALS.
- ANIMALS FOCUSED ON MOVEMENT GENERALLY HAVE BILATERAL SYMMETRY
- BILATERAL SYMMETRY MEANS BOTH SIDES ARE THE SAME

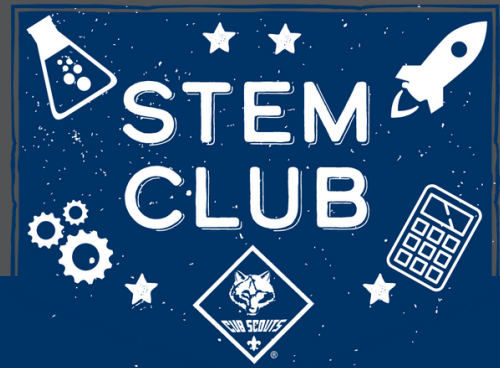
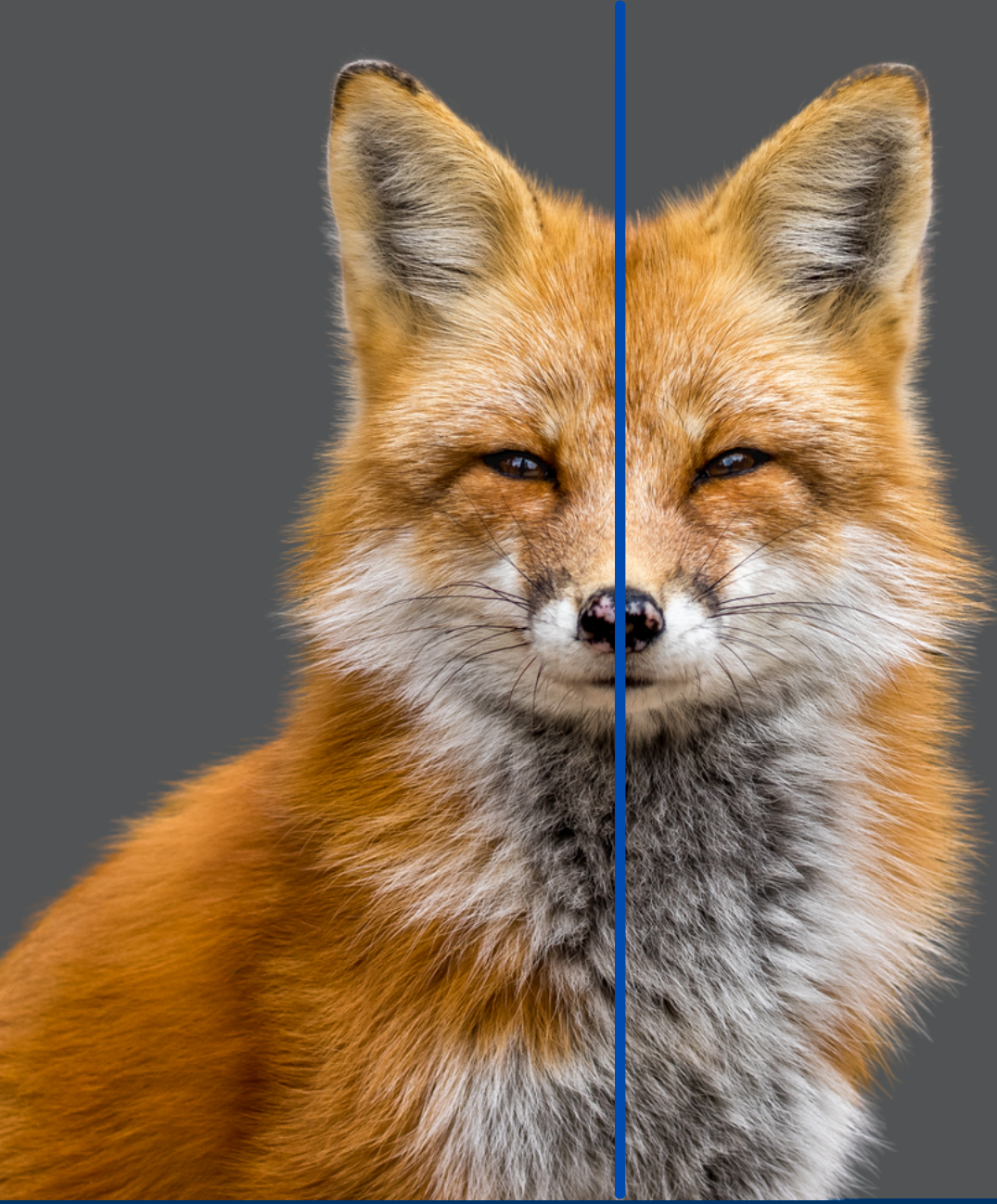


BILATERAL SYMMETRY

- ANIMALS WITH BILATERAL SYMMETRY HAVE SIMILAR CHARACTERISTICS
 - THEIR MOUTH, EYES, AND OTHER SENSORY ORGANS ARE USUALLY GROUPED TOGETHER IN ONE AREA
 - HAVING A HEAD MEANS THAT THEY HAVE A "FRONT" AND A "BACK" OF THEIR BODY
 - THIS HELPS WITH THE BEST PLACEMENT FOR OTHER PARTS OF THE BODY. LIKE WINGS, FINS, ARMS, AND LEGS



EXAMPLES OF BILATERAL SYMMETRY



WEEK 7 STEM CLUB NOTES

FEARFUL SYMMETRY



TOPIC COVERED:

- **Reflectional, Rotational, Translational, and Bilateral Symmetry**
- **Symmetry Difference of a Geranium and Periwinkle**
- **Reflectional Symmetry Artwork**

FURTHER QUESTIONS:

MAIN TAKEAWAYS:

ADDITIONAL NOTES:

- **Learn the difference of a sweetgum tree and a maple tree leaf arrangement**
- **Learn about the art form of Rangoli or Kolam and then create your own art piece**

LEARN MORE BY READING OR WATCHING: